

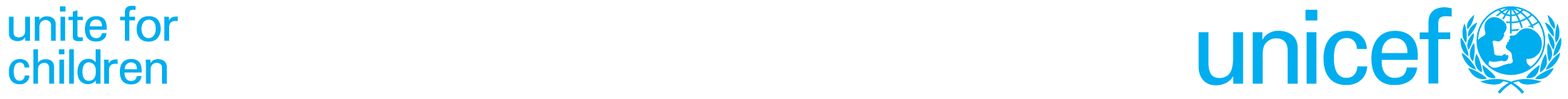
DRAFT OF

June 2020

**SDG CELL**

**Bangladesh Bureau of Statistics**

Statistics and Informatics Division, Ministry of Planning

**United Nations**

**Children’s Fund**



**Prepared and Published by**

SDG CELL

Bangladesh Bureau of Statistics (BBS)

www.bbs.gov.bd

June 2020

This document is prepared with the technical and financial support from UNICEF Bangladesh

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Cover Design

Easel Mortuza

ISBN:

Printed by

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**Message**

**M. A. Mannan,** MP

Minister

Ministry of Planning

Government of the People’s Republic of Bangladesh

I am immensely pleased to be informed that the `Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs’ has been prepared by the SDG Cell, Bangladesh Bureau of Statistics (BBS) of the Statistics and Informatics Division (SID) of the Government of the People’s Republic of Bangladesh within a shortest possible time which is being published now.

This unique publication has been formulated incorporating distinct custodian agency, indicator computation procedure, data sources, frequency of data generation by indicator, deadlines for each of 247 indicators with rounds, so that organizations in global arena as well as country context will get a detailed oriented plan outlining actions needed to reach multiple goals. To be specific, by following this recapitulation, all data providers and users will be able to monitor & evaluate the development progress in light of data disaggregation and generation for SDGs to ensure Leave No One Behind.

Moreover, this unprecedented publication will deliver ample room for the National Statistical System as a comprehensive checklist for the steps or tasks they need to complete for data generation in order to achieve the SDGs.

In this backdrop, I take this room to thank Secretary, Statistics and Informatics division and Director General, Bangladesh Bureau of Statistics for their sedulous work in conducting the data generation, outline, processing and preparation of this concise report. A plethora of extol is also due to the officials of the SDG Cell, BBS for their relentless efforts.

Hopefully, this publication will work as impetus to the planners, policy makers, researchers, stakeholders and all of the data providers for proper data generation and monitoring & evaluation planning of the country.

Dhaka, June 2020 **M. A. Mannan**, *MP*

**Message**

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**Zuena Aziz**

Principal Coordinator (SDG Affairs)

Prime Minister’s Office

Government of the People’s Republic of Bangladesh

I am highly delighted to learn that Bangladesh’s National Statistical Office (NSO), Bangladesh Bureau of Statistics (BBS) is going to publish an incredible report “Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs”. By following this requisite manual, all organizations in global arena as well as country context will get a good support to check data generation and disaggregation status for SDGs monitoring and evaluation.

To sate a comprehensive follow-up for the data generation and disaggregation of SDGs 247 indicators, this incredible publication will be employed as like as a chief impetus. Contemplating all these, I believe that, this action plan and methodological guideline will be used efficiently for monitoring the Progress of data generation and disaggregation of the SDGs indicators in Bangladesh.

Therefore, I would like to thank the SID officials for their initiative and relentless support in preparing and finalizing of this report. In addition to this, I would feel Good to thanks to several Ministries/ Divisions/ Agencies for providing their exemplary effort to finalize this publication. At the end, I wish that Bangladesh will be a role model in data generation and disaggregation of the SDGs as it performed good in achieving the MDGs.

Dhaka, June 2020  **Zuena Aziz**

** Foreword**

**Muhammad Yamin Chowdhury**

Secretary

Statistics and Informatics Division

Ministry of Planning

Government of the People’s Republic of Bangladesh

It is glaring to know that the `Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs’ has been prepared by SDG Cell of Bangladesh Bureau of Statistics (BBS) within a very short time.

This exhaustive report will persuade the data providers and users to know implicit of any indicator by providing specific information on data source, data provider, data calculation procedure, data delivery deadlines and so more. Furthermore, this publication will work as an encyclopedialike manual for the numerous ministries, divisions and other data provider agencies to check current status of data generation and data disaggregation.

I would like to express my heartfelt thanks to Mohammad Tajul Islam, Director General of Bangladesh Bureau of Statistics (BBS), Md. Alamgir Hossen, Deputy Director and Focal point officer of SDG cell, BBS and his team and other officials for their intellectual musing and technical input in preparing this versatile report. I would like to also convey my thanks to the members of National Data Coordination Committee (NDCC) for their valuable suggestions in preparing this report.

I wish, this publication will meet up as like as a requisite for the data providers and users to ensure the essence of SDGs ‘Leave No One Behind’ through Data Disaggregation for Monitoring and Evaluation of SDGs.

Dhaka, June 2020 **Muhammad Yamin Chowdhury**

**Preface**

**Mohammad Tajul Islam**

Director General

Bangladesh Bureau of Statistics

Statistics and Informatics Division

Ministry of Planning

Government of the People’s Republic of Bangladesh

`Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs’ is the recap guideline and monitoring tool that Bangladesh has developed with a view to check and validate the calculation procedure and current status of data for SDGs in context of Bangladesh.

This Action Plan will come forward for country led systematic follow-up and review of current status of data for 247 indicators of the SDGs. All data producing organizations in global arena as well as country context will get a preferable guideline to check and validate their current status and formation of deliverable data with detailed oriented description and data analysis procedure.

It is clear to mention from the Action Plan that main responsibility for data generation relies on Bangladesh Bureau of Statistics (BBS), the National Statistical Office (NSO) of the Government of Bangladesh.

It is responsible for generating & disaggregating data for 247 indicators for SDGs monitoring and evaluation. Apart from this, as the NSO, BBS has to guide other data producing agencies like ERD, DoE, DGHS, MoEFCC, BFD, FD, BB, BP, BoF, LGD, MoDMR, DDM, NIPORT, DPE, MoFA, SHED, BANBEIS, MoST etc. in generating authentic and reliable data in timely following the metadata of SDGs suggested by the IAEG-SDGs.

I would like to express thanks to the Mr. Muhammad Yamin Chowdhury, Secretary, Statistics Division for his continuous guidance as the chair of National Data Coordination Committee (NDCC). I also like to thanks Mr. Md. Alamgir Hossen, Deputy Director and Focal Point of SDG Cell, BBS for his innovative idea for preparing and organizing this momentous report.

Dhaka, June 2020 Mohammad Tajul Islam

******Acknowledgements**

**Md. Alamgir Hossen**

Focal Point Officer, SDG Cell

Bangladesh Bureau of Statistics (BBS)

Government of the People’s Republic of Bangladesh

The ‘Action plan and Methodological Guidelines towards Data Generation & Disaggregation for Monitoring and evaluation of SDGs’ has been formulated in order to reflect the procedure and updated status of data generation and disaggregation in context of Bangladesh.

The process of initiative and formation started after completing several inter-ministerial workshops and different meetings of National Data Coordination Committee (NDCC). Different consultation workshops have been conducted to finalize this publication and also a plethora of written opinions have collected from stakeholders. Apart from this, the action plan has been shared multiple times in National Data Coordination Committee (NDCC).

To organize and validate, this report has been checked with SDGs Data Availability Status Report, Revised Monitoring and Evaluation Framework of the Sustainable Development Goals (SDGs): Bangladesh Perspective and SDG Indicators Metadata repository. Later on, the indicators statement and Tier classifications have been again checked with the Tier Classification Sheet (as of 17 April 2020).

I would like to acknowledge Ms. Zuena Aziz, Principal Coordinator (SDGs Affairs), PMO; Mr. Md. Abul Kalam Azad, Former Principal Coordinator (SDGs affairs), PMO; Mr. Md. Shamsul Alam, Member (Senior Secretary), General Economics Division; Mr. Mohammad Yamin Chowdhury, Secretary, Statistics and Informatics Division and Mr. Mohammad Tajul Islam, Director General, Bangladesh Bureau of Statistics for their continuous guidance and direction to prepare this document. Special thanks to Mr. Mohammad Monirul Islam, Deputy Secretary, PMO; Dr. Dipankar Roy, Deputy Secretary, SID; Mr. Md. Mahbubul Alam Siddique, Senior Assistant Chief, GED; Ms. Aklima Khatun, Deputy Director, BBS; Ms. Naima Aktar, Deputy Director, SDG Cell, BBS; Ms. Shaila Sharmin, Statistical Officer, SDG Cell, BBS; Mr. Mohammad Junayed Bhuyan, Statistical Officer, Mr. Md. Khorshed Alam, Statistical Officer, SDG Cell, BBS; Ms. Somapti Mojumder, Statistical Officer, BBS and Mr. S. M. Ashiqur Rahman, Assistant Cartographer, SDG Cell, BBS deserves special thanks for their relentless support.

I also acknowledge the valuable input from the members of National Data Coordination Committee, SDG Technical Working Committee, Member-Secretary and Cluster Focal Points from different wings of BBS. Special thanks to UNICEF Bangladesh for providing their technical support for publishing this report. Mr. Ariful Islam, Senior National Consultant and Mr. Ahammad Ullah Kabir, Statistician— National Consultant, other staff members from SDG cell, BBS also deserve heartful thanks for their relentless efforts with full compassion and dedication in preparing of this guideline.

Profound gratitude to Muhammad Yamin Chowdhury, Secretary, SID for his continuous guidance to the team and for editing the entire Action Plan in making this salient SDGs publication a reality.

Dhaka, June 2020 Md. Alamgir Hossen

**ACRONYMS**

ADP : Annual Development Programme

7thFYP : Seventh Five Year Plan

BBS : Bangladesh Bureau of Statistics

BCCRF : Bangladesh Climate Change Resilience Fund

BCCSAP : Bangladesh Climate Change Strategy and Action Plan, 2009

BCCTF : Bangladesh Climate Change Trust Fund

BIDS : Bangladesh Institute of Development Studies

BMET : Bureau of Manpower, Employment and Training

BNH : Bangladesh National Herbarium

BOP : Balance of Payment

BOU : Bangladesh Open University

BPD : Bangladesh Poverty Database

BPDB : Bangladesh Power Development Board

BRAC : Bangladesh Agricultural Research Council

BRDB : Bangladesh Rural Development Board

CCA : Climate Change Adaptation

CCF : Chief Conservator of Forest

CCGT : Combined-Cycle Gas Turbine

CCKN : Climate Change Knowledge Network

CDM : Clean Development Mechanism

CDMP : Comprehensive Disaster Management Programme

CSO : Civil Society Organization

DRF : Development Results Framework

GED : General Economic Division

HIES : Household Income and Expenditure Survey

OWG : Open Working Group

OECD : Organization for Economic Co-operation and Development

PMO : Prime Minister’s Office

CEGIS : Centre for Environmental and Geographical Information Services

DDM : Department of Disaster Management

DAC : Development Assistance Committee

ERD : Economic Relations Division

LDC : Least Developed Countries

MoF : Ministry of Finance

NAS : National Accounts Statistics

NSDS : National Strategy for the Development of Statistics

NBR : National Board of Revenue

SID : Statistics and Informatics Division

SDGs : Sustainable Development Goals (2016-30)

SFDRR : Sendai Framework for Disaster Risk Reduction (2016-30)

UNFCC : United Nations Framework Convention on Climate Change

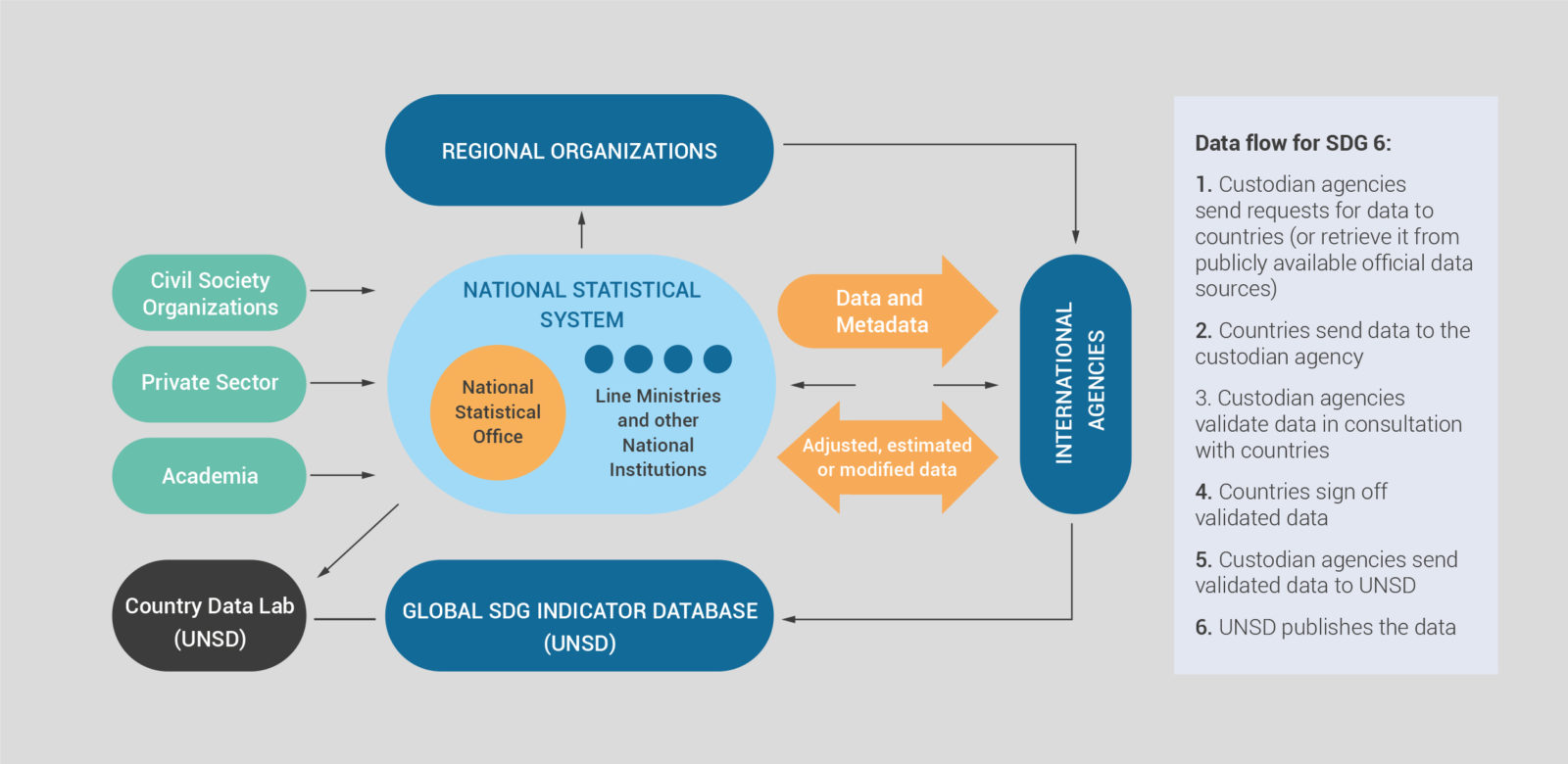
SNA 2008 : System of National Accounts, 2008

UNSEEA : United Nations System of Environmental Economic Accounting

UNFDES : United Nations Framework for Development of Environment Statistics

UNDP : United Nations Development Programme

**INTRODUCTION**

This report provides the current status of 247 indicators for the United Nations ‘Sustainable Development Goals’ (SDGs) with respect to the current situation in Bangladesh. This is the first publication as like as a manual to insist the Data generation procedures and respective deadlines for the National and International data providers in context of Bangladesh. This exclusive information hub has made available through extensive consultation with ministries, policy analysis organizations, knowledge institutes and NGOs.

In September 2015, 193 members of the United Nations including Bangladesh, agreed a future agenda for sustainable development and signed up to an aspirant package of goals for sustainable development. There are 17 exhaustive goals, 169 sub-goals, 247 indicators (Uniquely 231) and all the Governments of United Nations member states bear responsibility for their countries implementation and monitoring of progress of their Developments. For this purpose, they agreed that data required for monitoring will be reported by the countries, with the salient role of National Statistical offices (NSOs) of the respective countries.

This Publication titled `Action plan and Methodological Guidelines towards Data Generation & Disaggregation for Monitoring and evaluation of SDGs’ published in June 2020 by SDG Cell, Bangladesh Bureau of Statistics (BBS) of Statistics and Informatics Division (SID) was based on 247 indicators developed in 2020.

**Figure 1** summarizes that Apart from the government data providers, a total number of 52 custodian agencies are involved in the initiative. The list of custodian agencies includes different multilateral organizations working in different areas like economic growth, public health, food security, gender equality and empowerment etc. A few notable names among the custodian agencies are World Health Organization, IMF, UNESCO, FAO, UN Women, IOM etc.

**Goals, targets and indicators with Tier Classifications**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Goal** | **Total Indicators** | **Tier I** | **Tier II** | **TBD** | **Multiple Tier** |
|
| ***1*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** |
| SDG 1: Poverty | 13 | 3 | 8 | 2 | 0 |
| SDG 2: Hunger | 14 | 8 | 5 | 1 | 0 |
| SDG 3: Health | 28 | 25 | 2 | 1 | 0 |
| SDG 4: Education | 12 | 4 | 8 | 1 | **1** |
| SDG 5: Gender | 14 | 4 | 10 | 0 | 0 |
| SDG 6: WatSan | 11 | 7 | 4 | 0 | 0 |
| SDG 7: Energy | 6 | 5 | 0 | 1 | 0 |
| SDG 8: Growth | 16 | 8 | 8 | 0 | 0 |
| SDG 9: Infrastructure | 12 | 10 | 2 | 0 | 0 |
| SDG 10: Inequality | 14 | 5 | 7 | 3 | **1** |
| SDG 11: Urban & Community | 14 | 2 | 11 | 1 | 0 |
| SDG 12: Consumption | 13 | 3 | 8 | 2 | 0 |
| SDG 13: Climate | 8 | 0 | 4 | 4 | 0 |
| SDG 14: Life below | 10 | 5 | 5 | 0 | 0 |
| SDG 15: Life on Land | 14 | 8 | 4 | 2 | 0 |
| SDG 16: Peace, Justice, Strong Institution | 24 | 7 | 16 | 1 | 0 |
| SDG 17: Partnership | 24 | 15 | 6 | 3 | 0 |
| **Total Indicators** | **247** | **119** | **108** | **22** | **2** |
| **Total Unique Indicators** | **231** | **115** | **95** | **19** | **2** |

**Partners of Custodian Agencies for SDG Indicators**

There are 45 multiple other agencies partnering up with the Custodian Agencies. These Partner Agencies are responsible for collaborating and supporting the Custodian Agencies in multiple different areas of technical support. These partner agencies include many other organizations working to address different specific global issues in different specific areas like water and sanitation hygiene, labor rights, energy, refugee response etc. The partner agencies include 45 agencies including UNICEF, UNEP, Eurostat, ILO, UN Water, UN Energy etc.

**Tier Classification of SDG Indicators**

The following Pie chart shows that, for the 17 global goals, there are 247 indicators that were decided to be evaluated. The chart portrays that, a unique number of 115 indicators are categorized as Tier I whereas 95 unique indicators were marked as Tier II. It is observed that Goal 3 is leading in number of Tier indicators with 25 indicators. In Tier II, Goal 16 holds the highest position with 16 indicators followed by Goal 11 and Goal 5. There is no Tier III indicator right now. However, there are 19 indicators that are yet to be decided upon further consideration.

**Sources of Data** The sources of data for the indicators. The highest indicators (131 indicators) data will be generated from administrative sources. Survey/census data composes of the second most data sources and almost all of the survey/census data will be provided by Bangladesh Bureau of Statistics (BBS). Data 27 indictors will be generated from multiple data sources or in combination of different sources. About 9 indicators will be generated through innovative data approaches through big data initiatives including machine learning, artificial intelligence, internet of things etc.

**Minimum Disaggregation**

**Dimensions for Generating SDGs Data**

**Figure 5** depicts that different indicators are disaggregated by different demographic, geographic and other relevant measures such as gender, age group, geographical region, residence and so on. Other indicators also bring economic, health-related and other relevant components like aid, financing, migration, disability type etc.

**Frequency of data generation**

Indicators from different sources are expected to be evaluated in different time intervals. The indicators and other relevant measures will be evaluated annually, bi-annually, triennially and five-yearly. Total 125 indicators data will be generated annually, followed by 92 indicators triennially, 19 indicators once in five years and 11 indicators will be generated bi-annually.

**Local Indicator Group**

Indicators were broken down into 3 major groups. About 118 indicators in Group-1 indicators already produced by NSS and data exist for baseline report. 77 indicators in an ongoing process or could be produced within the NSDS up to 2023 named as group 2 and 31 group 3 indicators need more efforts (methods, financing etc.).

**National Data Coordination Committee**

National Data Coordination Committee (NDCC) has been constituted headed by Secretary, Statistics and Informatics Division by taking/through the representatives from all data generating agencies/ministries of the government and also representatives from private and CSOs to streamline the data generation system, reducing the duplicity and prioritize the areas of the survey, identify data gaps, ensure the availability of quality data and coordinate among ministries and divisions to make data available for SDGs and monitor other international commitments.

The Government of Bangladesh has launched an online SDGs Tracker which is being administered by BBS backstopping IT support from a2i Programme where all the data generating ministries are connected to provide data on the platform. In addition to coordination among the data providing agencies in the NSS, BBS is also providing technical support and training on metadata in light of their responsibility in data generation.

According to the Statistics Act, 2013, BBS, as the NSO is mandated to authenticate all the official statistics generated for national and international reporting. Besides, BBS is the authority to authenticate of data provided by the data focal points for SDG Tracker from 166 of different ministries/divisions/agencies. A technical working committee, headed by Director General of BBS reviews and authenticate all the data submitted to the SDG Tracker before opening it publicly. The nominated cluster focal points of BBS coordinates from BBS in generation of quality data according to the metadata guidelines.

 End Poverty in all its forms everywhere

Total Target 7, Total Indicators: 14

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

|  |  |
| --- | --- |
|  | End Poverty in all its forms everywhere |

| **Goals and targets and Indicators** | **Custodian Agency (ies)** | **Tier Classifications** | **Definition, Rationale, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***1*** | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** | ***8*** | ***9*** | ***10*** | ***11*** | ***12*** | ***13*** |
| Target 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.90 a day | | | | | | | | | | | | |
| 1.1.1 Proportion of the population living below the international poverty line by sex, age, employment status and geographic location (urban/rural) | World Bank  Partner Agency: ILO | Tier I | **For 1.1.1a**  **Definition:**  The indicator Proportion of population below the international poverty line is defined as the percentage of the population living on less than $1.90 a day at 2011 international prices. The 'international poverty line' is currently set at $1.90 a day at 2011 international prices.  **Rationale**  Monitoring poverty is important on the global development agenda as well as on the national development agenda of many countries. The World Bank produced its first global poverty estimates for developing countries for World Development Report 1990: Poverty (World Bank 1990) using household survey data for 22 countries (Ravallion, Datt, and van de Walle 1991).  The World Bank's Development Research Group maintains a database that is updated annually as new survey data become available (and thus may contain more recent data or revisions) and conducts a major reassessment of progress against poverty every year. PovcalNet [http://iresearch.worldbank.org/PovcalNet] is an interactive computational tool that allows users to replicate these internationally comparable $1.90 and $3.10 a day global, regional and country-level poverty estimates and to compute poverty measures for custom country groupings and for different poverty lines.  **Concepts:**  Poverty lines across countries vary in terms of their purchasing power, and they have a strong economic gradient, such that richer countries tend to adopt higher standards of living in defining poverty. But to consistently measure global absolute poverty in terms of consumption we need to treat two people with the same purchasing power over commodities the same way—both are either poor or not poor—even if they live in different countries.  The welfare of people living in different countries can be measured on a common scale by adjusting for differences in the purchasing power of currencies. The commonly used $1 a day standard, measured in 1985 international prices and adjusted to local currency using PPPs, was chosen for World Development Report 1990. The international poverty line has to be periodically updated using new PPP price data to reflect these changes. The last change was in October 2015, when the World Bank adopted $1.90 as the international poverty line using the 2011 PPP. Prior to that, the 2008 update set the international poverty line at $1.25 using the 2005 PPP.  **Computation Methods and formula:**  The current extreme poverty line is set at $1.90 a day in 2011 PPP terms, which represents the mean of the national poverty lines found in the same poorest 15 countries ranked by per capita consumption. The new poverty line maintains the same standard for extreme poverty - the poverty line typical of the poorest countries in the world - but updates it using the latest information on the cost of living in developing countries.  When measuring international poverty of a country, the international poverty line at PPP is converted to local currencies in 2011 price and is then converted to the prices prevailing at the time of the relevant household survey using the best available Consumer Price Index (CPI). Then the poverty rate is calculated from that survey. All inter-temporal comparisons are real, as assessed using the country-specific CPI. Interpolation/extrapolation methods are used to line up the survey-based estimates with these reference years.  For 1.1.1b  **Definition:**  The proportion of the employed population below the international poverty line of US$1.90 per day, also referred to as the working poverty rate, is defined as the share of employed persons living in households with per-capita consumption or income that is below the international poverty line of US$1.90.  **Concepts:**  Employment: All persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit.  Poverty Line: Threshold below which individuals in the reference population are considered poor and above which they are considered non-poor. The threshold is generally defined as the per-capita monetary requirements an individual needs to afford the purchase of a basic bundle of goods and services. For the purpose of this indicator, an absolute international poverty line of US$1.90 per day is used.  Household in poverty: Households are defined as poor if their income or consumption expenditure is below the poverty line taking into account the number of household members and composition (e.g., number of adults and children).  Working poor: Employed persons living in households that are classified as poor, that is, that have income or consumption levels below the poverty line used for measurement.  **Computation Method:** | Regression model is used based on HIES data.  World Bank calculates the estimates based on the microdata. | The World Bank typically receives data from National Statistical Offices (NSOs) directly. In other cases it uses NSO data received indirectly. | PovcalNet, WB | a) PovcalNet, WB  b) HIES,BBS | * Sex: male/female * Age: 15 years and over/ 15 to 24 years/ 25 years and older * Employment status: Employed, Unemployed * Geographical location: Rural, urban | Triennial | Group 1 | 1st Round: 2016  2nd Round: June, 2021  3rd Round:  June, 2024  4th Round:  June, 2027  5th Round:  June, 2030 | Estimate for Bangladesh is based on HIES data.    BBS will input data subject to published by WB.  Disaggregated data are not available.  UNSC 51 refinement |
| Target 1.2: By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions | | | | | | | | | | | | |
| 1.2.1: Proportion of population living below the national poverty line, by sex and age | World Bank  Partner Agency: UNICEF | Tier I | **Definition:**  The national poverty rate is the percentage of the total population living below the national poverty line. The rural poverty rate is the percentage of the rural population living below the national poverty line (or in cases where a separate, rural poverty line is used, the rural poverty line). Urban poverty rate is the percentage of the urban population living below the national poverty line (or in cases where a separate, urban poverty line is used, the urban poverty line).  **Rationale:**  Monitoring national poverty is important for country-specific development agendas. National poverty lines are used to make more accurate estimates of poverty consistent with the country’s specific economic and social circumstances, and are not intended for international comparisons of poverty rates.  **Concepts:**  In assessing poverty in a given country, and how best to reduce poverty according to national definitions, one naturally focuses on a poverty line that is considered appropriate for that country. Poverty lines across countries vary in terms of their purchasing power, and they have a strong economic gradient, such that richer countries tend to adopt higher standards of living in defining poverty. Within a country, the cost of living is typically higher in urban areas than in rural areas. Some countries may have separate urban and rural poverty lines to represent different purchasing powers.  **Comments and limitations:**  To be useful for poverty estimates, surveys must be nationally representative. Consumption is measured by using household survey questions on food and nonfood expenditures as well as food consumed from the household’s own production, which is particularly important in the poorest developing countries. This information is collected either through recall questions using lists of consumption items or through diaries in which respondents record all expenditures daily. But these methods do not always provide equivalent information, and depending on the approach used, consumption can be underestimated or overestimated. Different surveys use different recall or reference periods. Depending on the true flow of expenditures, the rate of spending reported is sensitive to the length of reporting period. The longer the reference period, the more likely respondents will fail to recall certain expenses—especially food items—thus resulting in underestimation of true expenditure.  **Computation Methods and Formula:**  The formula for calculating the proportion of the total, urban and rural population living below the national poverty line, or headcount    Where I (.) is an indicator function that takes on a value of 1 if the bracketed expression is true, and 0 otherwise. If individual consumption or income yi is less than the national poverty line (for example, in absolute terms the line could be the price of a consumption bundle or in relative terms a percentage of the income distribution), then yi is equal to 1 and the individual is counted as poor. Np is the total, urban or rural number of poor. N is the total, urban or rural population. | Household survey | National Statistic Office | HIES, BBS | HIES, BBS | * Sex: male/female * Age: 15 years and over/ 15 to 24 years/ 25 years and older * Geographical location: rural, urban | Triennial | **Group 1** | 1st Round: 2016  2nd Round: June, 2021  3rd Round:  June, 2024  4th Round:  June, 2027  5th Round:  June, 2030 |  |
| 1.2.2: Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions | National Gov.  Partner Agencies:  UNICEF,  World Bank,  UNDP | Tier II | National definition and standard should be finalized. Global metadata yet not published. | - | - | MPI, BBS | MICS, BBS | * Men/Women/Children * Age: Below 15 yrs/15 years and over/ 15 to 24 years/ 25 years and older | Triennial | Group 3 | 1st Round: 2019  2nd Round: December, 2022  3rd Round:  December, 2025  4th Round:  December, 2028  5th Round:  December, 2030 | * Child focused MPI has been estimated based on MICS 2012-13. * Next C-MPI will be calculated based on MICS. |
| Target 1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable | | | | | | | | | | | | |
| 1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable. | ILO  Partner Agency:  World Bank | Tier II | **For 1.3.1a**  **Definition:**  The indicator reflects the proportion of persons effectively covered by a social protection system, including social protection floors. It also reflects the main components of social protection: child and maternity benefits, support for persons without a job, persons with disabilities, victims of work injuries and older persons.  Effective coverage of social protection is measured by the number of people who are either actively contributing to a social insurance scheme or receiving benefits (contributory or non-contributory).  **Concepts:**  Social protection systems include contributory and non-contributory schemes for children, pregnant women with newborns, people in active age, older persons, for victims of work injuries and persons with disabilities. Social protection floors provide at least a basic level in all main contingencies along the life cycle, as defined in the Social Protection Floors Recommendation 2012 (no. 202) referred to in SDG 1.3.  When assessing coverage and gaps in coverage, distinctions need to be made between coverage by (1) contributory social insurance, (2) universal schemes covering all residents (or all residents in a given category), and (3) means-tested schemes potentially covering all those who pass the required test of income and/or assets.  **Rationale**  Measurements of effective coverage should reflect how in reality legal provisions are implemented. It refers to the percentage of people actually receiving benefits of contributory and non-contributory social protection programmes, plus the number of persons actively contributing to social insurance schemes.  **Computation Methods and formula:**  Calculations include separate indicators in order to distinguish effective coverage for children, unemployed persons, older persons and persons with disabilities, mothers with newborns, workers protected in case of work injury, and the poor and the vulnerable. For each case, coverage expressed as a share of the respective population.  Indicators are obtained as follows:  a) Proportion of children covered by social protection benefits: ratio of children/households receiving child or family cash benefits to the total number of children/households with children.  b) Proportion of women giving birth covered by maternity benefits: ratio of women receiving cash maternity benefits to women giving birth in the same year (estimated based on age-specific fertility rates published in the UN’s World Population Prospects or on the number of live births corrected for the share of twin and triplet births).  c) Proportion of persons with disabilities receiving benefits: ratio of persons receiving disability cash benefits to persons with severe disabilities. The latter is calculated as the product of prevalence of disability ratios (published for each country group by the World Health Organization) and each country’s population.  d) Proportion of unemployed receiving benefits: ratio of recipients of unemployment cash benefits to the number of unemployed persons.  e) Proportion of workers covered in case of employment injury: ratio of workers protected by injury insurance to total employment or the labour force.  f) Proportion of older persons receiving a pension: ratio of persons above statutory retirement age receiving an old-age pension to persons above statutory retirement age (including contributory and non-contributory).  g) Proportion of vulnerable persons receiving benefits: ratio of social assistance recipients to the total number of vulnerable persons. The latter are calculated by subtracting from total population all people of working age who are contributing to a social insurance scheme or receiving contributory benefits, and all persons above retirement age receiving contributory benefits.  The aggregate indicator is calculated as the proportion of the total population receiving cash benefits under at least one of the contingencies (contributory or non-contributory benefit) or actively contributing to at least one social security scheme.  For 1.3.1b  **Definition:**  Coverage of social protection and labor programs (SPL) is the percentage of population participating in social insurance, social safety net, and unemployment benefits and active labor market programs. Estimates include both direct and indirect beneficiaries.  Concepts:  This indicator is estimated by program type, for the entire population and by quintiles of both the post-transfer and pre-transfer welfare distribution. Programs are aggregated into social assistance, social insurance and labor market according to ASPIRE (Atlas of Social Protection – Indicators of Resilience and Equity) classification. Indicators for all social protection and labor programs (SPL) provide the totals summing up the social assistance, social insurance and labor market figures.  ASPIRE is the World Bank's premier compilation of Social Protection and Labor (SPL) indicators gathered from officially-recognized international household surveys in order to analyze the distributional and poverty impact of Social Protection and Labor programs. ASPIRE is an ongoing project that aims to improve SPL data quality, comparability and availability to better inform SPL policies and programs.  Computation Method:  Data are calculated from national representative household surveys using ASPIRE: The Atlas of Social Protection - Indicators of Resilience and Equity, The World Bank (see datatopics.worldbank.org/aspire/).  Coverage = Number of beneficiaries in the total population (or group) / Total population (or group).  Generally, ASPIRE indicators are based on a first level analysis of original household survey data (with no imputations) and on a unified methodology that does not necessarily reflect country-specific knowledge and in depth country analysis relying on different data sources (administrative program level data). | Administrative Records and  Household Survey using ASPIRE: The Atlas of Social  Protection – Indicators of Resilience and Equity | ASPIRE: The Atlas of Social  Protection – Indicators of Resilience and Equity, WB | HIES, BBS | HIES/ NHD, BBS | * Sex: male/female * Age: children/ retirement age * Income quintiles: * Employment status: unemployed/ retired * Disability: severe disabilities collecting disability social protection benefits * Pregnancy: mothers receiving maternity benefits and benefits for new-borns * Work injury victims: * Income: income quintiles | Triennial | Group 3 | 1st Round:  2016  2nd Round: June, 2021  3rd Round:  June, 2024  4th Round:  June, 2027  5th Round:  June, 2030 | Coverage of social protection floors/systems is wider which need to be addressed in future  DPP for HIES 2020 has been sent to Planning  Commission for approval  IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II) |
| Target 1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance | | | | | | | | | | | | |
| 1.4.1 Proportion of population living in households with access to basic services. | UN-Habitat  Partner Agencies:  UNICEF,  WHO | Tier I | **Concepts and definitions:**  The following key concepts were defined to support the indicator in the context of poverty eradication. Basic Services refer to public service provision systems that meet human basic needs including drinking water, sanitation and hygiene, energy, mobility, waste collection, health care, education and information technologies.  **Access to basic services** implies that sufficient and affordable service is reliably available with adequate quality.  **Access to Basic Drinking Water Services** refers to drinking water from an improved source is available with collection time not more than 30 minutes for a round trip, including queuing. Improved sources include; piped water, boreholes or tube wells, protected dug wells, protected springs, and packaged or delivered water. This definition is based on SDG indicator 6.1.  **Access to Basic Sanitation Services** refers to the use of improved facilities that are not shared with other households. Improved facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs. This definition is based on SDG 6.2.  **Access to Basic Hygiene Facilities** refers to availability of a handwashing facility on premises with soap and water. Handwashing facilities may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other handwashing agents. This definition is based on SDG 6.2.  **Access to Basic Mobility** refers to having access to all-weather-roads in a rural context (SDG 9.1.1) or having access to public transport in an urban context (SDG 11.2.1). The computation of “Access to Basic Mobility” shall therefore be a combination of the above.  **Urban Context:**  **Access to Basic Waste Collection Services** refers to the access that the population have to a reliable waste collection service, including both formal municipal and informal sector services. A ‘collection service’ may be ‘door to door’ or by deposit into a community container. ‘Collection’ includes collection for recycling as well as for treatment and disposal (so includes e.g. collection of recyclables by itinerant waste buyers). ‘Reliable’ means regular - frequency will depend on local conditions and on any pre-separation of the waste. For example, both mixed waste and organic waste are often collected daily in tropical climates for public health reasons, and generally at least weekly; source-separated dry recyclables may be collected less frequently.  **Access to Basic Health Care Services** refers to access to services that cover in and out-of-area emergency services, inpatient hospital and physician care, outpatient medical services, laboratory and radiology services, and preventive health services. Basic health care services also extend to access to limited treatment of mental illness and substance abuse in accordance with minimum standards prescribed by local and national ministries of health.  Access to Basic Education refers to access to education services that provides all learners with capabilities they require to become economically productive, develop sustainable livelihoods, contribute to peaceful and democratic societies and enhance individual well-being. For this indicator we examine access to education services in the school going age of 5 – 21 years of pupils. The right to education is a multi-faceted right that has at least two dimensions that need to be fulfilled:  (a) quantitative (for everyone),  (b) qualitative (right to what education, for how long, provided by whom and for whom and also leading to full development of the human personality fundamental to the fulfilment of other rights, freedom and maintenance of peace. Article 26 of the Universal Declaration of Human rights (1948) note that: Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.  Access to Basic Information Services refers to having a broadband internet access. Broadband is defined as technologies that deliver advertised download speeds of at least 256 kbit/s. The main types of broadband services are: 1) Fixed (wired) broadband network, such as DSL, cable modem, high speed leased lines, fibre to- the-home/building, powerline and other fixed (wired) broadband; 2) Terrestrial fixed (wireless) broadband network, such as WiMAX, fixed CDMA; 3) Satellite broadband network (via a satellite connection); 4) Mobile broadband network (at least 3G, e.g. UMTS) via a handset and 5) Mobile broadband network (at least 3G, e.g. UMTS) via a card (e.g. integrated SIM card in a computer) or USB modem.  **Computation Method:**  There are two computation stages that we have applied depending on the level at which data is collected. Step 1 is getting proportion of population that have access to ALL the basic services mentioned above from primary data sources such as household surveys and census.  **Proportion of Population with access to basic services** | Household Surveys  Administrative Records  Satellite image and remote sensing | National Statistics Office and Line Agencies | MICS, BBS  SVRS, BBS | MICS/SVRS/ /EHS/CPHS/HIES/ APTRCS /NHS/PHC, BBS | * Income: High/medium/low * Sex: male/female | Triennial | Group 3 | 1st Round:  2013  2nd Round:  June, 2019  3rd Round:  June, 2022  4th Round:  June, 2025  5th Round:  June, 2028 | • This is an index based on HH size, drinking water service (6.1.1), Sanitation service  Data availability reviewed in Oct. 2019  (classified as Tier I)  Reviewed at Sept 2018 WebEx meeting  (classified as Tier II) |
| 1.4.2 Proportion of  total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure | UN-Habitat and World Bank  Partner Agencies: FAO,  UNSD,  UN Women,  UNEP,  IFAD" | Tier II | **Concepts:**  The concepts below are based on the “Voluntary Guidelines for the Responsible Governance of Tenure of Land, Forests and Fisheries in the Context of National Food Security” (shorthand VGGT), which were endorsed by the United Nations World Committee on World Food Security in 2012 and therefore considered an internationally accepted standard. Other international frameworks using these concepts are the African Union Agenda on Land as laid out in the 2009 Framework and Guidelines on Land Policy in Africa and the 2014 Nairobi Action Plan on Large-Scale Land-Based Investments.  **Definitions:**  ***Tenure:*** How people, communities and others gain access to land and natural resources (including fisheries and forests) is defined and regulated by societies through systems of tenure. These tenure systems determine who can use which resources, for how long, and under what conditions. Tenure systems may be based on written policies and laws, as well as on unwritten customs and practices. No tenure right, including private ownership, is absolute. All tenure rights are limited by the rights of others and by the measures taken by states for public purposes (VGGT, 2012).  ***Tenure typology:*** A tenure typology is country specific and refers to categories of tenure rights, for example customary, leasehold, public and freehold. Rights can be held collectively, jointly or individually and may cover one or more elements of the bundle of rights (the right of possession, of control, of exclusion, of enjoyment and of disposition).  *Land governance:* Rules, processes and structures through which decisions are made regarding access to and the use (and transfer) of land, how those decisions are implemented and the way that conflicting interests in land are managed. States provide legal recognition for tenure rights through policies, law and land administration services, and define the categories of rights that are considered official.  ***Secure tenure rights:*** comprised of two sub-components: (i) legally recognized documentation and (ii) perception of the security of tenure, which are both necessary to provide a full measurement of tenure security.  ***Legally recognized documentation:*** Legal documentation of rights refers to the recording and publication of information on the nature and location of land, rights and right holders in a form that is recognized by government, and is therefore official. For purposes of computing SDG Indicator 1.4.2, the country specific metadata will define what documentation on land rights will be counted as legally recognized.  ***Perceived security of tenure:*** Perception of tenure security refers to an individual’s perception of the likelihood of involuntary loss of land, such as disagreement of the ownership rights over land or ability to use it, regardless of the formal status and can be more optimistic or pessimistic. Although those without land rights’ documentation may frequently be perceived to be under threat, and those with documentation perceived as protected, there may be situations where documented land rights alone are insufficient to guarantee tenure security. Conversely, even without legally recognized documentation, individuals may feel themselves to be protected against eviction or dispossession. Therefore, capturing and analysing these diverse ranges of situations will enable a more comprehensive understanding of land tenure security, based on a country specific context.  For purposes of constructing the indicator, we define perceptions of tenure to be secure if:   1. The landholder does not report a fear of involuntary loss of the land within the next five years due to, for example, intra-family, community or external threats and 2. The landholder reports having the right to bequeath the land.   **Computation Method and formula:**  Indicator 1.4.2 is composed of two parts: (A) measures the incidence of adults with legally recognized documentation over land among the total adult population; while (B) focuses on the incidence of adults who report having perceived secure rights to land among the adult population. Part (A) and part (B) provide two complementary data sets on security of tenure rights, needed for measuring the indicator.  Part (A): X100  Part (B):  x 100  Part A will be computed using national census data or household survey data generated by the national statistical system and/or administrative data generated by land agency (depending on data availability).  Part B will be computed using national census data or household survey data that feature the perception questions globally agreed through the EGMs and standardized in a module with essential questions discussed in section 5.1.1).  The indicator gives equal weight to both components.  𝐼𝑛𝑑𝑖𝑐𝑎𝑡𝑜𝑟 1.4.2 = 0.5 ∗ 𝑝𝑎𝑟𝑡(𝐴) + 0.5 ∗ 𝑃𝑎𝑟𝑡(𝐵) | 1. Agriculture Census 2. Household-level consumption/expenditure surveys 3. multi-topic household surveys 4. Demographic and Health Surveys (DHS) 5. Multiple Indicator Cluster Surveys (MICS) | NSO | Not Available | Agriculture Sample census, BBS | * Sex: male/female * Type of tenure: Occupied/Non occupied * Income: high/Medium/Low * Geographical location: rural, urban, Division, District, Upazila | Triennial | Group 3 | 1st Round:  December, 2020  2nd Round: December, 2023  3rd Round:  December, 2026  4th Round:  December, 2029  5th Round:  December, 2030 | Data will be collected through Agriculture Sample Census 2019.  Reviewed at 6th IAEG-SDG meeting (classified as Tier II) |
| Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters | | | | | | | | | | | | |
| 1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population | United Nations Office for Disaster Reduction (UNISDR)  Partner Agencies:  UN-Habitat,  UNEP,  DESA Population Division | Tier II | **Definition:**  This indicator measures the number of people who died, went missing or were directly affected by disasters per 100,000 population.  **Concepts:**  **Death:** The number of people who died during the disaster, or directly after, as a direct result of the hazardous event.  **Missing:** The number of people whose whereabouts is unknown since the hazardous event. It includes people who are presumed dead, for whom there is no physical evidence such as a body, and for which an official/legal report has been filed with competent authorities.  **Directly affected:** The number of people who have suffered injury, illness or other health effects; who were evacuated, displaced, relocated or have suffered direct damage to their livelihoods, economic, physical, social, cultural and environmental assets. Indirectly affected are people who have suffered consequences, other than or in addition to direct effects, over time, due to disruption or changes in economy, critical infrastructure, basic services, commerce or work, or social, health and psychological consequences.  **Computation Method:**  Related indicators as of February 2020  Where:  A2 Number of deaths attributed to disasters;  A3 Number of missing persons attributed to disasters; and  B1 Number of directly affected people attributed to disasters. | Administrative Record: National disaster loss database, reported to UNISDR | National disaster management agencies, civil protection agencies, and meteorological  agencies, and disaster data collected by line ministries | BDRHS, BBS | BDRHS, BBS  DDM, MoDMR  Administrative Record | * Income: High/medium/low * Event (as occurred) * Hazard family: IRDR classification * Disaster-related victims: dead, missed, directly affected * Age * Hazard type * Sex: male/female * Location of residence: sub-national administrative unit * Other characteristics: | 5-Yearly | Group 3 | 1st Round:  2014  2nd Round:  December, 2020  3rd Round:  December, 2023  4th Round:  December, 2026  5th Round:  December, 2029 | DPP is has been sent to Planning Commission for approval.  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as Tier II)  11.5.1 and 13.1.1 are repeated |
| 1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP) | United Nations Office for Disaster Reduction (UNISDR)  Partner Agencies:  UNEP, FAO | Tier II | **Definition:**  This indicator measures the ratio of direct economic loss attributed to disasters in relation to GDP.  **Concepts:**  Economic Loss: Total economic impact that consists of direct economic loss and indirect economic loss.  Direct economic loss: the monetary value of total or partial destruction of physical assets existing in the affected area. Direct economic loss is nearly equivalent to physical damage.  Indirect economic loss: a decline in economic value added as a consequence of direct economic loss and/or human and environmental impacts.  Computation Method:  Related indicators as of February 2020  Where:  C2 Direct agricultural loss attributed to disasters;  C3 Direct economic loss to all other damaged or destroyed productive assets attributed to disasters;  C4 Direct economic loss in the housing sector attributed to disasters;  C5 Direct economic loss resulting from damaged or destroyed critical infrastructure attributed to disasters;  C6 Direct economic loss to cultural heritage damaged or destroyed attributed to disasters. | Administrative Record: National disaster loss database, reported to UNISDR | National disaster management agencies | BDRHS, BBS | BDRHS, BBS | * by event (as occurred) * by hazard type (e.g. disaggregation by climatological, hydrological, meteorological, geophysical, biological and extra-terrestrial for natural hazards is possible following IRDR classification) * By asset loss category (health/education/road etc.) * By transportation mode * By service sector: as agriculture/fishing/others * By division/district | Five-yearly | Group 3 | 1st Round:  2015  2nd Round:  December, 2020  3rd Round:  December, 2025  4th Round:  December, 2030 | DPP is has been sent to Planning Commission for approval.  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as Tier II) |
| 1.5.3 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030 | United Nations Office for Disaster Reduction (UNISDR)  Partner Agencies:  UNEP | Tier II | Definition:  The indicator will build bridge between the SDGs and the Sendai Framework for DRR. Increasing number of national governments that adopt and implement national and local DRR strategies, which the Sendai Framework calls for, will contribute to sustainable development from economic, environmental and social perspectives.  [a] An open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction established by the General Assembly (resolution 69/284) is developing a set of indicators to measure global progress in the implementation of the Sendai Framework. These indicators will eventually reflect the agreements on the Sendai Framework indicators.  **Rationale:**  The indicator will build bridge between the SDGs and the Sendai Framework for DRR. Increasing number of national governments that adopt and implement national and local DRR strategies, which the Sendai Framework calls for, will contribute to sustainable development from economic, environmental and social perspectives.  **Computation Method:**  Note: Computation methodology for several indicators is very comprehensive, very long (about 180 pages) and probably out of the scope of this Metadata. UNISDR prefers to refer to the outcome of the Open Ended Intergovernmental Working Group, which provides a full detailed methodology for each indicator and sub-indicator.  The latest version of these methodologies can be obtained at:  http://www.preventionweb.net/documents/oiewg/Technical%20Collection%20of%20Concept%20Notes%20on%20Indicators.pdf  A short summary:  Summation of data from National Progress Reports of the Sendai Monitor | Administrative Record: National Progress Report of the Sendai Monitor, reported to UNISDR | National Progress Report of the Sendai Monitor, reported to UNISDR |  | MoDMR | * Qualitative Indicator * Income: high/medium/low * city: sub-national administrative units | Triennial | Group 1 | 1st Round:  December, 2020  2nd Round:  December, 2021  3rd Round:  December, 2024  4th Round:  December, 2027  5th Round:  December, 2030 | Data to be provided by  MoDMR following metadata  Data availability reviewed in Oct. 2019 (classified as Tier II)  Data availability reviewed in Nov. 2017 (classified as Tier I)  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as Tier II)  1.5.3/11.b.1/13.1.2 are repeats |
| 1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies | United Nations Office for Disaster Reduction (UNISDR) | Tier II | **Definition:**  The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted by UN Member States in March 2015 as a global policy of disaster risk reduction. One of the targets is: “Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020”.  In line with the Sendai Framework for Disaster Risk Reduction 2015-2030, disaster risk reduction strategies and policies should mainstream and integrate disaster risk reduction within and across all sectors, across different timescales and with targets, indicators and time frames. These strategies should be aimed at preventing the creation of disaster risk, the reduction of existing risk and the strengthening of economic, social, health and environmental resilience.  The open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (OIEWG) established by the General Assembly (resolution 69/284) has developed a set of indicators to measure global progress in the implementation of the Sendai Framework, which was endorsed by the UNGA The relevant SDG indicators reflect the Sendai Framework indicators.  Member States count the number of local governments that adopt and implement local DRR strategies in line with the national strategy and express it as a percentage of the total number of local governments in the country.  **Computation Method:**  Member States count the number of local governments that adopt and implement local DRR strategies in line with the national strategy and express it as a percentage of the total number of local governments in the country.  Local governments are determined by the reporting country for this indicator, considering sub-national public administrations with responsibility to develop local disaster risk reduction strategies. It is recommended that countries report on progress made by the lowest level of government accorded the mandate for disaster risk reduction, as the Sendai Framework promotes the adoption and implementation of local disaster risk reduction strategies in every local authority.  Each Member State will calculate the ratio of the number of local governments with local DRR strategies in line with national strategies and the total number of local governments.  Global Average will then be calculated as below through arithmetic average of the data from each Member State. | Administrative Record: National Progress Report of the Sendai Monitor, reported to UNISDR | National Progress Report of the Sendai Monitor, reported to UNISDR | MoDMR | DDM, MoDMR | * Qualitative Indicator * Income: high/medium/low * city: sub-national administrative units | Annual | Group 1 | 1st Round:  2019  2nd Round:  August, 2020  3rd Round:  August, 2021  4th Round:  August, 2022  5th Round:  August, 2023 | City Corporation of Rangpur and Municipalities of Tangail, Rangamati and Sunamganj have disaster risk reduction strategies in line with national disaster risk reduction strategies.  Reviewed at 6th IAEG-SDG meeting (classified as Tier II)  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as TBD)  11.b.2 & 13.1.3 are repeated |
|  | | Target 1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions | | | | | | | | | | |
| 1.a.1 Total official development assistance grants from all donors that focus on poverty reduction as a share of the recipient country’s gross national income | - | TBD | **Definition:**    Total official development assistance (ODA) grants from all donors that focus on poverty reduction as a share of the recipient country’s gross national income.    The OECD/Development Assistance Committee (DAC) defines ODA as “flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are i) provided by official agencies, including state and local governments, or by their executive agencies; and ii) each transaction is administered with the promotion of the economic development and welfare of developing countries as its main objective; and is concessional in character and conveys a grant element of at least 25 per cent  (calculated at a rate of discount of 10 per cent). (See [http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm)](http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm).    Poverty reduction items can be defined as ODA to basic social services (basic health, basic education, basic water and sanitation, population programmes and reproductive health) and developmental food aid (see here: [http://www.oecd.org/dac/stats/purposecodessectorclassification.htm)](http://www.oecd.org/dac/stats/purposecodessectorclassification.htm).    **Concepts:**    Basic social services and development food aid, which focus on poverty reduction, are defined using the following OECD Creditor Reporting System purpose codes, which identify the sector the activity is intended to target:    Basic Education (CRS codes 112xx)  Basic Health (CRS codes (122xx)  Water Supply and Sanitation (CRS codes 140xx)  Multisector aid for basic social services (CRS code 16050)  Development Food Aid (CRS code 52010)    The detailed list of CRS purpose codes and their definitions are available here:  <http://www.oecd.org/dac/stats/purposecodessectorclassification.htm>    Comments and limitations:    Data in the Creditor Reporting System (i.e. at an activity level), are available from 1973 onwards. However, the data coverage is considered complete since 1995 for commitments and 2002 for disbursements.    Computation Method:    From a donor country’s perspective: The sum of bilateral ODA grants by donor that focus on poverty reduction as a share of the donor country’s gross national income.    From a recipient country’s perspective: The sum of total ODA grants from all donors (i.e. DAC donors, multilateral organisations and other bilateral providers of development cooperation) that focus on poverty reduction as a share of the developing country’s gross national income. | A statistical reporter is responsible for the collection of DAC statistics in each providing country/agency. This reporter is usually located in the national aid agency, Ministry of Foreign Affairs or Finance etc.    The OECD prepares and sends a questionnaire on aid flows (at an activity level and aggregate level) to the national statistical reporter every year. | A statistical reporter is responsible for the collection of DAC statistics in each providing country/agency. This reporter is usually located in the national aid agency, Ministry of Foreign Affairs or Finance etc. |  | ERD Administrative data | * by donor (country/agency) * ,by recipient country, * by type of finance, * by type of aid: Financial/ Non Financial, * by sub-sector, * by policy marker * by gender : male/female/tarnsgender | Annual | - | 1st Round:  December, 2020  2nd Round:  December, 2021  3rd Round:  December, 2022  4th Round:  December, 2023  5th Round:  December, 2024 | Metadata  yet to finalised  UNSC 51 replacement included in the 2020 comprehensive review; new indicator 1.a.1 is a replacement for indicator 1.a.3 |
| 1.a.2 Proportion of total government spending on essential services (education, health and social protection) | Under discussion among agencies (ILO, UNESCO-UIS, WHO) | Tier II | Metadata for this indicator is not yet available | Administrative Record | - | FD  Administrative data | FD  Administrative data | * Sectors (education, health and social protection) * By geographical region: Division | Annual | Group 2 | 1st Round:  2015  2nd Round:  January, 2019  3rd Round:  January, 2020  4th Round:  January, 2021  5th Round:  January, 2022 | FD should comply with the metadata for reporting subject to availability |
|  | | 1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions | | | | | | | | | | |
| 1.b.1 Pro-poor public social spending | - | TBD | **Definition:**  Proportion of government spending towards health and education and direct transfers which benefit directly the monetary poor. Government spending measures public expenditures on health and education services. Direct transfers refer to cash transfers and near-cash transfers. The definition of the monetary poor follows national standards, with poverty levels determined by national definition of income or consumption poverty (consistent with SDG 1.2.1).    **Concepts:**  Proportion of public spending: Expenditures by governments on health, education and direct transfers (cash transfers and near-cash transfers).    The poor: Monetary Poverty as determined by national definition of income/consumption poverty (consistent with SDG 1.2.1):    **Rationale:**  The indicator measures the extent to which public spending in three key areas which are critical for poverty eradication, including health, education, and other direct transfers is directly allocated to individuals or households in the monetary poor as per the national definition.  The indicator measures if public spending is targeting the monetary poor. Pro-poor social spending is defined if the proportion of government expenditures on social services is higher than the proportion of the population, measured at the level determined by national definition of income/consumption poverty (consistent with SDG 1.2.1). For instance, if the proportion of public spending received by the poor exceeds (falls below) the proportion of poor as defined by national definitions, public expenditures can be interpreted as pro-poor (not pro-poor). This is a strong measurement of the financial commitment governments make to target their services and transfers on the poor groups of society, reinforcing propoor  development strategies.  Further developments of the methodology and improvements in data availability may allow to expand this indicator to other vulnerable groups, such as women and children.  **Comments and limitations:**  Feasibility: The indicator can be estimated for any country for which (a) a micro-data set detailing incomes or expenditures and services utilization (i.e. education, health, and cash transfers receipts) at the individual or household level exists and (b) a set of fiscal, administrative, or budgetary records detailing public expenditures at the program level is available.    Suitability/relevance: The indicator provides an estimate how well public resources are allocated to sectors which disproportionally benefit the poor. This reflects the financial consequences of policy frameworks, which are based on pro-poor development strategies, which allows to measure progress on the SDG target 1.b.    Limitations: The indicator does not take into effect the consequences of revenue-related fiscal activities, such as taxes or contributions to public insurance systems, on the poor. The proposed methodology does not currently expand to other groups, such as women or children.    **Computation Method:**  Monetary Poverty can be derived directly from a nationally representative micro-data set (an Income and Expenditure Survey, for example). Procedures for estimations are detailed comprehensively in the 1.2.1 metadata. The estimates used for this indicator would be the same as the ones for Target 1.2.1.  Public spending on social services can be directly derived from budget administrative data.  A fiscal incidence analysis is required to estimate the benefit the poor individuals or households (depending on underlying survey data) are receiving from those services. The incidence analysis measures the monetised value of in-kind transfers in education and health services at average government costs. In addition, this indicator includes cash and near cash transfers in the definition of social services (conditional and unconditional cash transfers, school feeding programmes etc.). The procedures are described in detailed in the CEQ Handbook, Meerman, Jacob (1979), Selowsky, Marcelo (1979), and many other ones. | Administrative Record | Ultimately the data providers are national-level statistical agencies for the micro-data sets and nationallevel fiscal agencies and bodies for the budgetary and administrative data. |  | FD  Administrative data  HIES, BBS | • by subnational level: Division, District | Annual | Group 2 | 1st Round: 2016  2nd Round: June, 2021  3rd Round:  June, 2024  4th Round:  June, 2027  5th Round:  June, 2030 | FD should comply with the metadata for reporting subject to  availability  UNSC 51 replacement included in the 2020 comprehensive review |

 End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Total Target 8, Total Indicators: 13

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

|  |  |
| --- | --- |
|  | End hunger, achieve food security and improved nutrition and promote sustainable agriculture |

| **Goals and targets and Indicators** | | **Custodian Agency (ies)** | **Tier Classifications** | **Definition, Rationale, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***1*** | | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** | ***8*** | ***9*** | ***10*** | ***11*** | ***12*** | ***13*** |
|  | Target 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round | | | | | | | | | | | | |
| 2.1.1 Prevalence of undernourishment | | Food and Agriculture Organization of the United Nations (UN FAO) | Tier I | **Definition:**  The prevalence of undernourishment (PoU) (French: pourcentage de sous-alimentation; Spanish: porcentaje de sub-alimentación; Italian: prevalenza di sotto-alimentazione) is an estimate of the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels that are required to maintain a normal active and healthy life. It is expressed as a percentage.  **Rationale:**  The indicator has been used by FAO to monitor the World Food Summit Target and the MDG Target 1C, at national, regional and global level, since 1999. It allows monitoring trends in the extent of dietary energy inadequacy in a population over time, generated as a result of the combination of changes in the overall availability of food, in the households’ ability to access it, and in the socio-demographic characteristics of the population, as well as differences across countries and regions in any given moment in time.  The parametric approach adopted by FAO allows obtaining reliable estimated for relatively large population groups. As it reflects a severe condition of lack of food, it is fully consistent with the spirit of a Goal that aims at reducing hunger.  **Concepts:**  Undernourishment is defined as the condition by which a person has access, on a regular basis, to amounts of food that are insufficient to provide the energy required for conducting a normal, healthy and active life, given his or her own dietary energy requirements. Though strictly related, “undernourishment” as defined here is different from the physical conditions of “malnutrition” and “undernutrition” as it refers to the condition of insufficient intake of food, rather than to the outcome in terms of nutritional status. In French, Spanish and Italian the difference is marked by the use of the terms alimentation, alimentación, or alimentazione, instead of nutrition, nutrición or nutrizione, in the name of the indicator. A more appropriate expression in English that would render the precise meaning of the indicator might have been “prevalence of under-feeding” but by now the term “undernourishment” has long been associated with the indicator. While the undernourishment condition applies to individuals, due to conceptual and data-related considerations, the indicator can only be referred to a population, or group of individuals. The prevalence of undernourishment is thus an estimate of the percentage of individuals in a group that are in that condition, but it does not allow for the identification of which individuals in the group are, in fact, undernourished.  **Computation Method and Formula:**  The indicator is computed at the population level. To this aim, the population is represented by an “average” individual for which a probability distribution of the habitual daily dietary energy intake levels is modelled through a parametric probability density function (pdf). Once the pdf is characterized, the indicator is obtained as the cumulative probability that daily habitual dietary energy intakes (x) are below the lower bound of the range of normal dietary energy requirements for that representative, or average individual (MDER), as in the formula below:  PoU= ∫\_(x<MDER) f(x | DEC; CV; Skew) dx  where DEC, CV and Skew are the mean, coefficient of variation and skewness that characterize the distribution of habitual dietary energy consumption levels in the population. | Individual dietary intake survey | NSO | FAO | Data mining  a) BBS (HIES)  b) FAO | * Rural-urban * Division * Sex of Head of Household:Male/female * Income classes:high/medium/low | Triennial | Group 3 | 1st Round:  2016  2nd Round:  December  2019  3rd Round:  December  2022  4th Round:  December  2025  5th Round:  December  2028 | HIES, BBS data can be explored or incorporate individual dietary intake in HIES data. |
| 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) | | Food and Agriculture Organisation of the United Nations (FAO) | Tier II | **Definition:**  The indicator measures the percentage of individuals in the population who have experienced food insecurity at moderate or severe levels during the reference period. The severity of food insecurity, defined as a latent trait, is measured on the Food Insecurity Experience Scale global reference scale, a measurement standard established by FAO through the application of the Food Insecurity Experience Scale in more than 140 countries worldwide, starting in 2014.  **Rationale:**  Food insecurity at moderate levels of severity is typically associated with the inability to regularly eat healthy, balanced diets. As such, high prevalence of food insecurity at moderate levels can be considered a predictor of various forms of diet-related health conditions in the population, associated with micronutrient deficiency and unbalanced diets. Severe levels of food insecurity, on the other hand, imply a high probability of reduced food intake and therefore can lead to more severe forms of undernutrition, including hunger.  **Concept:**  Extensive research over more than 25 years has demonstrated that the inability to access food results in a series of experiences and conditions that are fairly common across cultures and socio-economic contexts and that range from being concerned about the ability to obtain enough food, to the need to  compromise on the quality or the diversity of food consumed, to being forced to reduce the intake of food by cutting portion sizes or skipping meals, up to the extreme condition of feeling hungry and not having means to access any food for a whole day. Typical conditions like these form the basis of an experience-based food insecurity measurement scale. When analysed through sound statistical methods rooted in Item Response Theory, data collected through such scales provide the basis to compute theoretically consistent, cross country comparable measures of the prevalence of food insecurity. The severity of the food insecurity condition as measured by this indicator thus directly reflects the extent of households’ or individuals’ inability to regularly access the food they need.  **Computation Method:**  Data at the individual or household level is collected by applying an experience-based food security scale questionnaire within a survey. The food security survey module collects answers to questions asking respondents to report the occurrence of several typical experiences and conditions associated with food insecurity. The data is analysed using the Rasch model (also known as one-parameter logistic model, 1-PL), which postulates that the probability of observing an affirmative answer by respondent i to question j, is a logistic function of the distance, on an underlying scale of severity, between the position of the respondent, 𝑎𝑖 , and that of the item, 𝑏𝑗.    Parameters 𝑎𝑖 and 𝑏𝑗 can be estimated using maximum likelihood procedures. Parameters 𝑎𝑖, in particular, are interpreted as a measure of the severity of the food security condition for each respondent and are used to classify them into classes of food insecurity.  The FIES considers the three classes of (a) food security or mild food insecurity; b) moderate or severe food insecurity, and (c) severe food insecurity, and estimates the probability of being moderately or severely food insecure (𝑝mod+sev) and the probability of being severely food insecure (𝑝sev) for each respondent, with 0<𝑝sev<𝑝mod+sev<1. The probability of being food secure or mildly food insecure can be obtained as 𝑝fs=1−𝑝mod+sev.  Given a representative sample, the prevalence of food insecurity at moderate or severe levels (FImod+sev), and at severe levels (FIsev) in the population are computed as the weighted sum of the probability of belonging to the moderate or severe food insecurity class, and to the severe food insecurity class, respectively, of all individual or household respondents in a sample:  and  where 𝑤𝑖 are post-stratification weights that indicate the proportion of individual or households in the national population represented by each element in the sample. It is important to note that if 𝑤𝑖 are individual sampling weights, then the prevalence of food insecurity refers to the total population of individuals, while if they are household weights, the prevalence refers to the population of households. For the calculation of the indicator 2.1.2, objective is to produce a prevalence of individuals. This implies that:  if a survey is at household level, and provides household sampling weights, they should be transformed to individual sampling weights by multiplying the weights by the household size. This individual weighting system can then be used to calculate the individual prevalence rates in formulas (1) and (2) | Household based survey | NSO | FAO | (FIES/ CPHS/ ASC ) SID, BBS | * Location: Urban/Rural * household income: High/Medium/Low * composition (including for example presence and number of small children, members with disabilities, elderly members, etc.) * sex: Male/Female * age: 0-5 years/below 15 yrs/ 15 yrs and over * education of the household head | Triennial | Group 3 | 1st Round:  2014  2nd Round:  July 2020  3rd Round:  July 2023  4th Round:  July 2026  5th Round:  July 2029 | BBS should conduct CMNS Survey asap. |
|  | Target 2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons | | | | | | | | | | | | |
| 2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age | | UNICEF, WHO, WB | Tier I | **Definition:**  Prevalence of stunting (height-for-age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age.  **Rationale:**  Child growth is an internationally accepted outcome reflecting child nutritional status. Child stunting refers to a child who is too short for his or her age and is the result of chronic or recurrent malnutrition. Stunting is a contributing risk factor to child mortality and is also a marker of inequalities in human development. Stunted children fail to reach their physical and cognitive potential. Child stunting is one of the World Health Assembly nutrition target indicators.  **Computation Method:**  Survey estimates are based on standardized methodology using the WHO Child Growth Standards as described elsewhere (Ref: Anthro software manual). Global and regional estimates are based on methodology outlined in UNICEF-WHO-The World Bank: Joint child malnutrition estimates - Levels and trends (UNICEF/WHO/WB 2012 ) | Household Survey | NSO | MICS, BBS | a) MICS, BBS | * Sex:Male/female * Age groups: 0-12 months/0-24 months/0-59 months/24-59 months * Wealth quantile * Mothers’ education: illiterate/primary/higher * Residence: urban/rural | Triennial | Group 1 | 1st Round:  2013  2nd Round:  August 2019  3rd Round:  August 2022  4th Round:  August 2025  5th Round:  August 2028 |  |
| 2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight) | | UNICEF, WHO, WB | Tier I | **For 2.2.2a**  **Definition:**  Prevalence of overweight (weight for height >+2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age.  **Rationale:**  Child growth is an internationally accepted outcome area reflecting child nutritional status. Child overweight refers to a child who is too heavy for his or her height. This form of malnutrition results from expending too few calories for the amount of food consumed and increases the risk of noncommunicable diseases later in life. Child overweight is one of the World Health Assembly nutrition target indicators.  **Concepts:**  The official MDG indicator is overweight as assessed using weight for height. Overweight can however also be assessed with other indicators such body mass index for age. In general BMI for age is not used in the joint dataset but has been considered in absence of any other available estimates.  **Computation Method:**  Survey estimates are based on standardized methodology using the WHO Child Growth Standards as described elsewhere (Ref: Anthro software manual). Global and regional estimates are based on methodology outlined in UNICEF-WHO-The World Bank: Joint child malnutrition estimates - Levels and trends (UNICEF/ WHO/ WB 2012 )  **For 2.2.2b**  **Definition:**  Prevalence of wasting (weight for height <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age.  Concepts:  The official MDG indicator is wasting as assessed using weight for height. Wasting can however also be assessed with mid upper arm circumference (MUAC). Estimates of wasting based on MUAC are not considered for the joint dataset. In addition, while wasting constitutes the major form of moderate acute malnutrition (MAM), there are acutely malnourished children who would not be picked up with weight-for-height or MUAC, namely those presenting bilateral pitting odema (characterized by swollen feet, face and limbs). For Surveys that report oedema cases, in the joint data set these are included in the prevalence of low weight-for-height.  Computation Method:  Survey estimates are based on standardized methodology using the WHO Child Growth Standards as described elsewhere (Ref: Anthro software manual). Global and regional estimates are based on methodology outlined in UNICEF-WHO-The World Bank: Joint child malnutrition estimates - Levels and trends (UNICEF/WHO/WB 2012 ). | Household Survey | NSO | a) BDHS  b) MICS | MICS, BBS | * Sex Male/female * Age groups:0-12 months/0-24 months/0-59 months/24-59 months * Wealth quantile * Mothers' education: illiterate/primary/higher * Residence: urban/rural * Malnutrition: wasted/overweight | Triennial | Group 1 | For (a)  1st Round:  2014  2nd Round:  August 2019  3rd Round:  August 2022  4th Round:  August 2025  5th Round:  August 2028  For (b)  1st Round:  2014  2nd Round:  August 2019  3rd Round:  August 2022  4th Round:  August 2025  5th Round:  August 2028 |  |
| 2.2.3 Prevalence of anaemia in women aged 15 to 49 years, by pregnancy status (percentage) | |  | TBD | **Definition:**  Percentage of women aged 15−49 years with a haemoglobin concentration less than 120 g/L for nonpregnant women and lactating women, and less than 110 g/L for pregnant women, adjusted for altitude and smoking.  **Concepts:**  Anaemia: condition in which the concentration of blood haemoglobin falls below established cut-off values.  Iron deficiency state in which there is insufficient iron to maintain the normal physiological function of blood, brain and muscles (ICD-11, 5B5K.0 iron deficiency)  Iron deficiency anaemia: (ICD-11, 3A00, iron deficiency anaemia) Blood haemoglobin concentration: concentration of haemoglobin in whole blood  **Computation Method:**  The anaemia status of women is assessed using blood haemoglobin concentrations. In surveys, blood haemoglobin concentrations are typically measured using the direct cyanmethemoglobin method in a laboratory or with a portable, battery-operated, haemoglobin photometer in the field that uses the azide-methaemoglobin method.  Prevalence of anaemia and/or mean haemoglobin in women of reproductive age were obtained from 303 population-representative data sources from 116 countries worldwide. Data collected from 1990 to 2016 were used. Adjustment of data on blood haemoglobin concentrations for altitude and smoking was carried out whenever possible. Biologically implausible haemoglobin values (<25 g/L or >200 g/L) were excluded. A Bayesian hierarchical mixture model was used to estimate haemoglobin distributions and systematically addressed missing data, non-linear time trends, and representativeness of data sources. | Survey  Bayesian hierarchical mixture model | Ministries of Health through WHO regional and country offices,  National research and academic institutions,  Nongovernmental organizations, and  Organizations of th[e United Nations](http://www.unsceb.org/directory) system. | NMSB, IPHN | a) MICS/ HMSS, BBS  b) IPHN, DGHS | * Age: 15-19 yrs/ 20-24 yrs/25-29 yrs/30-34 yrs/35-39 yrs/40-44 yrs/45-49 yrs * Residence: Rural/Urban * Location: Division/District |  |  | 1st Round:  2012  2nd Round:  December, 2020  3rd Round:  December, 2023  4th Round:  December, 2026  5th Round:  December, 2029 | UNSC 51 addition included in the 2020 comprehensive review |
|  | Target 2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment | | | | | | | | | | | | |
| 2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size | | Food and Agriculture Organization of the United Nations | Tier II | Definition:  Volume of agricultural production of small-scale food producer in crop, livestock, fisheries, and forestry activities per number of days.  The indicator is computed as a ratio of annual output to the number of working days in one year.  **Concepts:**  • The following concepts are adopted for the computation of indicators 2.3.1:  • Small-scale food producers are defined as those falling in the intersection of the bottom 40 percent of the cumulative distribution of land, livestock and revenues.  • Tropical Livestock Units are a conversion scale used for standardization and measurement of the number of livestock heads. One TLU is the metabolic weight equivalent of one cattle in North America. The complete list of conversion factors can be found in the Guidelines for the preparation of livestock sector Reviews  • The concept of productivity is standardized by OECD’s Manual for Measuring Productivity. This defines productivity as “a ratio of a volume measure of outputs to a volume measure of input use.” More information on possible definitions can be found in “Productivity and Efficiency Measurement in Agriculture: Literature Review and Gaps Analysis”.  **Computation Method:**  where:  V\_ij^t is the physical volume of agricultural product i sold by the small-scale food producer j during year t;  p\_ij^t is the constant sale price received by the small-scale food producer j for the agricultural product i during same year t;  〖Ld〗\_j^t is the number of labour days utilized by the small-scale food producer j during year t;  n is the number of small-scale food producer. | Agriculture Census/ Agriculture Survey  administrative data | NSO | - | a) Agriculture Sample Census Agriculture Survey /, BBS  b) Cost of Agriculture Production Survey, BBS | * Classes of farming/pastoral/forestry enterprise size: TPE/Capital * TPE by sex, Sex of unit head: Male, Female. * Type of enterprise   Community of reference | Triennial | Group 3 | 1st Round:  December  2020  2nd Round:  December  2025  3rd Round:  December  2030 |  |
| 2.3.2 Average income of small-scale food producers, by sex and indigenous status | | Food and Agriculture Organization of the United Nations | Tier II | **Definition:**  SDG indicator 2.3.2 measures income from on-farm production activities, which is related to the production of food and agricultural products. This includes income from crop production, livestock production, fisheries and aquaculture production, and from forestry production.  The indicator is computed as annual income.  **Concepts:**  The following concepts are adopted for the computation of indicators 2.3.2:  • Small-scale food producers are defined as those falling in the intersection of the bottom 40 percent of the cumulative distribution of land, livestock and revenues.  • Tropical Livestock Units are a conversion scale used for standardization and measurement of the number of livestock heads. One TLU is the metabolic weight equivalent of one cattle in North America. The complete list of conversion factors can be found in the Guidelines for the preparation of livestock sector Reviews  • The computation of income is based on the resolution adopted by the 17th International Conference of Labour Statisticians (ICLS). Income should be computed by deducting from revenues the operating costs and the depreciation of assets.  **Computation Method:**  Given i agricultural activities, including crops, livestock, fisheries and forestry activities, and j [1,…,n] small scale food producers defined as in the first section as a subset of all N [1,…,k] food producers, the SDG indicator 2.3.2 must be computed using the following formula:  where:    V\_ij^t is the physical volume of agricultural product i sold by the small-scale food producer j during year t;  p\_ij^t is the constant sale price received by the small-scale food producer j for the agricultural product i during year t;  C\_ij^t is the production cost of agricultural product i supported by the small-scale food producer j during year t;  n is the number of small-scale food producer. | Agriculture Census/ Agriculture Survey  administrative data | NSO | - | Agriculture Sample Census/ / Cost of Production Survey, BBS | * Classes of farming/pastoral/forestry enterprise size: TPE/Capital * TPE by sex, Sex of unit head: Male, Female. * Type of enterprise : farming/pastoral/forestry   Community of reference: women, indigenous peoples, family farmers, pastoralists and fishers | Triennial | Group 3 | 1st Round:  December  2020  2nd Round:  December  2023  3rd Round:  December  2026  4th Round:  December  2029  5th Round:  December  2030 |  |
|  | Target 2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality | | | | | | | | | | | | |
| 2.4.1 Proportion of agricultural area under productive and sustainable agriculture | | Food and Agriculture Organization of the United Nations | Tier II | **Definition:**  The indicator is defined by the formula:  This implies the need to measure both the extent of land under productive and sustainable agriculture (the numerator), as well as the extent of agriculture land area (the denominator).  The numerator captures the three dimensions of sustainable production: environmental, economic and social. It corresponds to agricultural land area of the farms that satisfy sub-indicators selected across all three dimensions.  The denominator in turn the sum of agricultural land area (as defined by FAO) utilized by agricultural holdings that are owned (excluding rented-out), rented-in, leased, sharecropped or borrowed. State or communal land used by farm holdings is not included. Please see the methodological document prepared by FAO for a more detailed explanation.  **Concepts:**  The literature review (Hayati, 2017) identified a large number of potential sustainability themes across the three dimensions of sustainability and, for each theme, usually a large number of possible sub-indicators. The key considerations in the selection of themes are relevance and measurability. In terms of relevance, the relationship between the associated sub-indicator and sustainable agriculture outcomes at farm level should be strong. Following this approach, only sub-indicators that are responsive to farm level policies aimed at improving sustainable agriculture are considered. In terms of measurability, only a “core” set of themes and sub-indicators for which measurement and reporting is expected in the majority of countries are selected.  A key aspect of all approaches to measuring sustainable agriculture is the recognition that sustainability is a multi-dimensional concept, and that these multiple dimensions need to be reflected in the construction of the indicator. This implies that SDG indicator 2.4.1 must be based on a set of sub-indicators that cover these three dimensions.  **Computation Method:**  Steps to calculate SDG 2.4.1 include:  1. Determining the scope of the indicator: The scope of Indicator 2.4.1 is the agricultural farm holding, and more precisely the agricultural land area of the farm holding, i.e., land used primarily to grow crops and raise livestock. Forestry, fisheries and aquaculture activities may be included to the extent that they are secondary activities conducted on the agricultural area of the farm holding, for example rice-fish farming and similar systems.  2. Determining the dimensions to be covered: Indicator 2.4.1 includes environmental, economic and social dimensions in the sustainability assessment.  3. Choosing the scale for the sustainability assessment: Indicator 2.4.1 is farm level with aggregation to higher levels.  4. Selecting the data collection instrument(s). It is recommended that indicator 2.4.1 be collected through a farm survey.  5. Selecting the themes within each dimension, and choosing a sub-indicator for each theme. The sub-indicators should satisfy a number of criteria (described in annex 1 for each sub-indicator, respectively).  6. Assessing sustainability performance at farm level for each sub-indicator: Specific sustainability criteria are applied in order to assess the sustainability level of the farm for each theme according to the respective sub-indicators.  7. Deciding the periodicity of monitoring the indicator. It is recommended to be collected at least every three years.  8. Modality of reporting the indicator. The set of sub-indicators are presented in the form of a dashboard. The dashboard approach offers a response in terms of measuring sustainability at farm level and aggregating it at national level. | environmental monitoring systems, administrative data or household surveys | National Statistical Office |  | ASC/Agriculture Production Survey, BBS | * Administrative Area: Division/District * Type of Farming System: Crop, Livestock, Mixed. * Other Characteristics of the Farm: E.G. Size, Gender of the Farm Holder. | 2 Years | Group 3 | 1st Round:  December  2020  2nd Round:  December  2023  3rd Round:  December  2026  4th Round:  December  2029  5th Round:  December  2030 | UNSC 51 revision included in the 2020 comprehensive review; revision of metadata: change in “use of biodiversity-supporting practices subindicator.  Pilot Survey on Agricultural Area Under Productive and Sustainable Agriculture is being conducted by BBS in 2019.  UNSC 51 revision included in the 2020 comprehensive review; revision of metadata: change in “use of biodiversity-supporting practices” subindicator  Reviewed at 8th IAEG-SDG meeting (classified as Tier II)  IAEG-SDG 6th meeting: Review of results of pilot studies necessary and more testing needed before indicator can be reclassified |
| Target 2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed | | | | | | | | | | | | | |
| 2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities | | Food and Agriculture Organization of the United Nations (UN FAO) | Tier I | **Definition:**  The conservation of plant and animal genetic resources for food and agriculture (GRFA) in medium or long term conservation facilities (ex situ, in genebanks) represents the most trusted means of conserving genetic resources worldwide. Plant and animal GRFA conserved in these facilities can be easily used in breeding programmes as well, even directly on-farm.  The measure of trends in ex situ conserved materials provides an overall assessment of the extent to which we are managing to maintain and/or increase the total genetic diversity available for future use and thus protected from any permanent loss of genetic diversity which may occur in the natural habitat, i.e. in situ, or on-farm.  The two components of the indicator, plant and animal GRFA, are separately counted.  **Concepts:**  Plant genetic resources  Plant genetic resources for food and agriculture (PGRFA): Any genetic material of plant origin of actual or potential value for food and agriculture.  Accession: An accession is defined as a sample of seeds, planting materials or plants representing either a wild population, a landrace, a breeding line or an improved cultivar, which is conserved in a genebank. Each accession should be distinct and, in terms of genetic integrity, as close as possible to the sample provided originally.  Base collection: A base collection is defined as a set of unique accessions to be preserved for a medium to long-term period.  Active collection: An active collection is defined as a set of distinct accessions that is used for regeneration, multiplication, distribution, characterization and evaluation. Active collections are maintained in short to medium-term storage and usually duplicated in a base collection.  Medium or long term conservation facilities: Biological diversity is often conserved ex situ, outside its natural habitat, in facilities called genebanks. In the case of plant genetic resources, genebanks conserve base collections under medium or long term storage conditions, in the form of seeds in cold rooms, plants in the field and tissues in vitro and/or cryoconserved.  Animal genetic resources  Breed: A breed is either a sub-specific group of domestic livestock with definable and identifiable external characteristics that enable it to be separated by visual appraisal from other similarly defined groups within the same species, or a group for which geographical and/or cultural separation from phenotypically similar groups has led to acceptance of its separate identity.  Medium or long term conservation facilities: Biological diversity is often conserved ex situ, outside its natural habitat, in facilities called genebanks. In the case of domestic animal diversity, ex situ conservation includes both the maintenance of live animals (in vivo) and cryoconservation.  Cryoconservation is the collection and deep-freezing of semen, ova, embryos or tissues for potential future use in breeding or regenerating animals.  **Computation Method:**  Plant genetic resources  The plant component of the indicator is calculated as the total number of unique accessions of plant genetic resources secured in medium to long term conservation facilities. This should include all the accessions in base collections, and unique accessions stored in medium term conservation facilities, as active collections, only when these accessions are considered to become part of the national base collections. Base collections may include both seed, field, cryo-preserved or in vitro collections depending on the species conserved and the available facilities in the country.  Animal genetic resources  For the animal component the indicator is calculated as the number of local breeds with enough genetic material stored within genebank collections allowing to reconstitute the breed in case of extinction | - | The officially nominated National Focal Points / National Coordinators. | MoA | a) BARC, MoA  b) BRRI, MoA c) BLRI, MoFL d) MoST  e) BFRI | * For both, plant and animal * components geographic disaggregation (national, regional, global) : Division | Bi-Annual | Group 2 | 1st Round:  January  2019  2nd Round:  January  2021  3rd Round:  January  2023  4th Round:  January  2025  5th Round:  January  2027 |  |
| 2.5.2 Proportion of local breeds classified as being at risk of extinction | | FAO  Partner Agency:  UNEP | Tier II | **Definition:**  The indicator presents the percentage of livestock breeds classified as being at risk, not at risk or of unknown risk of extinctions at a certain moment in time, as well as the trends for those percentages.  **Concept:**  This indicator was originally proposed for the Target 15.5, and it serves also as an indicator for the Aichi Target 13 “Genetic Diversity of Terrestrial Domesticated Animals” under the Convention on Biological Diversity (CBD). It is described on the webpage of the Biodiversity Indicators Partnership (BIP), a network of organizations, which have come together to provide the most up-to date biodiversity information possible for tracking progress towards the Aichi Targets.  **Computation Method:**  The indicator is based on the data contained in FAO’s Global Databank for Animal Genetic Resources DAD-IS (http://dad.fao.org/). Risk classes are defined based on population sizes of breeds reported to DAD-IS. The risk class is considered to be “unknown” if (i) no population sizes are reported or (ii) the most recent population size reported refers to a year more than 10- years before the year of calculation (10 year cut off point).  Species are assigned to two groups. The first group comprises species that have high reproductive capacity, such as pigs, rabbits, guinea pigs and avian species, and the second comprises species that have low reproductive capacity, i.e. those belonging to the taxonomical families Bovidae, Equidae, Camelidae and Cervidae. | Global Databank for Animal Genetic Resources | National Coordinators for the Management of Animal Genetic Resources (NCs) | BLRI | a) BLRI, MoFL  b) GDAGR, FAO  Administrative Data | * National * DIvision | Annual | Group 2 | 1st Round:  2015  2nd Round:  December,  2020  3rd Round:  December,  2022  4th Round:  December,  2024  5th Round:  December,  2026 | UNSC 51 revision included in the 2020 comprehensive review  Data availability reviewed in Oct. 2019 (classified as Tier II)  Data availability reviewed in Nov. 2017 (classified as Tier I) |
| Target 2.a: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries | | | | | | | | | | | | | |
| 2.a.1: The agriculture orientation index for government expenditures | | FAO | Tier I | **Concepts:**  Agriculture refers to the agriculture, forestry, fishing and hunting sector, or Division A of ISIC Rev 4 (equal to Division A+B of ISIC Rev 3.2). Government Expenditure are all expense and acquisition of non-financial assets associated with supporting a particular sector, as defined in the Government Finance Statistics Manual (GFSM) 2014 developed by the International Monetary Fund (IMF). Government Expenditures are based on the Classification of the Functions of Government (COFOG) developed by the OECD and published by the United Nations Statistics Division (UNSD).  **Definition:** The Agriculture Orientation Index (AOI) for Government Expenditures is defined as the Agriculture Share of Government Expenditures, divided by the Agriculture Share of GDP, where Agriculture refers to the agriculture, forestry, fishing and hunting sector. The measure in a currency-free index, calculated as the ratio of these two shares. National governments are requested to compile Government Expenditures according to the international Classification of Functions of Government (COFOC), and Agriculture Share of GDP according to the System of National Accounts (SNA).  **Computation Method:**  Where:  Agriculture refers to COFOG category 042 (agriculture, forestry, fishing and hunting); and  Agriculture refers to the Division A of ISIC Rev 4 (agriculture, forestry, fishing and hunting), equal to Division A+B of ISIC Rev 3.2. | - | Department of Finance (or other central planning agency), National Statistics Office, and/or Ministry of Agriculture | FAO | BBS (NAW), SID  FAO | Since this indicator is based on national accounts data and total central government expenditures, it does not allow for disaggregation by demographic characteristics or geographic location. | Annual | Group 2 | 1st Round:  2013  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 |  |
| 2.a.2 Total official flows (official development assistance plus other official flows) to the agriculture sector | | OECD  Partner Agency:  FAO | Tier I | **Concepts:**  ODA: The DAC defines ODA as “those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are   1. provided by official agencies, including state and local governments, or by their executive agencies; and 2. each transaction is administered with the promotion of the economic development and welfare of developing countries as its main objective; and is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent).   **Definition:**  Gross disbursements of total ODA and other official flows from all donors to the agriculture sector.  **Computation Formula:**  The sum of ODA and OOF flows from all donors to developing countries in the agriculture sector. | * Administrative Report * OECD | National aid agency, Ministry of Foreign Affairs or Finance etc. | ERD  FAO | ERD  Administrative Data | * Type of flow (ODA or OOF) * By Development Partner * Type of finance * Type of aid (project agriculture sub-sector) etc. | Annual | Group 1 | 1st Round:  2015  2nd Round:  September  2019  3rd Round:  September  2020  4th Round:  September  2021  5th Round:  September  2022 | Both DAC and ODA figure should be compiled |
| Target 2.b: Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round | | | | | | | | | | | | | |
| 2.b.1: Agricultural export subsidies | | WTO | Tier I | **Definition:**  Agricultural export subsidies are defined as export subsidies budgetary outlays and quantities as notified by WTO Members in Tables ES:1 and supporting Tables ES:2 (following templates in document G/AG/2 dated 30 June 1995).  **Data Cover:**   * Notifications by WTO Members with export subsidy reduction commitments included in part IV of their Schedules; * Notifications of export subsidies by developing country Members pursuant to the provisions of article 9.4 of the Agreement on Agriculture.   Other WTO Members are not entitled to use export subsidies and their notifications are therefore not recorded in the indicator series.  Budgetary outlays and quantities are expressed in a currency (national or other) and in quantity units as per Member's notification practices. For Members with export subsidy reduction commitments included in part IV of their Schedules, the currency used in the notifications is similar to the one used in the Schedules.  Data are available by country and by products or groups of products, according to Members' schedules for Members with export subsidy reduction commitments included in part IV of their Schedules and according to Member's notification practices in the case of developing country Members using export subsidies under the provisions of article 9.4 of the Agreement on Agriculture.  **Computation Method:**  The country level data come directly from Members' notifications to the WTO and are not subject to any computation by the WTO. Each WTO Member collects data following his own national practice to prepare his notification. | Administrative Record | WTO Members' notifications in their Table ES:1 and supporting table ES:2  notifications, pursuant to the notification requirements and formats adopted by the WTO Committee on  Agriculture and contained in document G/AG/2. | BB | (Administrative Data) FID  BB | * The indicator gives country and product-based information on the level of applied export subsidies, both in terms of budgetary outlays and quantities. | Annual | Group 2 | 1st Round:  2018  2nd Round:  January  2019  3rd Round:  January  2020  4th Round:  January  2021  5th Round:  January  2022 | There are no agricultural export subsidies in Bangladesh |
| Target 2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility | | | | | | | | | | | | | |
| 2.c.1 Indicator of food price anomalies | | FAO | Tier II | **Definition:**  The indicator of food price anomalies (IFPA) identifies markets prices that are abnormally high. The IFPA relies on a weighted compound growth rate that accounts for both within year and across year price growth. The indicator directly evaluates growth in prices over a particular month over many years, taking into account seasonality in agricultural markets and inflation, allowing to answer the question of whether or not a change in price is abnormal for any particular period.  **Concepts:**  The indicator of price anomalies (IFPA) relies on two compound growth rates (CGR’s), a quarterly compound growth rate (CQGR) and an annual compound growth rate (CAGR). A CGR is a geometric mean that assumes that a random variable grows at a steady rate, compounded over a specific period of time. Because it assumes a steady rate of growth the CGR smoothes the effect of volatility of price changes. The CGR is the growth in any random variable from time period t\_A to t\_B, raised to the power of one over the length of the period of time being considered  Where:  is the quarterly or annual compound growth rate in month t  is the price at the beginning of the period  is the price at the end of the period,  is the time in months between periods A and B.  The quarterly and annual indicators of food price anomalies are then defined as:  Where:  is either the quarterly or annual compound growth rate in month t for year y  is the weighted average of either the quarterly or annual compound growth rate for month t across years y  is the weighted standard deviation of either the quarterly or annual compound growth rate for month t over years y,  is either the quarterly or annual indicator of a price anomaly.  **Computation Method:**  Mathematically the IFPA for a particular year in month is calculated as the weighted sum of the quarterly indicator of food price anomalies ), and the annual indicator of food price anomalies as stated in equation 1.    Where:  is the indicator of food price anomalies in year and month  is the quarterly indicator of food price anomalies in year and month  is the annual indicator of food price anomalies in year and month  is a weight with a value of 0.4.  The weight establishes the relative importance of quarterly () anomalies to the year-on-year price variations (. The weight is set to 0.4, giving a weight of 0.6---- to abnormal price growth from year-to-year. This is done to better capture the price level relative to its seasonal trends, which is measured to the price level a year earlier. SDG indicator 2.c.1 is then calculated as the arithmetic mean over months of the  as follows:  Where:  is the annual indicator of food price anomalies in year  is the indicator of food price anomalies in year and month  is the number of months in a year | FPMA Price Tool, FAO | National line-ministries-mostly agricultural  ministries | FAO | a) BBS  b) FAO | * Market (Rural/Urban, Retail/Wholesale) * Commodity (Cereals, Breads, Meat, Fish, Vegetables, Oils and Fats, Oilseeds, etc.) * Division/District | Annualy | Group 3 | 1st Round:  2016  2nd Round:  December  2019  3rd Round:  December  2020  4th Round:  December  2021  5th Round:  December  2022 | NAW, BBS should revise the commodity list and price collection schedule as required. |

 Ensure healthy lives and promote well-being for all at all ages

Total Target 13, Total Indicators: 27

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

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|  | Ensure healthy lives and promote well-being for all at all ages |

| **Goals and targets and Indicators** | | **Custodian Agency (ies)** | **Tier Classifications** | **Definition, Rationale, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Deadline for Data providing** | **Local Indicator Group** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***1*** | | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** | ***8*** | ***9*** | ***10*** | ***11*** | ***12*** | ***12*** |
| Target 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births | | | | | | | | | | | | | |
| 3.1.1 Maternal mortality ratio | | WHO  **Partner Agencies:**  UNFPA,  DESA Population Division,  World Bank | Tier I | **Concepts:**  Definitions related to maternal death in ICD-10  Maternal death: The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management (from direct or indirect obstetric death), but not from accidental or incidental causes.  Pregnancy-related death: The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death.  Late maternal death: The death of a woman from direct or indirect obstetric causes, more than 42 days, but less than one year after termination of pregnancy.  **Definition:**  The maternal mortality ratio (MMR) is defined as the number of maternal deaths during a given time period per 100,000 live births during the same time period. It depicts the risk of maternal death relative to the number of live births and essentially captures the risk of death in a single pregnancy or a single live birth.  Maternal deaths: The annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, expressed per 100,000 live births, for a specified time period.  **Computation Formula:**  The maternal mortality ratio can be calculated by dividing recorded (or estimated) maternal deaths by total recorded (or estimated) live births in the same period and multiplying by 100 000. Measurement requires information on pregnancy status, timing of death (during pregnancy, childbirth, or within 42 days of termination of pregnancy), and cause of death. The maternal mortality ratio can be calculated directly from data collected through vital registration systems, household surveys or other sources. There are often data quality problems, particularly related to the underreporting and misclassification of maternal deaths. Therefore, data are often adjusted in order to take these data quality issues into account. Some countries undertake these adjustments or corrections as part of specialized/confidential enquiries or administrative efforts embedded within maternal mortality monitoring programmes.  MMR=PM ×(All female deaths at ages 15-49/Number of live births) | Vital registration  systems, household surveys or other sources | NSO | 1. SVRS, BBS | 1. SVRS/PHC, BBS | * Income Group: High/Medium/Low * Division/District * Location (Rural/Urban) | Annual | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Group 1 | SVRS should confirm disaggregation in reporting |
| 3.1.2 Proportion of births attended by skilled health personnel | | UNICEF  **Partner Agencies:**  WHO, UNFPA | Tier I | **Definition:**  Percentage of births attended by skilled health personnel (generally doctors, nurses or midwives) is the percentage of deliveries attended by health personnel trained in providing lifesaving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, labour and the post-partum period, conducting deliveries on their own, and caring for newborns. Traditional birth attendants, even if they receive a short training course, are not included.  **Rationale:**  Having a skilled attendant at the time of childbirth is an important lifesaving intervention for both women and babies. Not having access to this key assistance is detrimental to women's health because it could cause the death of the women or long lasting morbidity, especially in vulnerable settings.  **Computation Formula:**  The number of women aged 15-49 with a live birth attended by a skilled health personnel (doctors, nurses or midwives) during delivery is expressed as a percentage of women aged 15-49 with a live birth in the same period. | Household surveys or administrative sources | Ministries of Health and National Statistical Offices | BDHS | MICS/SVRS/HMSS, BBS | * Residence (urban/rural) * Household wealth (quintiles) * Maternal age: 15-19 yrs/ 20-24 yrs/25-29 yrs/30-34 yrs/35-39 yrs/40-44 yrs/45-49 yrs * Geographic regions (Division/District) | Annual | 1st Round:  2014  2nd Round:  August 2019  3rd Round:  August 2020  4th Round:  August 2021  5th Round:  August 2022 | Group 1 | SVRS report should ensure disaggregation as recommended |
| Target 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births | | | | | | | | | | | | | |
| 3.2.1: Under-five mortality rate | | UNICEF  **Partner Agencies:**  DESA Population Division,  World Bank | Tier I | **Definition:**  Under-five mortality is the probability of a child born in a specific year or period dying before reaching the age of 5 years, if subject to age specific mortality rates of that period, expressed per 1000 live births.  **Concepts:**  The under-five mortality rate as defined here is, strictly speaking, not a rate (i.e. the number of deaths divided by the number of population at risk during a certain period of time) but a probability of death derived from a life table and expressed as a rate per 1000 live births.  **Computation Method:**  The UN Inter-agency Group for Child Mortality Estimation (UN IGME) estimates are derived from national data from censuses, surveys or vital registration systems. The UN IGME does not use any covariates to derive its estimates. It only applies a curve fitting method to good-quality empirical data to derive trend estimates after data quality assessment. In most cases, the UN IGME estimates are close to the underlying data. The UN IGME aims to minimize the errors for each estimate, harmonize trends over time and produce up-to-date and properly assessed estimates. The UN IGME applies the Bayesian B-splines bias-reduction model to empirical data to derive trend estimates of under-five mortality for all countries. | Population Census; Sample Survey (MICS/DHS);  Civil Registration | National Statistics Office;  Civil Registration Authority | SVRS/PHC, BBS | SVRS, BBS | * Sex: male/female * Age (neonatal, infant, child) * Wealth quintile * Residence (rural/urban) * Mother’s education: illiterate/primary/ higher | Annual | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Group 1 |  |
| 3.2.2 Neonatal mortality rate | | UNICEF  **Partner Agencies:**  DESA Population Division,  World Bank | Tier I | **Definition:**  The neonatal mortality rate is the probability that a child born in a specific year or period will die during the first 28 completed days of life if subject to age-specific mortality rates of that period, expressed per 1000 live births.  Neonatal deaths (deaths among live births during the first 28 completed days of life) may be subdivided into early neonatal deaths, occurring during the first 7 days of life, and late neonatal deaths, occurring after the 7th day but before the 28th completed day of life.  **Rationale:**  Mortality rates among young children are a key output indicator for child health and well-being, and, more broadly, for social and economic development. It is a closely watched public health indicator because it reflects the access of children and communities to basic health interventions such as vaccination, medical treatment of infectious diseases and adequate nutrition.  **Computation Method:**  The UN Inter-agency Group for Child Mortality Estimation (UN IGME) estimates are derived from nationally representative data from censuses, surveys or vital registration systems. The UN IGME does not use any covariates to derive its estimates. It only applies a curve fitting method to good-quality empirical data to derive trend estimates after data quality assessment. In most cases, the UN IGME estimates are close to the underlying data. The UN IGME aims to minimize the errors for each estimate, harmonize trends over time and produce up-to-date and properly assessed estimates. The UN IGME produces neonatal mortality rate estimates with a Bayesian spline regression model which models the ratio of neonatal mortality rate / (under-five mortality rate - neonatal mortality rate). Estimates of NMR are obtained by recombining the estimates of the ratio with the UN IGME-estimated under-five mortality rate. See the references for details.  For the underlying data mentioned above, the most frequently used methods are as follows:  Civil registration: Number of children who died during the first 28 days of life and the number of births used to calculate neonatal mortality rates.  Censuses and surveys: Censuses and surveys often include questions on household deaths in the last 12 months, which can be used to calculate mortality estimates.  Surveys: A direct method is used based on a full birth history, a series of detailed questions on each child a woman has given birth to during her lifetime. Neonatal, post-neonatal, infant, child and under-five mortality estimates can be derived from the full birth history module. | Population Census; Sample Survey (MICS/DHS);  Civil Registration | National Statistics Office;  Civil Registration Authority | SVRS/PHC | SVRS, BBS | * Sex male/female * Age (neonatal, infant, child) * Wealth quintile * Residence (urban/Rural) * Mother’s education: illiterate/primary/ higher * Geographic location (Division, District) * neonatal mortality cause: preterm birth complication, pneumonia, diarrhoea | Annual | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Group 1 |  |
| Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases | | | | | | | | | | | | | |
| 3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations | | UNAIDS  **Partner Agencies:**  WHO,  UNFPA | Tier I | **Definition:**  The number of new HIV infections per 1,000 uninfected population, by sex, age and key populations as defined as the number of new HIV infections per 1000 person-years among the uninfected population.  **Computation Method:**  Longitudinal data on individuals are the best source of data but are rarely available for large populations. Special diagnostic tests in surveys or from health facilities can be used to obtain data on HIV incidence. HIV incidence is thus modelled using the Spectrum software. | Spectrum modelling, household or key population surveys with HIV incidence-testing,  Other possible data sources: Regular surveillance system among key populations | Team consisting of ministry of health, national AIDS advisory groups and  development partners. | UNAIDS | a) DGHS (NASP),  HSD  b) IEDCR, MoHFW  c) UNAIDS  Administrative Data | * General population * Key populations (men who have sex with men, sex workers, people who inject drugs, transgender people, prisoners) * Age groups (0-14, 15-24, 15-49, 50+ years), for key populations (< 25, 25+ years) * Mode of transmission (including mother-to-child transmission), * Place of residence (Rural/Urban) * Sex: male/female/transgender | Triennial | 1st Round:  2016  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 | Group 2 |  |
| Indicator 3.3.2: Tuberculosis incidence per 100,000 population | | WHO | Tier I | **Definition:**  The tuberculosis incidence per 100,000 population as defined as the estimated number of new and relapse TB cases (all forms of TB, including cases in people living with HIV) arising in a given year, expressed as a rate per 100 000 population.  **Concepts:**  Direct measurement requires high-quality surveillance systems in which underreporting is negligible, and strong health systems so that under-diagnosis is also negligible; otherwise indirect estimates are based on notification data and estimates of levels of underreporting and under-diagnosis.  **Computation Method:**  Estimates of TB incidence are produced through a consultative and analytical process led by WHO and are published annually. These estimates are based on annual case notifications, assessments of the quality and coverage of TB notification data, national surveys of the prevalence of TB disease and information from death (vital) registration systems.  Estimates of incidence for each country are derived, using one or more of the following approaches depending on available data:   1. incidence= case notifications/estimated proportion of cases detected; 2. capture-recapture modelling 3. incidence = prevalence/duration of condition.   Uncertainty bounds are provided in addition to best estimates.  Details are available from TB impact measurement: policy and recommendations for how to assess the epidemiological burden of TB and the impact of TB control and from the online technical appendix to the WHO global tuberculosis report 2017 and https://arxiv.org/abs/1603.00278 | Case notification data combined with expert opinion about case detection  Gaps;  national TB prevalence surveys | National TB Programmes, Ministries of Health | NTP, DGHS | a) HMSS, BBS  b) NTP, DGHS  c) WHO | * Sex: male/female/transgender * Age (children vs adults) | Annual | 1st Round:  2016  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Group 1 |  |
| 3.3.3: Malaria incidence per 1,000 population | | GMP of WHO | Tier I | **Definition:**  Incidence of malaria is defined as the number of new cases of malaria per 1,000 people at risk each year.  **Concepts:**  Case of malaria is defined as the occurrence of malaria infection in a person whom the presence of malaria parasites in the blood has been confirmed by a diagnostic test. The population considered is the population at risk of the disease.  **Comments and limitations:**  The estimated incidence can differ from the incidence reported by a Ministry of Health which can be affected by:  • the completeness of reporting: the number of reported cases can be lower than the estimated cases if the percentage of health facilities reporting in a month is less than 100%  • the extent of malaria diagnostic testing (the number of slides examined or RDTs performed)  • the use of private health facilities which are usually not included in reporting systems.  • the indicator is estimated only where malaria transmission occurs  **Computation Method:**  Malaria incidence (1) is expressed as the number of new cases per 100,000 population per year with the population of a country derived from projections made by the UN Population Division and the total proportion at risk estimated by a country’s National Malaria Control Programme. More specifically, the country estimates what is the proportion at high risk (H) and what is the proportion at low risk (L) and the total population at risk is estimated as UN Population x (H + L).  The total number of new cases, T, is estimated from the number of malaria cases reported by a Ministry of Health which is adjusted to take into account (i) incompleteness in reporting systems (ii) patients seeking treatment in the private sector, self-medicating or not seeking treatment at all, and (iii) potential over-diagnosis through the lack of laboratory confirmation of cases. The procedure, which is described in the World malaria report 2009 (2), combines data reported by NMCPs (reported cases, reporting completeness and likelihood that cases are parasite positive) with data obtained from nationally representative household surveys on health-service use. Briefly,  where:  a is malaria cases confirmed in public sector  b is suspected cases tested  c is presumed cases (not tested but treated as malaria)  d is reporting completeness  e is test positivity rate (malaria positive fraction) = a/b  f is cases in public sector, calculated by (a + (c x e))/d  g is treatment seeking fraction in public sector  h is treatment seeking fraction in private sector  i is the fraction not seeking treatment, calculated by (1-g-h)/2  j is cases in private sector, calculated by f x h/g  k is cases not in private and not in public, calculated by f x i/g  T is total cases, calculated by f + j + k.  To estimate the uncertainty around the number of cases, the test positivity rate was assumed to have a normal distribution centred on the Test positivity rate value and standard deviation defined as 0.244 × 〖Test positivity rate〗^0.5547 and truncated to be in the range 0, 1. Reporting completeness was assumed to have one of three distributions, depending on the range or value reported by the NMCP. If the range was greater than 80% the distribution was assumed to be triangular, with limits of 0.8 and 1 and the peak at 0.8. If the range was greater than 50% then the distribution was assumed to be rectangular, with limits of 0.5 and 0.8. Finally, if the range was lower than 50% the distribution was assumed to be triangular, with limits of 0 and 0.5 and the peak at 0.5 (3) . If the reporting completeness was reported as a value and was greater than 80%, a beta distribution was assumed with a mean value of the reported value (maximum of 95%) and confidence intervals (CIs) of 5% round the mean value. The proportions of children for whom care was sought in the private sector and in the public sector were assumed to have a beta distribution, with the mean value being the estimated value in the survey and the standard deviation calculated from the range of the estimated 95% confidence intervals (CI) divided by 4. The proportion of children for whom care was not sought was assumed to have a rectangular distribution, with the lower limit 0 and upper limit calculated as 1 minus the proportion that sought care in public or private sector.  **Treatment of missing values:**  • At country level for missing values of the parameters (test positivity rate and reporting completeness) a distribution based on a mixture of the distribution of the available values is used, if any value exists for the country or from the region otherwise. Values for health seeking behaviour parameters are imputed by linear interpolation of the values when the surveys where made or extrapolation of the first or last survey. When no reported data is available the number of cases is interpolated taking into account the population growth. | National Malaria Control Programme summarized in a DHIS2 application;  DHS;  Malaria Indicator Survey | National Malaria Control Program at the Ministry of Health | NMEP | a) HMSS, BBS  b) NMEP, DGHS,HSD | * Division * District * Location (Urban/Rural) | Annual | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2022  4th Round:  July 2025  5th Round:  July 2028 | Group 1 |  |
| 3.3.4: Hepatitis B incidence per 100,000 population | | WHO | Tier I | **Definition:**  Estimated number of new and relapse TB cases (all forms of TB, including cases in people living with HIV) arising in a given year, expressed as a rate per 100 000 population.  **Computation Method:**  Direct measurement requires high-quality surveillance systems in which underreporting is negligible, and strong health systems so that underdiagnosis is also negligible; otherwise indirect estimates based on notification data and estimates of levels of underreporting and under-diagnosis.  Method of estimation:  Estimates of TB incidence are produced through a consultative and analytical process led by WHO and are published annually. These estimates are based on annual case notifications, assessments of the quality and coverage of TB notification data, national surveys of the prevalence of TB disease and information from death (vital) registration systems.  Estimates of incidence for each country are derived, using one or more of the following approaches depending on available data: (i) incidence = case notifications/estimated proportion of cases detected; (ii) incidence = prevalence/duration of condition; (iii) incidence = deaths/proportion of incident cases that die.  Uncertainty bounds are provided in addition to best estimates.  Hepatitis B incidence per 100,000 population= (Number of new and relapse TB cases arising in a specified time period/Number of person-years of exposure)×1000000 | Administrative Data;  Population-based health surveys with TB diagnostic testing | Ministry of Health;  NSO | WHO | a) HMSS, BBS  b) CDC Unit, DGHS, HSD | * Place of residence: (Rural/Urban) * Exposure to the birth dose hepatitis B vaccine (official records) * Exposure to three doses of hepatitis B vaccine * Age: Below 15 yrs, 15-24 yrs, 25-39 yrs, 40-59 yrs, 60 yrs+ * HIV status: Positive/Negative * Sex: Male, Female, Transgender | Annual | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2022  4th Round:  July 2025  5th Round:  July 2028 | * Group 2 | * Final Metadata not yet available. * HMSS questionnaire should be modified for estimate the ‘incidence’ in place of prevalence. |
| 3.3.5 Number of people requiring interventions against neglected tropical diseases | | WHO | Tier I | **Definition:**  Number of people requiring treatment and care for any one of the neglected tropical diseases (NTDs) targeted by the WHO NTD Roadmap and World Health Assembly resolutions and reported to WHO.  **Concepts:**  Treatment and care is broadly defined to allow for preventive, curative, surgical or rehabilitative treatment and care. In particular, it includes both:  1) Average annual number of people requiring mass treatment known as preventive chemotherapy (PC) for at least one PC-NTD; and  2) Number of new cases requiring individual treatment and care for other NTDs.  Other key interventions against NTDs (e.g. vector management, veterinary public health, water,  sanitation and hygiene) are to be addressed in the context of other targets and indicators, namely  Universal Health Coverage (UHC) and universal access to water and sanitation.  **Computation Method:**  Some estimation is required to aggregate data across interventions and diseases. There is an established methodology that has been tested and an agreed international standard. [http://www.who.int/wer/2012/wer8702.pdf?ua=1]  1) Average annual number of people requiring mass treatment known as PC for at least one PC-NTD: People may require PC for more than one PC-NTD. The number of people requiring PC is compared across the PC-NTDs, by age group and implementation unit (e.g. district). The largest number of people requiring PC is retained for each age group in each implementation unit. The total is considered to be a conservative estimate of the number of people requiring PC for at least one PC-NTD. Prevalence surveys determine when an NTD has been eliminated or controlled and PC can be stopped or reduced in frequency, such that the average annual number of people requiring PC is reduced.  2) Number of new cases requiring individual treatment and care for other NTDs: The number of new cases is based on country reports, whenever available, of new and known cases of Buruli ulcer, Chagas disease, cysticercosis, dengue, guinea-worm disease, echinococcosis, human African trypanosomiasis (HAT), leprosy, the leishmaniases, rabies and yaws. Where the number of people requiring and requesting surgery for PC-NTDs (e.g. trichiasis or hydrocele surgery) is reported, it can be added here. Similarly, new cases requiring and requesting rehabilitation (e.g. leprosy or lymphoedema) can be added whenever available.  Populations referred to under 1) and 2) may overlap; the sum would overestimate the total number of people requiring treatment and care. The maximum of 1) or 2) is therefore retained at the lowest common implementation unit and summed to get conservative country, regional and global aggregates. By 2030, improved co-endemicity data and models will validate the trends obtained using this simplified  approach. | Administrative Source, NTD  Database;  WHO | NTD, WHO | a) WHO | a) CDC Unit, DGHS, HSD  b) WHO  Administrative Data | * By disease (tropical as occurred) * age [pre-school-aged children (1-4 years), school-aged (5-14 years) and adults (= 15 years). | Annual | 1st Round:  2016  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 | Group 3 |  |
| Target 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being | | | | | | | | | | | | | |
| 3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease | | WHO | Tier I | **Definition:**  Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease. Probability of dying between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases, defined as the per cent of 30-year-old-people who would die before their 70th birthday from cardiovascular disease, cancer, diabetes, or chronic respiratory disease, assuming that s/he would experience current mortality rates at every age and s/he would not die from any other cause of death (e.g., injuries or HIV/AIDS). This indicator is calculated using life table methods (see further details in section 3.3).  **Concepts:**  *Probability of dying:* The likelihood that an individual would die between two ages given current mortality rates at each age, calculated using life table methods. The probability of death between two ages may be called a mortality rate.  *Life table:* A table showing the mortality experience of a hypothetical group of infants born at the same time and subject throughout their lifetime to a set of age-specific mortality rates.  *Cardiovascular disease, cancer, diabetes or chronic respiratory diseases:* ICD-10 underlying causes of death I00-I99, COO-C97, E10-E14 and J30-J98.  **Computation Method:**  There are 4 steps involved in the calculation of this indicator:  1. Estimation of WHO life tables, based on the UN World Population Prospects 2012 revision.  2. Estimation of cause-of-death distributions.  3. Calculation of age-specific mortality rates from the four main NCDs for each five-year age range between 30 and 70.  4. Calculation of the probability of dying between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases. | Death registration systems with complete coverage; medical certification  of cause of death; household surveys with verbal autopsy, and  sample or sentinel registration systems | National statistics offices and/or ministries of health | WHO | Household Survey;  Hospital MIS  a) NCDC Unit, DGHS, HSD  b) MIS, DGHS, HSD  c) SVRS, BBS, SID  d) WHO | * Sex:Male/female/both * Age: 30-40 yrs/41-50 yrs/51-60 yrs/61-70 yrs * Cause * Type of disease: cancer, cardiovascular disease, chronic respiratory disease, diabetes | Annual | 1st Round:  2016  2nd Round:  June, 2019  3rd Round:  June, 2020  4th Round:  June, 2021  5th Round:  June, 2022 | Group 2 | SVRS, BBS introduced ICD-10 and will ensure reporting from SVRS 2018 on the indicator |
| 3.4.2: Suicide mortality rate | | WHO | Tier I | **Definition:**  The Suicide mortality rate as defined as the number of suicide deaths in a year, divided by the population, and multiplied by 100 000.  **Comments and limitations:**  The complete recording of suicide deaths in death-registration systems requires good linkages with coronial and police systems, but can be seriously impeded by stigma, social and legal considerations, and delays in determining cause of death. Less than one half of WHO Member States have well-functioning death-registration systems that record causes of death.  **Computation Method:**  Suicide mortality rate (per 100,000 population) = (Number of suicide deaths in a year x 100,000) / Midyear population for the same calendar year | Death registration systems with complete coverage; medical certification  of cause of death using ICD-10; Household surveys with verbal autopsy; sample or sentinel registration systems; Special studies and surveillance systems | National statistics offices and/or ministries of health | BP, PSD | 1. BP, PSD, MoHA   Administrative Data | * Sex: Female, Male, both * Age group: 0-14, 15-24, 25-39, 40-59, 60-64, 65+ * Division/ District * Urban/Rural | Annual | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Group 2 |  |
| Target 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol | | | | | | | | | | | | | |
| 3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders | | WHO,  UNODC | Tier II | **Definition:**  The coverage of treatment interventions for substance use disorders is defined as the number of people who received treatment in a year divided by the total number of people with substance use disorders in the same year. This indicator is disaggregated by two broad groups of psychoactive substances: (1) drugs, (2) alcohol and other psychoactive substances.  Whenever possible, this indicator is additionally disaggregated by type of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services). The proposed indicator will be accompanied, with contextual information on availability coverage, i.e. treatment capacity for substance use disorders generated at national level to provide additional information for interpretation of the contact coverage data.  **Concepts:**  The central concept of “substance abuse” in the SDG health target 3.5 implies the use of psychoactive substances that, when taken in or administered into one's system, affect mental processes, e.g. perception, consciousness, cognition or affect. The concept of “substance use disorders” includes both “drugs use disorders” and “alcohol use disorders” according to the International Classification of Diseases (ICD-10 and ICD-11).  The term “drugs” refers to controlled psychoactive substances as scheduled by the three Drug Control Conventions (1961, 1971 and 1988), substances controlled under national legislation and new psychoactive substances (NPS) that are not controlled under the Conventions, but may pose a public health threat. “Alcohol” refers to ethanol - a psychoactive substance with dependence producing properties that is consumed in ethanol-based or alcoholic beverages.  People with substance use disorders are those with harmful substance use and/or affected by substance dependence. Harmful substance use is defined in the ICD-11 as a pattern of use of substances that has caused damage to a person’s physical or mental health or has resulted in behaviour leading to harm to the health of others. According to ICD-11, dependence arises from repeated or continuous use of psychoactive substances. The characteristic feature is a strong internal drive to use psychoactive substance, which is manifested by impaired ability to control use, increasing priority given to use over other activities and persistence of use despite harm or negative consequences.  Treatment of substance use disorder -any structured intervention that is aimed specifically to a) reduce substance use and cravings for substance use; b) improve health, well-being and social functioning of the affected individual, and c) prevent future harms by decreasing the risk of complications and relapse. These may include pharmacological treatment, psychosocial interventions and rehabilitation and aftercare. All evidence-based used for treatment of substance use disorders are well defined in WHO and UNODC related documents.  Pharmacological treatment refers to interventions that include detoxification, opioid agonist maintenance therapy (OAMT) and antagonist maintenance (WHO, UNODC International Standards for the treatment of drug use disorders, 2016).  Psychosocial interventions refer to programs that address motivational, behavioral, psychological, social, and environmental factors related to substance use and have been shown to reduce drug use, promote abstinence and prevent relapse. For different drug use disorders, the evidence from clinical trials supports the effectiveness of treatment planning, screening, counselling, peer support groups, cognitive behavioral therapy (CBT), motivational interviewing (MI), community reinforcement approach (CRA), motivational enhancement therapy (MET), family therapy (FT) modalities, contingency management (CM), counselling, insight-oriented treatments, housing and employment support among others. (UNODC WHO International Standards for the Treatment of Drug Use Disorders, 2016).  Rehabilitation and aftercare (Recovery Management and Social Support) refers to interventions that are based on scientific evidence and focused on the process of rehabilitation, recovery and social reintegration dedicated to treat drug use disorders.  **Computation Method:**  The indicator will be computed by dividing the number of people receiving treatment services at least once in a year by the total number of people with substance use disorders in the same year:  Where:  SUD – Substance use disorders  **Treatment of missing values:**  **At country level**  For drug use disorder, data will be provided for countries where information is available for both numerator and denominator. No data estimates will be done at the national level.  For alcohol, when information on service utilization is missing in a country, several approaches will be used to produce estimates based on all available pieces of contextual service capacity data in the country and regionally. Link to be established between service availability and service utilization to get rough understanding on number of people who might be using services for countries where no direct information on number of people using services is available at all. | Household survey. | Drug use disorders data are collected through national focal points.  Ministries of Health and/or National Statistical Offices. | - a) DNC, | a) DNC, SSD, MoHA   1. b) MIS, DGHS, HSD | * by the settings, type of intervention(pharmacological, psychosocial, rehabilitation and aftercare) for the population groups. * Age: 15-24, 25-39, 40-59, 60-64, 65+ * Sex: male/female | Annual | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Group 2 |  |
| 3.5.2 Alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol | | WHO | Tier I | Definition:  Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol Total alcohol per capita consumption (APC) is defined as the total (sum of recorded APC three-year average and unrecorded APC as a proportion of total) amount of alcohol consumed per adult (15+ years) over a calendar year, in litres of pure alcohol, adjusted for tourist consumption. Recorded alcohol consumption refers to official statistics at country level (production, import, export, and sales or taxation data), while the unrecorded alcohol consumption refers to alcohol which is not taxed and is outside the usual system of governmental control, such as home or informally produced alcohol (legal or illegal), smuggled alcohol, surrogate alcohol (which is alcohol not intended for human consumption), or alcohol obtained through cross-border shopping (which is recorded in a different jurisdiction). Tourist consumption takes into account tourists visiting the country and inhabitants visiting other countries. Positive figures denote alcohol consumption of outbound tourists being greater than alcohol consumption by inbound tourists, negative numbers the opposite. Tourist consumption is based on UN statistics, and data are provided by IHME.  **Concepts:**  Recorded alcohol per capita (15+) consumption of pure alcohol is calculated as the sum of beverage specific alcohol consumption of pure alcohol (beer, wine, spirits, other) from different sources. The first priority in the decision tree is given to government national statistics; second are country-specific alcohol industry statistics in the public domain based on interviews or fieldwork (GlobalData (formerly Canadean), International Wine and Spirit Research (IWSR), Wine Institute; historically World Drink Trends) or data from the International Organisation of Vine and Wine (OIV); third is the Food and Agriculture Organization of the United Nations' statistical database (FAOSTAT), and fourth is data from alcohol industry statistics in the public domain based on desk review. For countries, where the data source is FAOSTAT the unrecorded consumption may be included in the recorded consumption. As from the introduction of the "Other" beverage-specific category, beer includes malt beers, wine includes wine made from grapes, spirits include all distilled beverages, and other includes one or several other alcoholic beverages, such as fermented beverages made from sorghum, maize, millet, rice, or cider, fruit wine, fortified wine, etc. For unrecorded APC, the first priority in the decision tree is given to nationally representative empirical data; these are often general population surveys in countries where alcohol is legal. Second are specific other empirical investigations, and third is expert opinion supported by periodic survey of experts at country level (50 countries with significant estimates of unrecorded alcohol consumption) using modified Delphi-technique.  For recorded APC, In order to make the conversion into litres of pure alcohol, the alcohol content (% alcohol by volume) is considered to be as follows: Beer (barley beer 5%), Wine (grape wine 12%; must of grape 9%, vermouth 16%), Spirits (distilled spirits 40%; spirit-like 30%), and Other (sorghum, millet, maize beers 5%; cider 5%; fortified wine 17% and 18%; fermented wheat and fermented rice 9%; other fermented beverages 9%). Survey questions on consumption of unrecorded alcohol are converted into estimates per year of unrecorded APC.  **Computation Method:**  *Numerator:* The sum of the amount of recorded alcohol consumed per capita (15+ years), average during three calendar years, in litres of pure alcohol, and the amount of unrecorded alcohol per capita consumption (15+ years), during a calendar year, in litres of pure alcohol, adjusted for tourist consumption.  *Denominator:* Midyear resident population (15+ years) for the same calendar year, UN World Population Prospects, medium variant. | Administrative Record | Ministries of Health; National statistical bureau/agencies (data on alcohol production and trade/sales);  National monitoring centres on alcohol and drug use; National academic and monitoring centres  concerned with population-based surveys of risk factors to health. | WHO | a) DNC, SSD, MoHA  b) WHO | * Sex: male/female * Age 15 Years Old and over | Annual | 1st Round:  2016  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Group 3 | UNSC 51 refinement |
| Target 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents | | | | | | | | | | | | | |
| 3.6.1 Death rate due to road traffic injuries | | WHO  Partner Agency:  UNCE | Tier I | **Definition:**  Death rate due to road traffic injuries as defined as the number of road traffic fatal injury deaths per 100,000 population.  **Concepts:**  *Numerator:* Number of deaths due to road traffic crashes Absolute figure indicating the number of people who die as a result of a road traffic crash.  *Denominator:* Population (number of people by country).  **Computation Method:**  Our model is based on the quality of data we received. As a health organization, we rely primarily on the submission of vital registration data from countries’ Ministries of Health to WHO (through the official channels). These data, on all causes of death, are then analysed by our colleagues in the Health Information Systems department to decide on how good the data are, that is, determining if there is good completeness and coverage of deaths for all causes. | Road Safety  Survey; Vital registration; certificate deaths data | Ministry of  health, Ministry of interior and Ministry of transport | BP, PSD | Administrative record  a) BP, PSD  b) SVRS, BBS | * Types of road users: Pedestrian, Driver, Passenger * Age: 0-17, 18-64, 64+ * Sex: male, female * Income groups: Low, medium, high * District: 64 districts | Annual | 1st Round:  2015  2nd Round:  July 2020  3rd Round:  July 2021  4th Round:  July 2022  5th Round:  July 2023 | Group 2 | Values have been recalculated by BP with BBS Population. |
| Target 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes | | | | | | | | | | | | | |
| 3.7.1 Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods | | DESA Population Division  Partner Ageny:  UNFPA,  WHO | Tier I | **Definition:**  The percentage of women of reproductive age (15-49 years) who desire either to have no (additional) children or to postpone the next child and who are currently using a modern contraceptive method.  The indicator is also referred to as the demand for family planning satisfied with modern methods.  **Concepts:**  The percentage of women of reproductive age (15-49 years) who have their need for family planning satisfied with modern methods is also referred to as the proportion of demand satisfied by modern methods. The components of the indicator are contraceptive prevalence (any method and modern methods) and unmet need for family planning. Contraceptive prevalence is the percentage of women who are currently using, or whose sexual partner is currently using, at least one method of contraception, regardless of the method used. Unmet need for family planning is defined as the percentage of women of reproductive age, either married or in a union, who want to stop or delay childbearing but are not using any method of contraception. For analytical purposes, contraceptive methods are often classified as either modern or traditional. Modern methods of contraception include female and male sterilization, the intra-uterine device (IUD), the implant, injectables, oral contraceptive pills, male and female condoms, vaginal barrier methods (including the diaphragm, cervical cap and spermicidal foam, jelly, cream and sponge), lactational amenorrhea method (LAM), emergency contraception and other modern methods not reported separately (e.g., the contraceptive patch or vaginal ring). Traditional methods of contraception include rhythm (e.g., fertility awareness-based methods, periodic abstinence), withdrawal and other traditional methods not reported separately.  **Computation Method:**  The numerator is the percentage of women of reproductive age (15-49 years old) who are currently using, or whose sexual partner is currently using, at least one modern contraceptive method. The  denominator is the total demand for family planning (the sum of contraceptive prevalence (any method) and the unmet need for family planning). Estimates are with respect to women who are married or in a union.  Demand satisfied by modern methods= (Number of women who are currently using a modern method of contraception) / (Number of women who are using any method of contraception or are having an unmet need for family planning) | Nationally representative household survey- Contraceptive Prevalence Surveys (CPS),  Demographic and Health Surveys (DHS), Fertility and Family Surveys (FFS), Reproductive Health Surveys  (RHS), Multiple Indicator Cluster Surveys (MICS) | National Statistics Office | BDHS, | a) MICS/SVRS, BBS  b) BDHS, MEFWD, NIPORT | * Age: 15-19 yrs/ 20-24 yrs/25-29 yrs/30-34 yrs/35-39 yrs/40-44 yrs/45-49 yrs * Geographic location (Rural/Urban, Division/District) * Marital status * Socioeconomic status * Other categories | 3-Year | 1st Round:  2014  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Group 1 | SVRS, BBS should revise the contraceptive module to generate data annually |
| 3.7.2 Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group | | DESA Population Division  Partner Ageny:  UNFPA,  WHO | Tier I | **Definition:**  Annual number of births to females aged 10-14 or 15-19 years per 1,000 females in the respective age group.  **Concepts:**  The adolescent birth rate represents the risk of childbearing among females in the particular age group. The adolescent birth rate among women aged 15-19 years is also referred to as the age-specific fertility rate for women aged 15-19.  **Computation Method:**  The adolescent birth rate is computed as a ratio. The numerator is the number of live births to women aged 15-19 years, and the denominator an estimate of exposure to childbearing by women aged 15-19 years. The computation is the same for the age group 10-14 years. The numerator and the denominator are calculated differently for civil registration, survey and census data.  In the case of civil registration data, the numerator is the registered number of live births born to women aged 15-19 years during a given year, and the denominator is the estimated or enumerated population of women aged 15-19 years.  In the case of survey data, the numerator is the number of live births obtained from retrospective birth histories of the interviewed women who were 15-19 years of age at the time of the births during a reference period before the interview, and the denominator is person-years lived between the ages of 15 and 19 years by the interviewed women during the same reference period. The reported observation year corresponds to the middle of the reference period. For some surveys without data on retrospective birth histories, computation of the adolescent birth rate is based on the date of last birth or the number of births in the 12 months preceding the survey.  With census data, the adolescent birth rate is computed on the basis of the date of last birth or the number of births in the 12 months preceding the enumeration. The census provides both the numerator and the denominator for the rates. In some cases, the rates based on censuses are adjusted for under registration based on indirect methods of estimation. For some countries with no other reliable data, the own-children method of indirect estimation provides estimates of the adolescent birth rate for a number of years before the census.  If data are available, adolescent fertility at ages 10-14 years can also be computed. | Civil Registration System; Population Census; Household Survey | Civil Registration Authority; National Statistics Office | SVRS, BBS | SVRS/MICS/PHC, BBS | * Age: 10-14 years, 15-19 years * Education * Number of living children * Marital status: Married/Unmarried/other * Socioeconomic status: High/Medium/ Low * Geographic location (Urban/Rural), Division/Distric | Annual | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Group 2 |  |
| Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all | | | | | | | | | | | | | |
| 3.8.1 Coverage of essential health services | | WHO  Partner Agencies:  UNICEF,  UNFPA,  DESA Population Division | Tier I | **Definition:**  Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population).  The indicator is an index reported on a unitless scale of 0 to 100, which is computed as the geometric mean of 14 tracer indicators of health service coverage.  **Concepts:**  The index of health service coverage is computed as the geometric means of 14 tracer indicators. The 14 indicators are listed below and detailed metadata for each of the components are available online  (http://www.who.int/healthinfo/universal\_health\_coverage/UHC\_Tracer\_Indicators\_Metadata.pdf) and Annex 1. The tracer indicators are as follows, organized by four broad categories of service coverage:  *I.* REPRODUCTIVE, MATERNAL, NEWBORN AND CHILD HEALTH  1. Family planning: Percentage of women of reproductive age (15−49 years) who are married or in union who have their need for family planning satisfied with modern methods.  2. Pregnancy and delivery care: Percentage of women aged 15-49 years with a live birth in a given time period who received antenatal care four or more times.  3. Child immunization: Percentage of infants receiving three doses of diphtheria-tetanus-pertussis containing vaccine.  4. Child treatment: Percentage of children under 5 years of age with suspected pneumonia (cough and difficult breathing NOT due to a problem in the chest and a blocked nose) in the two weeks preceding the survey taken to an appropriate health facility or provider.  *II. INFECTIOUS DISEASES*  5. Tuberculosis: Percentage of incident TB cases that are detected and successfully treated.  6. HIV/AIDS: Percentage of people living with HIV currently receiving antiretroviral therapy.  7. Malaria: Percentage of population in malaria-endemic areas who slept under an insecticide-treated net the previous night [only for countries with high malaria burden].  8. Water and sanitation: Percentage of households using improved sanitation facilities.  *III. NONCOMMUNICABLE DISEASES*  9. Hypertension: Age-standardized prevalence of non-raised blood pressure (systolic blood pressure <140 mm Hg or diastolic blood pressure <90 mm Hg) among adults aged 18 years and older.  10. Diabetes: Age-standardized mean fasting plasma glucose (mmol/L) for adults aged 25 years and older.  11. Tobacco: Age-standardized prevalence of adults >=15 years not smoking tobacco in last 30 days.  *IV. SERVICE CAPACITY AND ACCESS*  12. Hospital access: Hospital beds per capita, relative to a maximum threshold of 18 per 10,000 Population.  13. Health workforce: Health professionals (physicians, psychiatrists, and surgeons) per capita, relative to maximum thresholds for each cadre.  14. Health security: International Health Regulations (IHR) core capacity index, which is the average percentage of attributes of 13 core capacities that have been attained.  **Computation Method:**  The index is computed with geometric means, based on the methods used for the Human Development Index. The calculation of the 3.8.1 indicator requires first preparing the 14 tracer indicators so that they can be combined into the index, and then computing the index from those values.  The 14 tracer indicators are first all placed on the same scale, with 0 being the lowest value and 100 being the optimal value. For most indicators, this scale is the natural scale of measurement, e.g., the percentage of infants who have been immunized ranges from 0 to 100 percent. However, for a few indicators additional rescaling is required to obtain appropriate values from 0 to 100, as follows:  • Rescaling based on a non-zero minimum to obtain finer resolution (this “stretches” the distribution across countries): prevalence of non-raised blood pressure and prevalence of nonuse of tobacco are both rescaled using a minimum value of 50%.  rescaled value = (X-50)/(100-50)\*100  • Rescaling for a continuous measure: mean fasting plasma glucose, which is a continuous measure (units of mmol/L), is converted to a scale of 0 to 100 using the minimum theoretical biological risk (5.1 mmol/L) and observed maximum across countries (7.1 mmol/L).  rescaled value = (7.1 - original value)/ (7.1-5.1) \*100  • Maximum thresholds for rate indicators: hospital bed density and health workforce density are both capped at maximum thresholds, and values above this threshold are held constant at 100. These thresholds are based on minimum values observed across OECD countries.  rescaled hospital beds per 10,000 = minimum (100, original value / 18\*100)  rescaled physicians per 1,000 = minimum (100, original value / 0.9\*100)  rescaled psychiatrists per 100,000 = minimum (100, original value / 1\*100)  rescaled surgeons per 100,000 = minimum (100, original value / 14\*100)  Once all tracer indicator values are on a scale of 0 to 100, geometric means are computed within each of the four health service areas, and then a geometric mean is taken of those four values. If the value of a tracer indicator happens to be zero, it is set to 1 (out of 100) before computing the geometric mean.  The following diagram illustrates the calculations. | Household surveys; however,  administrative data, facility data, facility surveys, and sentinel surveillance system data can be used for different indicator | Ministry of Health and National Statistical Office | WHO | a) DGHS, HSD  b) NIPORT (BDHS), MEFWD  c) HEU, MoHFW, HSD  d) WHO  e) MICS, BBS  f) SVRS, BBS  g) STEP Survey, NIPSOM | * Geographic location (Division/District) * Residence (Urban/Rural) * Household wealth * Service coverage across key inequality dimensions * All 14 tracer indicators * Income: High/Medium/Low | 5 years | 1st Round:  2016  2nd Round:  August, 2019  3rd Round:  August, 2020  4th Round:  August, 2021  5th Round:  August, 2022 | Group 3 | BHFS, NIPORT can only provide, service availability and readiness of Family Planning, Antenatal Care (ANC), Maternal Health, Child Health |
| 3.8.2 Proportion of population with large household expenditures on health as a share of total household expenditure or income | | WHO  Partner Agency:  World Bank | Tier I | **Definition:**  Proportion of the population with large household expenditure on health as a share of total household expenditure or income. Two thresholds are used to define “large household expenditure on health”: greater than 10% and greater than 25% of total household expenditure or income.  **Concepts:**  Indicator 3.8.2 is defined as the “Proportion of the population with large household expenditure on health as a share of total household expenditure or income”. In effect it is based on a ratio exceeding a threshold. The two main concepts of interest behind this ratio are household expenditure on health (numerator) and total household consumption expenditure or, when unavailable, income (denominator).  **Numerator**  Household expenditure on health is defined as any expenditure incurred at the time of service use to get any type of care (promotive, preventive, curative, rehabilitative, palliative or long-term care) including all medicines, vaccines and other pharmaceutical preparations as well as all health products, from any type of provider and for all members of the household. These health expenditures are characterized by a direct payments that are financed by a household’s income (including remittances), savings or loans but do not include any third-party payer reimbursement. As such they only grant access to the health services and health products individuals can pay for, without any solidarity between the healthy and the sick beyond the household and solely based on the willingness and ability of the household to pay. Direct health care payments are labelled Out-Of-Pocket (OOP) payments in the classification of health care financing schemes (HF) of the international Classification for Health Accounts (ICHA). OOP health expenditures are the most unequitable source of funding for the health system.  The components of a household’s health care consumption expenditure so defined should be consistent with division 06 on health of the UN Classification of Individual Consumption According to Purpose (COICOP) which currently includes expenditures on medicines and medical products (06.1), outpatient care services (06.2) and inpatient care services (06.3) but is being expanded.  .  Further information on definitions and classifications (for example by provider, by beneficiary  characteristics) of health expenditures should be consistent with the international classification for health accounts (http://www.who.int/health-accounts/methodology/en/) and its family of classifications. ICHA results from collaboration between OECD, Eurostat and the World Health Organization.  **Denominator**  Expenditure on household consumption and household income are both monetary welfare measures. Household consumption is a function of permanent income, which is a measure of a household’s long term economic resources that determine living standards. Consumption is generally defined as the sum of the monetary values of all items (goods and services) consumed by the household on domestic account during a reference period. It includes the imputed values of goods and services that are not purchased but procured otherwise for consumption. Information on household consumption is usually collected in household surveys that may use different approaches to measure ‘consumption’ depending on whether items refer to durable or non-durable goods and/or are directly produced by households. The most relevant measure of income is disposable income as it is close to the maximum available to the household for consumption expenditure during the accounting period. Disposable income is defined as total income less direct taxes (net of refunds), compulsory fees and fines. Total income is generally composed of income from employment, property income, income from household production of services for own consumption, transfers received in cash and goods, transfers received as services.  Income is more difficult to measure accurately due to its greater variability over time. Consumption is less variable over time and easier to measure. It is therefore recommended that whenever there is information on both household consumption and income the former is used.  **Thresholds**  It is recommended to use two thresholds for global reporting to identify large household expenditure on health as share of total household consumption or income: a lower threshold of 10% (3.8.2\_10) and a higher threshold of 25% (3.8.2\_25). With these two thresholds the indicator measures financial hardship.  **Computation Method:**  Population weighted average number of people with large household expenditure on health as a share of total household expenditure or income  where i denotes a household, 1() is the indicator function that takes on the value 1 if the bracketed expression is true, and 0 otherwise, mi corresponds to the number of household members of i, 𝜔𝑖 corresponds to the sampling weight of household i, τ is a threshold identifying large household expenditure on health as a share of total household consumption or income (i.e. 10% and 25%). Household health expenditure and household expenditure or income are defined as explained in the “concept” section. | Household Income and Expenditure Survey | National Statistical Offices in collaboration with Ministries of health | HIES, BBS | HIES, BBS | * Gender and age of the head of the household * Geographic location (rural/urban) * Quintiles of the household welfare measures (total household expenditure or income). | 3-Year | 1st Round:  December, 2018  2nd Round:  December, 2021  3rd Round:  December, 2024  4th Round:  December, 2027  5th Round:  December, 2030 | Group 3 |  |
|  | Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination | | | | | | | | | | | | |
| 3.9.1 Mortality rate attributed to household and ambient air pollution | | WHO  Partner Agency:  UNEP | Tier I | **Definition:**  The mortality attributable to the joint effects of household and ambient air pollution can be expressed as: Number of deaths, Death rate. Death rates are calculated by dividing the number of deaths by the total population (or indicated if a different population group is used, e.g. children under 5 years).  Evidence from epidemiological studies have shown that exposure to air pollution is linked, among others, to the important diseases taken into account in this estimate:  - Acute respiratory infections in young children (estimated under 5 years of age);  - Cerebrovascular diseases (stroke) in adults (estimated above 25 years);  - Ischemic heart diseases (IHD) in adults (estimated above 25 years);  - Chronic obstructive pulmonary disease (COPD) in adults (estimated above 25 years); and  - Lung cancer in adults (estimated above 25 years).  **Concepts:**  The mortality resulting from exposure to ambient (outdoor) air pollution and household (indoor) air pollution from polluting fuels use for cooking was assessed. Ambient air pollution results from emissions from industrial activity, households, cars and trucks which are complex mixtures of air pollutants, many of which are harmful to health. Of all of these pollutants, fine particulate matter has the greatest effect on human health. By polluting fuels is understood kerosene, wood, coal, animal dung, charcoal, and crop wastes.  **Computation Method:**  Attributable mortality is calculated by first combining information on the increased (or relative) risk of a disease resulting from exposure, with information on how widespread the exposure is in the population (e.g. the annual mean concentration of particulate matter to which the population is exposed, proportion of population relying primarily on polluting fuels for cooking).  This allows calculation of the 'population attributable fraction' (PAF), which is the fraction of disease seen in a given population that can be attributed to the exposure (e.g in that case of both the annual mean concentration of particulate matter and exposure to polluting fuels for cooking).  Applying this fraction to the total burden of disease (e.g. cardiopulmonary disease expressed as deaths), gives the total number of deaths that results from exposure to that particular risk factor (in the example given above, to ambient and household air pollution).  To estimate the combined effects of risk factors, a joint population attributable fraction is calculated, as described in Ezzati et al (2003).  The mortality associated with household and ambient air pollution was estimated based on the  calculation of the joint population attributable fractions assuming independently distributed exposures and independent hazards as described in (Ezzati et al, 2003).  The joint population attributable fraction (PAF) were calculated using the following formula:  PAF=1-PRODUCT (1-PAFi)  where PAFi is PAF of individual risk factors.  The PAF for ambient air pollution and the PAF for household air pollution were assessed separately, based on the Comparative Risk Assessment (Ezzati et al, 2002) and expert groups for the Global Burden of Disease (GBD) 2010 study (Lim et al, 2012; Smith et al, 2014). For exposure to ambient air pollution, annual mean estimates of particulate matter of a diameter of less than 2.5 um (PM25) were modelled as described in (WHO 2016, forthcoming), or for Indicator 11.6.2. For exposure to household air pollution, the proportion of population with primary reliance on polluting fuels use for cooking was modelled. Details on the model are published in.  The integrated exposure-response functions (IER) developed for the GBD 2010 (Burnett et al, 2014) and further updated for the GBD 2013 study (Forouzanfar et al, 2015) were used.  The percentage of the population exposed to a specific risk factor (here ambient air pollution, i.e. PM2.5) was provided by country and by increment of 1 ug/m3; relative risks were calculated for each PM2.5 increment, based on the IER. The counterfactual concentration was selected to be between 5.6 and 8.8 ug/m3, as described elsewhere (Ezzati et al, 2002; Lim et al, 2012). The country population attributable fraction for ALRI, COPD, IHD, stroke and lung cancer were calculated using the following formula:  PAF=SUM(Pi(RR-1)/(SUM(RR-1) +1)  where i is the level of PM2.5 in ug/m3, and Pi is the percentage of the population exposed to that level of air pollution, and RR is the relative risk. The calculations for household air pollution are similar and are explained in detailed elsewhere. | Modeled Data and Survey Data | Ministry of Health, Ministry of Environment. | WHO | a) DGHS, HSD  b) DIFE, MoLE  c) WHO  Administrative Data  d) BBS (SVRS//HMSS)- Survey | * Sex: male, female * Age: 0-5 yrs, 0-15 yrs, 16-25 yrs, 25+ * Type of Disease: Acute respiratory infections/Stroke/Heart disease/COPD/Lung cancer | Annual | 1st Round:  2012  2nd Round:  January 2019  3rd Round:  January 2022  4th Round:  January 2025  5th Round:  January 2028 | Group 3 |  |
| 3.9.2: Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services | | WHO  Partner Agency:  UNEP | Tier I | **Definition:**  The mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services) as defined as the number of deaths from unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe WASH services) in a year, divided by the population, and multiplied by 100,000.  **Concepts:**  Deaths attributable to unsafe water, sanitation and hygiene focusing on inadequate WASH services, expressed per 100,000 population; The included diseases are the WASH attributable fractions of diarrhoea (ICD-10 code A00, A01, A03, A04, A06-A09), intestinal nematode infections (ICD-10 code B76- B77, B79) and protein-energy malnutrition (ICD-10 code E40-E46).  **Computation Method:**  The methods with agreed international standard have been developed, reviewed and published in various documents:  http://www.who.int/water\_sanitation\_health/publications/gbd\_poor\_water/en/  http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4255749/ | Civil Registration System; Household Survey with ICD-10 classifications | National statistics offices, Various line ministries and databases covering civil registration with complete  coverage and medical certification of cause of death. | WHO | a) DGHS, HSD  b) WHO  c) BBS (SVRS/HMSS), SID  Survey/Administrative Data | * Geographic location (Rural/Urban) * Age group: 0-15, 15-24, 25 and above * Sex: male, female * Income groups (wealth quintile), | Annual | 1st Round:  2016  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 | Group 2 | SVRS, BBS need to consult with WHO to address ICD-10 codes for the particular indictor. |
| 3.9.3 Mortality rate attributed to unintentional poisoning | | WHO  Partner Agency:  UNEP | Tier I | **Definition:**  The mortality rate attributed to unintentional poisoning as defined as the number of deaths of unintentional poisonings in a year, divided by the population, and multiplied by 100 000.  **Concepts:**  Mortality rate in the country from unintentional poisonings per year. The ICD-10 codes corresponding to the indicator includes X40, X43-X44, X46-X49  **Computation Method:**  The methods with agreed international standards have been developed, reviewed and published in various documents.  The methods used for the analysis of causes of death depend on the type of data available from countries.  For countries with a high-quality vital registration system including information on cause of death, the vital registration that member states submit to the WHO Mortality Database were used, with adjustments where necessary, e.g. for under-reporting of deaths.  For countries without high-quality death registration data, cause of death estimates are calculated using other data, including household surveys with verbal autopsy, sample or sentinel registration systems, special studies and surveillance systems. In most cases, these data sources are combined in a modelling framework.  Complete methodology may be found here: http://www.who.int/healthinfo/global\_burden\_disease/GlobalCOD\_method\_2000\_2012.pdf?ua=1 | Death Registration System; Household surveys with verbal autopsy; Sample or sentinel registration systems;  Special studies and Surveillance systems | Ministry of Health and National Statistics Office | WHO | a) DGHS, HSD  b) WHO  Administrative Data | * Age group: 0-15, 15-24, 25 and above * Sex: male,female * Disease (as occurred) | Annual | 1st Round:  2016  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 | Group 3 | SVRS, BBS should incorporate ICT-10 codes corresponding to the indicator |
| Target 3.a: Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate | | | | | | | | | | | | | |
| 3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older | | WHO,  WHO-FCTC | Tier I | **Definition:**  The indicator is defined as the percentage of the population aged 15 years and over who currently use any tobacco product (smoked and/or smokeless tobacco) on a daily or non-daily basis.  **Concepts:**  Tobacco use means use of smoked and/or smokeless tobacco products. “Current use” means use within the previous 30 days at the time of the survey, whether daily or non-daily use.  Tobacco products means products entirely or partly made of the leaf tobacco as raw material intended for human consumption through smoking, sucking, chewing or sniffing. “Smoked tobacco products” include cigarettes, cigarillos, cigars, cheroots, bidis, pipes, shisha (water pipes), roll-your-own tobacco, kretek and any other form of tobacco that is consumed by smoking.  "Smokeless tobacco product" includes moist snuff, creamy snuff, dry snuff, plug, dissolvables, gul, loose leaf, red tooth powder, snus, chimo, gutkha, khaini, gudakhu, zarda, quiwam, dohra, tuibur, nasway, naas, naswar, shammah, toombak, paan (betel quid with tobacco), iq’mik, mishri, tapkeer, tombol and any other tobacco product that consumed by sniffing, holding in the mouth or chewing. Prevalence estimates have been “age-standardized” to make them comparable across all countries no matter the demographic profile of the country. This is done by applying each country’s age-and-sex specific prevalence rates to the WHO Standard Population. The resulting rates are hypothetical numbers which are only meaningful when comparing rates obtained for one country with those obtained for another country.  **Computation Method:**  A statistical model based on a Bayesian negative binomial meta-regression is used to model prevalence of current tobacco smoking for each country, separately for men and women. A full description of the method is available as a peer-reviewed article in The Lancet, volume 385, No. 9972, p966–976 (2015). Once the age-and-sex-specific prevalence rates from national surveys were compiled into a dataset, the model was fit to calculate trend estimates from the year 2000 to 2030. The model has two main components: (a) adjusting for missing indicators and age groups, and (b) generating an estimate of trends over time as well as the 95% credible interval around the estimate. Depending on the completeness/comprehensiveness of survey data from a particular country, the model at times makes use of data from other countries to fill information gaps. To fill data gaps, information is “borrowed” from countries in the same UN sub-region. The resulting trend lines are used to derive estimates for single years, so that a number can be reported even if the country did not run a survey in that year. In order to make the results comparable between countries, the prevalence rates are age-standardized to the WHO Standard Population. | Household Survey  (MICS, DHS); | National Statistics Office and Ministry of Health | *GATS, WHO*  *HMSS* | *GATS/HMSS, BBS* | * Sex: male, female * Age Group: 15-24, 25-34, 35-44, 45-55, 55-64, 64+ * Income: High/Medium/Low | 3-Years | 1st Round:  2014  2nd Round:  July 2019  3rd Round:  July 2022  4th Round:  July 2025  5th Round:  July 2028 | Group 1 | GATS survey should conducted in every Triennial on a regular basis. |
| Target 3.b: Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all | | | | | | | | | | | | | |
| 3.b.1: Proportion of the target population covered by all vaccines included in their national programme | | WHO,  UNICEF | Tier I | **Definition:**  *Coverage of DTP containing vaccine (3rd dose):* Percentage of surviving infants who received the 3 doses of diphtheria and tetanus toxoid with pertussis containing vaccine in a given year.  *Coverage of Measles containing vaccine (2nd dose):* Percentage of children who received two dose of measles containing vaccine according to nationally recommended schedule through routine immunization services.  *Coverage of Pneumococcal conjugate vaccine (last dose in the schedule):* Percentage of surviving infants who received the recommended doses of pneumococcal conjugate vaccine.  *Coverage of HPV vaccine (last dose in the schedule):* Percentage of 15 years old girls received the recommended doses of HPV vaccine.  **Concepts:**  In accordance with its mandate to provide guidance to Member States on health policy matters, WHO provides global vaccine and immunization recommendations for diseases that have an international public health impact. National programmes adapt the recommendations and develop national immunization schedules, based on local disease epidemiology and national health priorities. National immunization schedules and number of recommended vaccines vary between countries, with only DTP polio and measles containing vaccines being used in all countries.  The target population for given vaccine is defined based on recommended age for administration. The primary vaccination series of most vaccines are administered in the first two years of life.  *Coverage of DTP* containing vaccine measure the overall system strength to deliver infant vaccination.  *Coverage of Measles containing vaccine* ability to deliver vaccines beyond first year of life through routine immunization services.  *Coverage of Pneumococcal conjugate vaccine:* adaptation of new vaccines for children.  *Coverage of HPV vaccine:* life cycle vaccination.  **Computation Method:**  WHO and UNICEF jointly developed a methodology to estimate national immunization coverage form selected vaccines in 2000. The methodology has been refined and reviewed by expert committees over time. The methodology was published and reference is available under the reference section. Estimates time series for WHO recommended vaccines produced and published annually since 2001.  The methodology uses data reported by national authorities from countries administrative systems as well as data from immunization or multi indicator household surveys. | Household Survey (MICS, DHS); National Health Information Systems or National Immunization systems;  National immunization registries | Ministries of Health;  Immunization programmes;  National Statistics Office | EPI-CES | a) EPI Coverage Evaluation Survey, DGHS  b) BDHS, NIPORT | * Geographical location (Rural/Urban), , potentially sub-national * Division/District * Sex male, female | Annual | 1st Round:  2016  2nd Round:  January 2019  3rd Round:  January 2022  4th Round:  January 2025  5th Round:  January 2028 | Group 1 | BDHS 2017-18 Draft Key Indicator Report ready for dissemination. |
| 3.b.2: Total net official development assistance to medical research and basic health sectors | | OECD | Tier I | **Definition:**  Gross disbursements of total ODA from all donors to medical research and basic health sectors.  **Concepts:**  ODA: The DAC defines ODA as “those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are  i) provided by official agencies, including state and local governments, or by their executive agencies; and  ii) each transaction is administered with the promotion of the economic development and welfare of developing countries as its main objective; and is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent).  **Computation Method:**  The sum of ODA flows from all donors to developing countries for medical research and basic health. | Creditor Reporting System | Aid  Agencies, ministries of foreign affairs or finance, etc. | ERD | a) ERD  b) HSD  c) MEFWD  Administrative Data | * Providing Country * donor * recipient country * type of finance * type of aid: Financial/ Non Financial * health sub-sector | Annual | 1st Round:  2015  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 | Group 2 |  |
| 3.b.3: Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis | | WHO | Tier II | **Definition:**  Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis.  The indicator is a multidimensional index reported as a proportion (%) of health facilities that have a defined core set of quality-assured medicines that are available and affordable relative to the total number of surveyed health facilities at national level.  **Concepts:**  This indicator is based on the proportion of facilities (pharmacies, hospitals, clinics, primary care centers, public/private, etc.) where core essential medicines from the identified set are available for purchase and their prices are affordable, compared to the total number of facilities surveyed.  There are several core concepts that are used for measuring indicator 3.b.3:  1. Availability of medicine  2. Affordability of medicine  → to define affordability, additional concepts are used:  • Daily dose treatment of the medicine  • National poverty line  • Wage of the lowest paid unskilled government worker  3. Core set of relevant essential medicines (defined on a global level)  → to apply a core set of relevant essential medicines defined on a global level to all countries, an additional concept is used:  • global burden of disease  1) A medicine is available in a facility when it is found in this facility by the interviewer on the day of data collection. Availability is measured as a binary variable with 1 = medicine is available and 0 = otherwise.  2) A medicine is affordable when no extra daily wages (EDW) are needed for the lowest paid unskilled government sector worker (LPGW wage) to purchase a monthly dose treatment of this medicine after fulfilling basic needs represented by the national poverty line (NPL). Affordability is measured as a ratio of  1) the sum of the NPL and the price per daily dose of treatment of the medicine (DDD), over 2) the LPGW salary. This measures the number of extra daily wages needed to cover the cost of the medicines in the core set and that can vary between 0 and infinity.  2.a) Daily dose of treatment (DDD) is an average maintenance dose per day for a medicine used for its main indication in adults. DDDs allow comparisons of medicine use despite differences in strength, quantity or pack size.  2.b) National poverty line (NLP) is the benchmark for estimating poverty indicators that are consistent with the country's specific economic and social circumstances. NPLs reflect local perceptions of the level and composition of consumption or income needed to be non-poor.  2.c) Wage of the lowest paid unskilled government worker (LPGW) is a minimum living wage that employees are entitled to receive to ensure overcome of poverty and reduction of inequalities.  In other words, affordability of a medicine identifies how many (if any) extra daily wages are needed for an individual who earns the LPGW wage to be able to purchase a medicine. The computed EDW ratio aims to indicate whether the LPGW wage is enough for the individual who earns the lowest possible income to cover 1) the daily expenditures for food and non-food items used to define (relative or absolute) poverty using national standards (NPL) and 2) the daily needs for a medicine (DDD). This ratio then requires transformation into a binary variable where medicine is affordable when zero extra daily wages are required to purchase it and not affordable otherwise.  3) The core set of relevant essential medicines is a list of 28 tracer essential medicines for acute and chronic, communicable and non-communicable diseases in the primary health care setting.  This basket of medicines has been selected from the 2017 WHO Model List of Essential Medicines and used in primary health care. By definition, essential medicines are those that satisfy the priority health care needs of the population and are selected for inclusion on the Model List based on due consideration of disease prevalence, evidence of efficacy and safety, and consideration of cost and cost-effectiveness.  These medicines are listed in table 1 of Annex 1, where a detailed justification for including each medicine is also provided, as well as online references for the relevant treatment guidelines and sections in the WHO List of Essential Medicines.  This list of medicines is intended as a global reference. However, to address regional and country specificities in terms of medicine needs, the medicines in this basket are weighted according to the regional burden of disease.  3.a) The global burden of disease is an assessment of the health of the world's population. More specifically, disease burden provides information on the global and regional estimates of premature mortality, disability and loss of health for causes. The summary measure used to give an indication of the burden of disease is the disability adjusted life years (DALYs), which represent a person’s loss of the equivalent of one year of full health. This metric incorporates years of life lost due to death and years of life lost through living in states of less than full health (or disability).  **Computation Method:**  The index is computed as a ratio of the health facilities with available and affordable medicines for primary health care over the total number of the surveyed health facilities:  For this indicator, the following variables are considered for a multidimensional understanding of the components of access to medicines:   * A core set of relevant essential medicines for primary healthcare * Regional burden of disease * Availability of a medicine * Price of a medicine * Treatment courses for each medicine (number of units per treatment & duration of treatment) * National poverty line and lowest-paid unskilled government worker (LPGW) wage * Proxy for quality of the core set of relevant essential medicines.   The index is measured for each facility separately. Then a proportion of facilities that have accessible medicines is computed. The following steps must be taken to compute the index at the facility level:   * Review and selection of the core basket of medicines for primary health care * Estimate weights for the defined medicines based on regional burden of disease * Measure the two dimensions of the access to medicine * Availability * Affordability * Combine the two dimensions on availability and affordability (access to medicines) * Apply weights to the medicine in the basket according to the regional prevalence of the diseases that are cured, treated, and controlled by these medicines * Identify whether a facility has a core set of relevant essential medicines available and affordable   The next two steps are calculated at the country level across all the surveyed facilities:   * Calculate the indicator as the proportion of facilities with accessible medicines in the country * Consideration of the quality of the accessible medicines in the country using a proxy | The Service Availability and Readiness Assessment survey **[SARA]**  Health Action International Project supported by the WHO | Ministries of Health (MOH) | - | a) BHFS, NIPORT | 1. public/private/mission sectors facilities (managing authority)  2. geography – rural/urban areas  3. therapeutic group  4. facility type (pharmacy/hospital)  5. medicine. | Annual | 1st Round:  December, 2020  2nd Round:  December, 2023  3rd Round:  December, 2026  4th Round:  December, 2029  5th Round:  December, 2030 | Group 3 | This information may be obtained from the BHFS Final Report, which may be available by August 2019 |
| Target 3.c: Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States | | | | | | | | | | | | | |
| 3.c.1 Health worker density and distribution | | WHO | Tier I | **Definition:**  *Density of physicians:* The density of physicians is defined as the number of physicians, including generalists and specialist medical practitioners per 1000 population in the given national and/or subnational area. The International Standard Classification of Occupations (ISCO) unit group codes included in this category are 221, 2211 and 2212 of ISCO-08.  *Density of nursing and midwifery personnel:* The density of nursing and midwifery personnel is defined as the number of nursing and midwifery personnel per 1000 population in the given national and/or subnational area. The ISCO-08 codes included in this category are 2221, 2222, 3221 and 3222.  *Density of dentistry personnel:* The density of dentistry personnel is defined as the number of dentists, dental technician/assistants and related occupation personnel per 1000 population in the given national and/or subnational area. The ISCO-08 codes included in this category are 2261, 3214 (excluding medical prosthetic related technicians) and 3251.  *Density of pharmaceutical personnel:* The density of pharmaceutical personnel is defined as the number of pharmacists, pharmaceutical, technicians/assistants and related occupation personnel per 1000 population in the given national and/or subnational area. The ISCO-08 codes included in this category are 2262 and 3213.  **Comments and limitations:**  Data on health workers tend to be more complete for the public health sector and may underestimate the active workforce in the private, military, nongovernmental organization and faith-based health sectors. In many cases, information maintained at the national regulatory bodies and professional councils are not updated.    As data is not always published annually for each country, the latest available data has been used. Due to the differences in data sources, considerable variability remains across countries in the coverage, periodicity, quality and completeness of the original data. Densities are calculated using national population estimates from the United Nations Population Division's World Population Prospects database and may vary from densities produced by the country.  **Computation Method:**  Though, traditionally, this indicator has been estimated using 2 measurements: density of physicians, and density of nursing and midwifery personnel. In the context of the SDG agenda, the dataset is expanded to physicians, nursing personnel, midwifery personnel, dentistry personnel and pharmaceutical personnel. The dataset is planned to progressively move to cover all health cadres.  The method of estimation for number of physicians (including generalist and specialist medical practitioners) depending on the nature of the original data source may include practising physicians only or all registered physicians.  The figures for number of nursing and midwifery include nursing personnel and midwifery personnel, whenever available. In many countries, nurses trained with midwifery skills are counted and reported as nurses. This makes the distinction between nursing personnel and midwifery personnel difficult to draw.  The figures for number of dentistry personnel include dentists, dental technicians/assistants and related occupations. Due to variability of data sources, the professional-level and associate-level occupations may not always be distinguishable.  The figures for number of pharmaceutical personnel include pharmacists, pharmaceutical technicians/assistants and related occupations. Due to variability of data sources, the professional level and associate-level occupations may not always be distinguishable.  In general, the denominator data for workforce density (i.e. national population estimates) are obtained from the United Nations Population Division's World Population Prospects database. In cases where the official health workforce report provides density indicators instead of counts, estimates of the stock were then calculated using the population estimated from the United Nations Population Division's World population prospects database (2015). | Administrative Information Systems; population censuses, labour  force and employment surveys and health facility assessments. | Ministry of Health and National Statistics Office | (a) (WHO  (b) HSD)  (c) MEFWD | a) HRB, HSD, MoHFW  b) MIS, DGHS, MoHFW  c) WHO  Administrative Data | * profession: physicians, pharmaceutical, nursing and midwifery, dentistry * type of country: 'DCs/ LCDs/ SMIDs * national level data | Annual | 1st Round:  2016  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 | Group 1 |  |
| Target 3.d: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks | | | | | | | | | | | | | |
| 3.d.1: International Health Regulations (IHR) capacity and health emergency preparedness | | WHO | Tier I | **Definition:**  Percentage of attributes of 13 core capacities that have been attained at a specific point in time. The 13 core capacities are: (1) National legislation, policy and financing; (2) Coordination and National Focal Point communications; (3) Surveillance; (4) Response; (5) Preparedness; (6) Risk communication; (7) Human resources; (8) Laboratory; (9) Points of entry; (10) Zoonotic events; (11) Food safety; (12) Chemical events; (13) Radio nuclear emergencies.  **Concepts:**  *Attributes:* one of a set of specific elements or characteristics that reflect the level of performance or achievement of a specific indicator.  *Core capacity:* the essential public health capacity that States Parties are required to have in place throughout their territories pursuant to Articles 5 and 12, and Annex 1A of the IHR (2005) requirements by the year 2012. Eight core capacities are defined in this document.  *Indicator:* a variable that can be measured repeatedly (directly or indirectly) over time to reveal change in a system. It can be qualitative or quantitative, allowing the objective measurement of the progress of a programme or event. The quantitative measurements need to be interpreted in the broader context, taking other sources of information (e.g. supervisory reports and special studies) into consideration and they should be supplemented with qualitative information.  *The capability levels:* Each attribute has been assigned a level of maturity, or a ‘capability level.’ Attainment of a given capability level requires that all attributes at lower levels are in place. In the checklist, the status of core capacity development is measured at four capability levels: Level < 1: prerequisites (foundational level); Level 1: inputs and processes; Level 2: outputs and outcomes; Level 3: additional.  **Computation Method:**  (Number of 'yes' to level 1 and 2 questions) / (Total number of level 1 and 2 questions) per core capacity | Key informant survey | National IHR Focal Points | WHO | a) DGHS, HSD (NHCMC & CR)  b) WHO | * Not Required | Annual | 1st Round:  2016  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 | Group 1 |  |
| 3.d.2 Percentage of bloodstream infections due to selected antimicrobial-resistant organisms | |  | TBD | **Definition:**  Frequency of bloodstream infection among hospital patients’ due to methicillin-resistant  Staphylococcus aureus (MRSA) and Escherichia coli resistant to 3rd-generation cephalosporin (e.g., ESBL- E. coli).    Rationale for selecting these two types of AMR organisms:   1. E. coli and S. aureus are among the most common human fast-growing bacteria causing acute human infections; 2. E. coli is highly frequent in both humans, animals and environment, being an excellent indicator for monitoring AMR across the sectors in line with the One Health approach; 3. both MRSA and ESBL- E. coli are largely disseminated and frequently in high frequency in hospital settings all over the world. Infections with these types of AMR lead to increase in use of the last resort drugs (e.g., vancomycin for MRSA infections, and carbapenems for ESBL- E. coli) against which new types of AMR are emerging. WHO has defined global infection prevention and control standards and strategies.     Effective control of these two types of AMR will ultimately preserve the capacity to treat infections with available antimicrobials while new prevention and treatment solutions can be developed.    **Comments and limitations:**  Constraints associated with in national AMR surveillance systems (number and distribution of surveillance sites and representativeness of surveillance data, sampling bias, poor diagnostic capacity, measurements errors, issues with data management).    **Computation Method:**  The WHO Global AMR Surveillance System (GLASS) supports countries to implement an AMR standardized surveillance system. At national level cases are found among patients from whom routine clinical samples have been collected for blood culture at surveillance sites according to local clinical practices, and antimicrobial susceptibility tests (AST) are performed for the isolated blood pathogens. The microbiological results (bacteria identification and AST) are combined with the patient data and related to population data from the surveillance sites. GLASS does collect information on the origin of the infection either community origin (less than 2 calendar days in hospital) or hospital origin (patients hospitalized for more than 2 calendar days). Data are collated and validated at national level and reported to GLASS where epidemiological statistics and metrics are generated.  **Numerator:** Number of patients presenting with blood stream infection due to MRSA and ESBL- E. coli among patients seeking hospital care  **Denominator:** Number of patients seeking hospital care and from whom the blood specimen was taken due to suspected bloodstream infection and from whom blood specimens have been submitted for blood culture and AST. |  |  |  | a) DGHS, HSD  Administrative Data | * by Sex: male,female * By Age group: 0-15, 15-24, 25 and above * Admission type: Community/hospital |  | 1st Round:  December, 2020  2nd Round:  December, 2021  3rd Round:  December, 2022  4th Round:  December, 2023  5th Round:  December, 2024 |  | Refinement of the indicator name approved by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) on 13 March and 2 April 2020. Final approval pending the 52nd session of the Statistical Commission in March 2021  UNSC 51 addition included in the 2020 comprehensive review |

 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Total Target 10, Total Indicators: 11

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

|  |  |
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|  | Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier Classifications** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***1*** | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** | ***8*** | ***9*** | ***10*** | ***11*** | ***12*** | ***13*** |
| Target 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes | | | | | | | | | | | | |
| 4.1.1: Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex | UNESCO-UIS  **Partner Agencies:**  OECD | Tier I | **For 4.1.1a**  **Definition:**  Proportion of children and young people in grades 2/3 achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex.  **Concepts:**  Minimum proficiency level is the benchmark of basic knowledge in a domain (mathematics, reading, etc.) measured through learning assessments. Until August 2018, there was no globally agreed definition on minimum proficiency level. As an interim reporting strategy, the UIS has been reporting according to the minimum proficiency level defined by each assessment.  Minimum proficiency levels defined by each learning assessment  The table below shows the minimum proficiency levels for each learning assessment by target grade/age and domain. Due to heterogeneity of performance levels set by national and cross-national assessments, these performance levels will be mapped to the globally-defined minimum performance levels and policy descriptors, agreed upon in September 2018 (see 4.1.1. UIS request for reclassification 2018.09.28.docx) that will allow pedagogical linking. Once the performance levels are mapped, the global education community will be able to identify for each country the proportion or percentage of children who achieved at least minimum proficiency levels.  **Table 1. Minimum proficiency levels defined by each learning assessment**   |  |  |  |  | | --- | --- | --- | --- | | **Name** | **Target grade/age** | **Domain** | **Minimum Proficiency Level (MPL)** | | **LLECE** | Grade 3 | Reading | Level 2 | | Math | Level 2 | | **PASEC** | Grade 2 | Reading | Level 3 | | Math | Level 2 | | **TIMSS** | Grade 4 | Math | Low International Benchmark | | **PIRLS** | Grade 4 | Reading | Low International Benchmark | | **MICS6** | Grade 2/3 | Reading | Foundational reading skills | | Math | Foundational numeracy skills | | **EGRA** | Grade 2/3 | Reading | Number of correct words per minute (cwpm) above a given threshold (typically 45 cwpm) defined by each country | | **EGMA** | Grade 2/3 | Math | Percentage of correct answers for addition and subtraction above a given threshold (typically 80% of correct answers) defined by each country | | **PAL Network** | Grade 3 | Reading | Can read one or more texts as defined by each country | | Math | Can do one or more arithmetic problems as defined by each country | | **National assessment** | Grade 2/3, end of primary or end of secondary | Reading | As defined by each national assessment | | Math | As defined by each national assessment |   **Computation Method:**  The number of children and/or young people at the relevant stage of education n in year t achieving at least the pre-defined proficiency level in subject s expressed as a percentage of the number of children and/or young people at stage of education n, in year t, in any proficiency level in subject s.  MPLt,n,s, = MPt,n,s / Pt,n  where:  MPt,n,s = the number of children and young people at stage of education n, in year t, who have achieved at least the minimum proficiency level in subject s.  Pt,n = the number of children and young people at stage of education n, in year t, in any proficiency level in subject s.  n = the stage of education that was assessed  s = the subject that was assessed (reading or mathematics).  Disaggregation:  Indicator 4.1.1.a must be disaggregated by domain (reading and mathematics) and sex.  **For 4.1.1bc**  **Definition:**  Percentage of children and young people in Grade 2 or 3 of primary education, at the end of primary education and the end of lower secondary education achieving at least a minimum proficiency level in (a) reading and (b) mathematics. The minimum proficiency level will be measured relative to new common reading and mathematics scales currently in development.  **Concepts:**  Minimum proficiency level is the benchmark of basic knowledge in a domain (mathematics or reading) measured through learning assessments. For example, the Programme for International Student Assessment (PISA) reading test has six proficiency levels, of which Level 2 is described as the minimum proficiency level. In Trends in International Mathematics and Science Study (TIMSS) and Progress in International Reading Literacy Study (PIRLS), there are four proficiency levels: Low, Intermediate, High and Advanced. Students reaching the Intermediate benchmark are able to apply basic knowledge in a variety of situations, similar to the idea of minimum proficiency. Currently, there are no common standards validated by the international community or countries. The indicator shows data published by each of the agencies and organizations specialised in cross-national learning assessments.  **Computation Method:**  The indicator is calculated as the percentage of children and/or young people at the relevant stage of education achieving or exceeding a pre-defined proficiency level in a given subject.  Performance above the minimum level, PLtn,s, above minimum = p  where p is the percentage of students in a learning assessment at stage of education n, in subject s in any year (t-i) where 0 ? i ? 5, who has achieved the level of proficiency that is greater than a pre-defined minimum standard, Smin. The minimum standard is defined by the global education community taking into consideration regional differences. | Cross-national learning assessments | Ministry of Education, National  Statistical Offices and other data providers | LASI, DSHE | a) BBS-(LAS/MICS) SID  b) DPE-(NSA), MoPME  c) DSHE-(LASI/NASS), MoE | * Age or age-group: 6-10 yrs, 10-15 yrs, 15-19 yrs, 20-24 yrs, 25-30 yrs * Sex :Female, Male, Both * Location: Urban/Rural * Socio-economic status: High/Medium/ Low * Migrant status: Migrants/Non migrants * Ethnicity: ethnic/non ethnic * Disability status: Disable/Non Disable | Annual | Group 2 | 1st Round:  2015  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 | Data availability reviewed in Oct. 2019  (classified as Tier I)  Part (a) reviewed at 8th IAEG-SDG meeting (classified as Tier II)  Reviewed at IAEG-SDG 6th meeting: part (a) Needs additional work to develop internationally comparable statistics  IAEG-SDG 4th meeting: Multi-tier classification due to concerns regarding the methodology for part (a) ((a) classified as TBD) |
| 4.1.2 Completion rate (primary education, lower secondary education, upper secondary education) |  | TBD | **Definition:**  Percentage of a cohort of children or young people aged 3-5 years above the intended age for the last grade of each level of education who have completed that grade.  **Concepts:**  The intended age for the last grade of each level of education is the age at which pupils would enter the grade if they had started school at the official primary entrance age, had studied full-time and had progressed without repeating or skipping a grade.    **Comments and limitations:**  The age group 3-5 years above the official age of entry into the last grade for a given level of education was selected for the calculation of the completion rate to allow for some delayed entry or repetition. In countries where entry can occur very late or where repetition is common, some children or adolescents in the age group examined may still attend school and the eventual rate of completion may therefore be underestimated.    The indicator is calculated from household survey data and is therefore subject to time lag in the availability of data. When multiple surveys are available, they may provide conflicting information due to the possible presence of sampling and non-sampling errors in survey data. The Technical Cooperation Group has also requested the refinement of the methodology to model the completion rate estimates, following an approach similar to that used for the estimation of child mortality rates. The model would ensure that common challenges with household survey data, such as timeliness and sampling or non-sampling errors are addressed to provide up-to-date and more robust data.  **Computation Method:**  The number of persons in the relevant age group who have completed the last grade of a given level of education is divided by the total population (in the survey sample) of the same age group.    Formula:      where:    𝐶𝑅𝑛 = completion rate for level *n* of education  𝑃𝐶𝑛,𝐴𝑔𝑒𝑎+3𝑡5 = population aged 3 to 5 years above the official entrance age *a* into the last grade of level *n* of education who completed level *n*  𝑃𝐴𝑔𝑒𝑎+3𝑡5 = population aged 3 to 5 years above the official entrance age *a* into the last grade of level *n* of education  𝑛 = ISCED level 1 (primary education), 2 (lower secondary education), or 3 (upper secondary education) | Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), the European Union Statistics on Income and Living Condition (EU-SILC), the Integrated Public Use Microdata Series (IPUMS), and national household surveys and censuses. | National statistics offices | MICS, BBS | LAS/MICS/HIES/EHS/SVRS, BBS | * Sex: Male/ Female * Residence: Rural/ Urban * Locality: Division/ District * Ethnicity: Bangali/ Non-Bangali * Wealth Index: Poorest/ Second/Middle/ Fourth/ Richest |  |  | 1st Round:  2019  2nd Round:  December, 2021  3rd Round:  January 2022  4th Round:  January 2023  5th Round:  January 2024 | UNSC 51 addition included in the 2020 comprehensive review |
| Target 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education | | | | | | | | | | | | |
| 4.2.1 Proportion of children aged 24-59 months who are developmentally on track in health, learning and psychosocial well-being, by sex | UNICEF  **Partner Agencies:**  UNESCO-UIS, OECD | Tier II | **Definition:**  The proportion of children aged 24-59 months who are developmentally on track in health, learning and psychosocial well-being is currently being measured by the percentage of children aged 24-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, socio-emotional and learning.  **Concepts:**  The domains included in the indicator currently being used as a proxy for reporting on SDG indicator 4.2.1 are operationally defined as follows:  *Literacy-numeracy:* Children are identified as being developmentally on track if they can do at least two of the following: identify/name at least 10 letters of the alphabet; read at least 4 simple, popular words; and/or know the name and recognize the symbols of all numbers from 1 to 10.  *Physical:* If the child can pick up a small object with two fingers, like a stick or rock from the ground, and/or the mother/primary caregiver does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.  *Social-emotional:* The child is considered developmentally on track if two of the following are true: The child gets along well with other children; the child does not kick, bite or hit other children; and the child does not get distracted easily.  *Learning:* If the child follows simple directions on how to do something correctly and/or when given something to do, and is able to do it independently, then the child is considered to be developmentally on track in the learning domain.  Comments and limitations:  For the time being, a proxy indicator (children aged 36-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, social-emotional and learning) is being used to report on 4.2.1 until the new measure has been finalized (expected by end of 2019). The proxy indicator is not fully aligned with the definition and age group covered by the SDG indicator formulation.  **Computation Method:**  The number of children under the age of five who are developmentally on track in health, learning and psychosocial well-being divided by the total number of children under the age of five in the population multiplied by 100.  Proxy indicator:  The number of children aged 36-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, social-emotional and learning divided by the total number of children aged 36-59 months in the population multiplied by 100. | Household Survey | NSO | MICS, BBS | MICS, BBS | * Age: 24-59 months, 36-59 months * Sex: male, female * Place of residence urban, Rural * Wealth quintiles * Caregiver education and other background characteristics * Migrant status: Migrant/ Non maigrant. | Triennial | Group 3 | 1st Round:  2013  2nd Round:  December, 2020  3rd Round:  December, 2023  4th Round:  December, 2026  5th Round:  December, 2029 | Refinement of the indicator name approved by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) on 13 March and 2 April 2020. Final approval pending the 52nd session of the Statistical Commission in March 2021  UNSC 51 deletion included in the 2020 comprehensive review; the portion of the indicator that measured progress for children between 0 and 23 months of age, which was a tier III, was deleted  IAEG-SDG 9th meeting: Multi-tier classification. Part of indicator measuring progress for children 0-23 months is Tier III, for children 24-59 months indicator is Tier II (classified as Tier II/III).  IAEG-SDG 3rd meeting: There is no established methodology for the indicator (classified as Tier III) |
| 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex | UNESCO-UIS  **Partner Agencies:**  UNICEF, OECD | Tier I | **Definition:**  The participation rate in organized learning (one year before the official primary entry age), by sex as defined as the percentage of children in the given age range who participate in one or more organized learning programme, including programmes which offer a combination of education and care. Participation in early childhood and in primary education are both included. The age range will vary by country depending on the official age for entry to primary education.  **Concepts:**  An organized learning programme is one which consists of a coherent set or sequence of educational activities designed with the intention of achieving pre-determined learning outcomes or the accomplishment of a specific set of educational tasks. Early childhood and primary education programmes are examples of organized learning programmes. Early childhood and primary education are defined in the 2011 revision of the International Standard Classification of Education (ISCED 2011). Early childhood education is typically designed with a holistic approach to support children’s early cognitive, physical, social and emotional development and to introduce young children to organized instruction outside the family context. Primary education offers learning and educational activities designed to provide students with fundamental skills in reading, writing and mathematics and establish a solid foundation for learning and understanding core areas of knowledge and personal development. It focuses on learning at a basic level of complexity with little, if any, specialisation. The official primary entry age is the age at which children are obliged to start primary education according to national legislation or policies. Where more than one age is specified, for example, in different parts of a country, the most common official entry age (i.e. the age at which most children in the country are expected to start primary) is used for the calculation of this indicator at the global level.  **Computation Method:**  The number of children in the relevant age group who participate in an organized learning programme is expressed as a percentage of the total population in the same age range. The indicator can be calculated both from administrative data and from household surveys. If the former, the number of enrolments in organized learning programmes are reported by schools and the population in the age group one year below the official primary entry age is derived from population estimates. For the calculation of this indicator at the global level, population estimates from the UN Population Division are used. If derived from household surveys, both enrolments and population are collected at the same time.  PROL0t1,AG(a-1) = E0t1,AG(a-1)  SAPAG(a-1)  *where: PROL0t1,AG(a-1)= participation rate in organized learning one year before the official entry age a to primary education*  *E0t1,AG(a-1) = enrolment in early childhood or primary education (ISCED levels 0 and 1) aged one year below the official entry age a to primary education*  *SAPAG(a-1) = school-age population aged one year below the official entry age a to primary education* | Household Survey;  Administrative Record on enrolment | NSO;  Ministry of Primary Education | APSC, DPE | a) LAS/EHS/PHC/ MICS/SVRS, BBS  b) APSC, MoPME, DPE | * Age: 3-4 yrs, 4-5 yrs, 5-6 yrs * Sex: male, female * Location: Urban/Rural * Income: High/medium/Low | Triennial | Group 2 | 1st Round:  2015  2nd Round:  January 2019  3rd Round:  January 2022  4th Round:  January 2025  5th Round:  January 2028 | Levels of education defined in the International Standard Classification of Education (ISCED) should be followed to ensure international comparability of resulting indicators. |
| Target 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university | | | | | | | | | | | | |
| 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex | UNESCO-UIS  **Partner Agencies:**  OECD,  Eurostat,  ILO | Tier II | **Definition:**  The percentage of youth and adults in a given age range (e.g. 15-24 years, 25-64 years, etc.) participating in formal or non-formal education or training in a given time period (e.g. last 12 months).  **Concepts:**  Formal education and training is defined as education provided by the system of schools, colleges, universities and other formal educational institutions that normally constitutes a continuous ‘ladder’ of full-time education for children and young people, generally beginning at the age of 5 to 7 and continuing to up to 20 or 25 years old. In some countries, the upper parts of this ‘ladder’ are organized programmes of joint part-time employment and part-time participation in the regular school and university system. Non-formal education and training is defined as any organized and sustained learning activities that do not correspond exactly to the above definition of formal education. Non-formal education may therefore take place both within and outside educational institutions and cater to people of all ages. Depending on national contexts, it may cover educational programmes to impart adult literacy, life-skills, work-skills, and general culture.  **Computation Method:** The number of people in selected age groups participating in formal or non-formal education or training is expressed as a percentage of the population of the same age.  PRAGi = EAGi  PAGi  where:  *PRAGi= participation rate of the population in age group i in formal and non-formal education and training*  *EAGi= enrolment of the population in age group i in formal and non-formal education and training*  *PAGi= population in age group i i = 15-24, 15 and above, 25-64 etc* | Household Survey; Population Census;  Administrative Record | National Statistical Offices;  Ministry of Education | c) BES  d) BTEB | a) (LAS/PHC/ EHS/SVRS), SID, BBS  b) BES,MoE, BANBEIS | * Age: 15-24 yrs, 25-64 yrs * Sex: Male/Female * Location: Urban, Rural * Income: High/ Medium/ Low * type of education: Primary/ Secondary/Higher | Triennial | Group 3 | 1st Round:  2015  2nd Round:  December 2019  3rd Round:  December 2022  4th Round:  December 2025  5th Round:  December 2028 |  |
| Target 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship | | | | | | | | | | | | |
| 4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill | UNESCO-UIS  ITU  **Partner Agency:**  OECD | Tier II | **Definition:**  The proportion of youth and adults with information and communications technology (ICT) skills, by type of skill as defined as the percentage of youth (aged 15-24 years) and adults (aged 15 years and above) that have undertaken certain computer-related activities in a given time period (e.g. last three months).  **Concepts:**  Computer-related activities to measure ICT skills include:   * Copying or moving a file or folder * Using copy and paste tools to duplicate or move information within a document * Sending e-mails with attached files (e.g. document, picture, and video) * Using basic arithmetic formulae in a spreadsheet * Connecting and installing new devices (e.g. modem, camera, printer) * Finding, downloading, installing and configuring software * Creating electronic presentations with presentation software (including text, images, sound, video or charts) * Transferring files between a computer and other devices * Writing a computer program using a specialised programming language   A computer refers to a desktop computer, a laptop (portable) computer or a tablet (or similar handheld computer). It does not include equipment with some embedded computing abilities, such as smart TV sets or cell phones.  **Computation Method:**  The indicator is calculated as the percentage of people in a given population who have responded ‘yes’ to a selected number of variables e.g. the use of ICT skills in various subject areas or learning domains, the use of ICT skills inside or outside of school and/or workplace, the minimum amount of time spend using ICT skills inside and outside of school and/or workplace, availability of internet access inside or outside of school and/or workplace, etc.  PICTa = ICTa  Pa  where:  PICTa,s = percentage of people in age group a who have ICT skill s  ICTa,s = number of people in age group a who have ICT skill s  Pa = population in age group a | School or household survey | NSO;  MoE | BBS | (LAS/MICS/  Access and use of ICT by Household and Individual Survey), SID, BBS | * Age or age-group 15-24 yrs, 25-64 yrs * Sex: male, Female * Location : Urban, Rural * Socio-economic status: High/Medium/Low | Triennial | Group 3 | 1st Round:  2019  2nd Round:  December 2020  3rd Round:  December 2023  4th Round:  December 2026  5th Round:  December 2029 |  |
| Target 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations | | | | | | | | | | | | |
| 4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated | UNESCO-UIS  **Partner Agency:**  OECD | Tier I/II/III depending on indice | **Definition:**  Parity indices require data for the specific groups of interest. They represent the ratio of the indicator value for one group to that of the other. Typically, the likely more disadvantaged group is placed in the numerator. A value of exactly 1 indicates parity between the two groups.  **Concepts:**  See metadata for relevant underlying indicator.  **Computation Method:**  The indicator value of the likely more disadvantaged group is divided by the indicator value of the other sub-population of interest.  DPI = [Indi]d  [Indi]a  where:  DPI= the Dimension (Gender, Wealth, Location, etc.) Parity Index  Indi= the Education 2030 Indicator i for which an equity measure is needed.  d= the likely disadvantaged group (e.g. female, poorest, etc.)  a= the likely advantaged group (e.g. male, richest, etc.) | The sources are the same as for the underlying indicators for this goal. | Same as the underlying indicators | APSC for Primary and BES for others | a) (BES), MoE, BANBEIS  b) (APSC/ASPR), MoPME, DPE  c) (EHS/MICS), SID, BBS  d) DSS, MoSW, DIS  e) MoSW, MIS of DSS | * sex: male/female * geographical location: Urban/Rural * wealth bottom/top * disability: Disable/Non-disable * indigeneity * conflict- affected: | Triennial | Group 3 | 1st Round:  2015  2nd Round:  December 2020  3rd Round:  December 2023  4th Round:  December 2026  5th Round:  December 2029 | Underlying indicators data should ensure the parity indices |
| Target 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy | | | | | | | | | | | | |
| 4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex | UNESCO-UIS  **Partner Agency:**  WB, OECD | Tier II | **Definition:**  The proportion of youth (aged 15-24 years) and of adults (aged 15 years and above) have achieved or exceeded a given level of proficiency in (a) literacy and (b) numeracy. The minimum proficiency level will be measured relative to new common literacy and numeracy scales currently in development.  **Concepts:**  The fixed level of proficiency is the benchmark of basic knowledge in a domain (literacy or numeracy) measured through learning assessments. Currently, there are no common standards validated by the international community or countries. The indicator shows data published by each of the agencies and organizations specialised in cross-national learning assessments.  **Computation Method:**  Proportion of youth and adults who have achieved above the minimum threshold of proficiency as defined for large-scale (sample representative) adult literacy assessment:  Performance achieve above minimum level, PLta,s,above minimum= p.  where p is the proportion of youth and adults at a national or cross-national adult literacy assessment at  age group a, in learning domain s in any year (t-i) where 0 ? i ? 5, who has achieved above the minimum  level of proficiency. | Household Survey | National  Statistical Offices; Ministries of Education, and other data providers |  | LAS, BBS | * Age-group: 15-64, 16-65 * Sex: female, male, both * Location urban/rural * Income high/medium/low * Type of skill: literacy, numeracy | Triennial | Group 3 | 1st Round:  December, 2020  2nd Round:  June, 2021  3rd Round:  June, 2024  4th Round:  June, 2027  5th Round:  June, 2030 |  |
| 4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment | UNESCO-UIS  **Partner agencies:**  OECD,  UNEP,  UN WOMEN | Tier II | **Definition:**  Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment.  **Concepts:**  *Education for Sustainable Development (ESD):* empowers learners to take informed decisions and  responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity. It is about lifelong learning and is an integral part of quality education.  *Global Citizenship Education (GCED):* GCED nurtures respect for all, building a sense of belonging to a  common humanity and helping learners become responsible and active global citizens. GCED aims to empower learners to assume active roles to face and resolve global challenges and to become proactive. contributors to a more peaceful, tolerant, inclusive and secure world.  **Computation Method:**  The method of reporting this indicator has still to be defined. It will be based on an evaluation of reports submitted by countries describing how they are mainstreaming global citizenship education and education for sustainable development in their education policies and systems. | Administrative Record,  Household Survey | UNESCO Member States via their National Commissions to UNESCO |  | SHED  MoE MoPME  Administrative Data | * education policy: national education policies/ curricula/ teacher education/ students’ assessment * global citizenship education/ education for sustainable development | Triennial | Group 3 | 1st Round:  December 2020  2nd Round:  December 2023  3rd Round:  December 2026  4th Round:  December 2029  5th Round:  December 2030 | UNSC 51 refinement  12.8.1 & 13.3.1 are repeated  Reviewed at Nov./Dec. 2019 WebEx meeting (classified as Tier II)  Reviewed at Dec. 2018 WebEx meeting:  request additional work on questionnaire methodology (classified as TBD)  Reviewed at 8th IAEG-SDG meeting: request additional work on methodology |
| Target 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all | | | | | | | | | | | | |
| 4.a.1 Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions) | UNESCO-UIS  **Partner agencies:**  UNICEF,  OECD,  UNEP | Tier II | **Definition:**  The percentage of schools by level of education (primary education) with access to the given facility or service.  **Concepts:**  *Electricity:* Regularly and readily available sources of power (e.g. grid/mains connection, wind, water,  solar and fuel-powered generator, etc.) that enable the adequate and sustainable use of ICT infrastructure for educational purposes.  *Internet for pedagogical purposes:* Internet that is available for enhancing teaching and learning and is accessible by pupils. Internet is defined as a worldwide interconnected computer network, which  provides pupils access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files, irrespective of the device used (i.e. not assumed to be only via a computer) and thus can also be accessed by mobile telephone, tablet, PDA, games machine, digital TV etc.). Access can be via a fixed narrowband, fixed broadband, or via mobile network.  *Computers for pedagogical use:* Use of computers to support course delivery or independent teaching and learning needs. This may include activities using computers or the Internet to meet information  needs for research purposes; develop presentations; perform hands-on exercises and experiments; share information; and participate in online discussion forums for educational purposes. A computer is a programmable electronic device that can store, retrieve and process data, as well as share information in a highly-structured manner. It performs high-speed mathematical or logical operations according to a set  of instructions or algorithms. Computers include the following types:  - *A desktop computer* usually remains fixed in one place; normally the user is placed in front of it, behind  the keyboard;  - *A laptop* computer is small enough to carry and usually enables the same tasks as a desktop computer;  it includes notebooks and netbooks but does not include tablets and similar handheld devices; and  - *A tablet* (or similar handheld computer) is a computer that is integrated into a flat touch screen, operated by touching the screen rather than using a physical keyboard.  *Adapted infrastructure* is defined as any built environment related to education facilities that are accessible to all users, including those with different types of disability, to be able to gain access to use and exit from them.  *Accessibility* includes ease of independent approach, entry, evacuation and/or use of  a building and its services and facilities (such as water and sanitation), by all of the building's potential users with an assurance of individual health, safety and welfare during the course of those activities.  *Adapted materials* include learning materials and assistive products that enable students and teachers with disabilities/functioning limitations to access learning and to participate fully in the school environment.  *Accessible learning materials* include textbooks, instructional materials, assessments and other materials that are available and provided in appropriate formats such as audio, braille, sign language and simplified formats that can be used by students and teachers with disabilities/functioning limitations.  *Basic drinking water* is defined as a functional drinking water source (MDG ‘improved’ categories) on or near the premises and water points accessible to all users during school hours.  *Basic sanitation facilities* are defined as functional sanitation facilities (MDG ‘improved’ categories) separated for males and females on or near the premises.  *Basic handwashing facilities* are defined as functional handwashing facilities, with soap and water available to all girls and boys.  **Computation Method:**  The number of schools in a given level of education with access to the relevant facilities is expressed as a percentage of all schools at that level of education.  PSn,f = Sn,f  Sn  Where:  PSn,f= percentage of schools at level n of education with access to facility f  Sn,f= schools at level n of education with access to facility f  Sn= total number of schools at level n of education | Administrative data from schools and other providers of education or training | Ministry of Education;  National Statistical Office | Primary: APSC Secondary: BES | a) BES, BANBEIS  b) SHED  c) APSC, DPE | * Level of education: Primary, Secodnary/ Higher | Annual | Group 2 | 1st Round:  2017  2nd Round: December 2020  3rd Round:  December 2021  4th Round:  December 2022  5th Round:  December 2023 | IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II) |
| Target 4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries | | | | | | | | | | | | |
| 4.b.1 Volume of official development assistance flows for scholarships by sector and type of study | OECD  **Partner agencies:** UNESCO-UIS | Tier I | **Definition:**  Gross disbursements of total ODA from all donors for scholarships.  **Concepts:**  *ODA:* The DAC defines ODA as “those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are  i) provided by official agencies, including state and local governments, or by their executive agencies; and  ii) each transaction is administered with the promotion of the economic development and welfare of developing countries as its main objective; and  is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent). (http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm).  *Scholarships:* Financial aid awards for individual students and contributions to trainees. The beneficiary students and trainees are nationals of developing countries. Financial aid awards include bilateral grants to students registered for systematic instruction in private or public institutions of higher education to follow full-time studies or training courses in the donor country. Estimated tuition costs of students attending schools financed by the donor but not receiving individual grants are not included here, but under item imputed student costs (CRS sector code 1520). Training costs relate to contributions for trainees from developing countries receiving mainly non-academic, practical or vocational training in the donor country.  **Computation Method:**  The sum of ODA flows from all donors to developing countries for scholarships. | Administrative Record | DAC statistics | ERD | a) ERD b) SHED, MoE  c) TMED, MoE d) MoPME  e) UNDP (OECD Report)  Administrative Data | * Donor * Recipient country * Type of finance | Annual | Group 3 | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Bangladesh is not in the DAC list as scholarship provider |
| Target 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States | | | | | | | | | | | | |
| 4.c.1 Proportion of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country | UNESCO-UIS  **Partner agencies:** OECD | Tier II | **Definition:**  The percentage of teachers by level of education taught (pre-primary, primary, lower secondary and upper secondary education) who have received at least the minimum organized pedagogical teacher training pre-service and in-service required for teaching at the relevant level in a given country.  **Concepts:**  A teacher is trained if they have received at least the minimum organized pedagogical teacher training pre-service and in-service required for teaching at the relevant level in a given country.  **Computation Method:**  The number of teachers in a given level of education who are trained is expressed as a percentage of all teachers in that level of education.  PTTn = TTn  Tn  where:  *PTTn= percentage of trained teachers at level n of education*  *TTn= trained teachers at level n of education*  *Tn= total teachers at level n of education*  *n= 02 (pre-primary), 1 (primary), 2 (lower secondary), 3 (upper secondary) and 23 (secondary)* | Administrative Record | Ministry of Education  Or  NSO |  | a) BES,MoE, BANBEIS  b) SHED  c) APSC,MoPME, DPE | * Level of education:   pre-primary education primary education lower secondary education   * upper secondary education * Type of institution (public/private) * sex: male/female | Annual | Group 1 | 1st Round:  June 2020  2nd Round:  June 2021  3rd Round:  June 2022  4th Round:  June 2023  5th Round:  June 2024 | BES and APSC should follow the International Standard Classification of Education (ISCED) |

 Achieve gender equality and empower all women and girls

Total Target 9, Total Indicators: 14

*\* 1 Indicator classified both as Tier I and Tier II*

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

|  |  |
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|  | Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all |

| **targets and Indicators** | **Custodian Agency (ies)** | | **Tier Classifications** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***1*** | ***2*** | | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** | ***8*** | ***9*** | ***10*** | ***11*** | ***12*** | ***13*** |
| Target 5.1 End all forms of discrimination against all women and girls everywhere | | | | | | | | | | | | | |
| 5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non‑discrimination on the basis of sex | UN Women,  World Bank, OECD Development Centre    **Partner Agency:**  OHCHR | | Tier II | **Definitions:**  Indicator 5.1.1 measures Government efforts to put in place legal frameworks that promote, enforce and monitor gender equality.  The indicator is based on an assessment of legal frameworks that promote, enforce and monitor gender equality. The assessment is carried out by national counterparts, including National Statistical Offices (NSOs) and/or National Women’s Machinery (NWMs), and legal practitioners/researchers on gender equality, using a questionnaire comprising 45 yes/no questions under four areas of law: (i) overarching legal frameworks and public life; (ii) violence against women; (iii) employment and economic benefits; and (iv) marriage and family. The areas of law and questions are drawn from the international legal and policy framework on gender equality, in particular the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which has 189 States parties, and the Beijing Platform for Action. As such, no new internationally agreed standard on equality and non-discrimination on the basis of sex was needed. The primary sources of information relevant for indicator 5.1.1 are legislation and policy/action plans.  There are 45 questions under 4 Areas which are available in detailed metadata (Please see https://unstats.un.org/sdgs/metadata/files/Metadata-05-01-01.pdf). The areas are: Area 1: Overarching legal frameworks and public life; Area 2: Violence against women; Area 3: Employment and economic benefits; and Area 4: Marriage and family.  **Concepts:**  Article 1 of CEDAW provides a comprehensive definition of discrimination against women covering direct and indirect discrimination and article 2 sets out general obligations for States, in particular on required legal frameworks, to eliminate discrimination against women. Article 1 of CEDAW states: “… the term "discrimination against women" shall mean any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field”.  The term “legal frameworks” is defined broadly to encompass laws, mechanisms and policies/plans to ‘promote, enforce and monitor’ gender equality.  Legal frameworks that “promote” are those that establish women’s equal rights with men and enshrine non-discrimination on the basis of sex. Legal frameworks that “enforce and monitor’ are directed to the realization of equality and non-discrimination and implementation of laws, such as policies/plans, establishment of enforcement and monitoring mechanisms, and allocation of financial resources.  **Scoring:**  The indicator is based on an assessment of legal frameworks that promote, enforce and monitor gender equality using a questionnaire comprising 45 Yes/No questions under four areas of law drawn from the international legal and policy framework on gender equality, in particular CEDAW and the Beijing Platform for Action.  The answers to the questions are coded with simple “Yes/No” answers with “1” for “Yes” and “0” for “No”. For questions 1 and 2 only, they may be scored “N/A” in which case they are not included as part of the overall score calculation for the area.  The scoring methodology is the unweighted average of the questions under each area of law calculated by:  Where Ai refers the area of law i; mi refers to the total number of questions under the area of law i; 3 q1+...+qmi refers to the sum of the coded questions under the area of law and where qi=”1” if the answer is “Yes” and qi=”0” if the answer is “No”.  Results of the four areas are reported as percentages as a dashboard: 〈𝐴1, 𝐴2, 𝐴3, 𝐴4〉. The score for each area (a number between 0 and 100) therefore represents the percentage of achievement of that country in that area, with 100 being best practice met on all questions in the area.  The choice of presenting all four area scores without further aggregation is the result of adopting the posture that high values in one area in a given country need not compensate in any way the country having low values in some other area, and that a comprehensive examination of the value of those four numbers for each country is potentially more informative than trying to summarize all four numbers into a single index. | Primary sources/ official  Government documents, in particular laws, policies/ action plans | National Statistical Offices (NSOs) and/or National Women’s Machinery (NWMs) |  | a) MoWCA | Four areas of law:   * Overarching legal frameworks and public life; * Violence against women; * Employment and economic benefits; and * Marriage and family | Bi-annual | Group 2 | 1st Round:  June 2019  2nd Round:  June 2021  3rd Round:  June 2023  4th Round:  June 2025  5th Round:  June 2027 | * MoWCA should set a focal point for generating data collaboration with of BBS. |
| Target 5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation | | | | | | | | | | | | | |
| 5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age | UNICEF,  UN Women, UNFPA,  WHO,  UNODC  **Partner Agencies:**  UNSD,  UNDP | | Tier II | **Definition:**  This indicator measures the percentage of ever-partnered women and girls aged 15 years and older who have experienced physical, sexual or psychological violence by a current or former intimate partner, in the previous 12 months.  **Concepts:**  According to the UN Declaration on the Elimination of Violence against Women (1993), Violence against Women is “Any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life. Violence against women shall be understood to encompass, but not be limited to, the following: Physical, sexual and psychological violence occurring in the family […]”. See here for full definition: http://www.un.org/documents/ga/res/48/a48r104.htm  Intimate partner violence includes any abuse perpetrated by a current or former partner within the context of marriage, cohabitation or any other formal or informal union.  The different forms of violence included in the indicator are defined as follows:  1. Physical violence consists of acts aimed at physically hurting the victim and include, but are not limited to, pushing, grabbing, twisting the arm, pulling the hair, slapping, kicking, biting or hitting with the fist or object, trying to strangle or suffocate, burning or scalding on purpose, or threatening or attacking with some sort of weapon, gun or knife.  2. Sexual violence is defined as any sort of harmful or unwanted sexual behaviour that is imposed on someone. It includes acts of abusive sexual contact, forced engagement in sexual acts, attempted or completed sexual acts without consent, incest, sexual harassment, etc. In intimate partner relationships, experiencing sexual violence is commonly defined as being forced to have sexual intercourse, having sexual intercourse out of fear for what the partner might do, and/or being forced to so something sexual that the woman considers humiliating or degrading.  3. Psychological violence includes a range of behaviours that encompass acts of emotional abuse and controlling behaviour. These often coexist with acts of physical and sexual violence by intimate partners and are acts of violence in themselves.  For a more detailed definition of physical, sexual and psychological violence against women see Guidelines for Producing Statistics on Violence against Women- Statistical Surveys (UN, 2014).  **Computation Method:**  This indicator calls for breakdown by form of violence and by age group and yields the following for each form of violence or forms of violence:  *1. Physical violence:* Number of ever-partnered women and girls (aged 15 years and above) who experience physical violence by a current or former intimate partner in the previous 12 months divided by the number of ever-partnered women and girls (aged 15 years and above) in the population multiplied by 100.  *2. Sexual violence:* Number of ever-partnered women and girls (aged 15 years and above) who experience sexual violence by a current or former intimate partner in the previous 12 months divided by the number of ever-partnered women and girls (aged 15 years and above) in the population multiplied by 100.  *3. Psychological violence:*Number of ever-partnered women and girls (aged 15 years and above) who experience psychological violence by a current or former intimate partner in the previous 12 months divided by the number of ever partnered women and girls (aged 15 years and above) multiplied by 100.  *4. Any form of physical and/or sexual violence:* Number of ever-partnered women and girls (aged 15 years and above) who experience physical and/or  sexual violence by a current or former intimate partner in the previous 12 months divided by the number of ever-partnered women and girls (aged 15 years and above) multiplied by 100.  *5. Any form of physical, sexual and/or psychological violence:* Number of ever-partnered women and girls (aged 15 years and above) who experience physical, sexual and/or psychological violence by a current or former intimate partner in the previous 12 months divided by the number of ever-partnered women and girls (aged 15 years and above) multiplied by 100. | Household Survey | National Statistics Office | VAW, BBS | VAW Survey/GBVS, BBS | * Form of violence * Age: 15-49;15-19, 20-24, 25-29, 30-…4-year-steps -49 * Income: High/ Medium/ Low * Wealth Quantile * Education: Primary/Secondary/ Higher * Ethnicity (including indigenous status): Ethnic/ Non Ethnic * Disability status: Disable/Non Disable * Geographic location Urban, Rural * Frequency of violence | Triennial | Group 1 | 1st Round:  2015  2nd Round:  December 2020  3rd Round:  December 2023  4th Round:  December 2026  5th Round:  December 2029 |  |
| 5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence | UNICEF,  UN Women, UNFPA,  WHO,  UNODC  **Partner Agencies:**  UNSD,  UNDP | | Tier II | **Definition:**  This indicator measures the percentage of women and girls aged 15 years and older who have experienced sexual violence by persons other than an intimate partner, in the previous 12 months. Definition of sexual violence against women and girls is presented in the next section (Concepts).  **Concepts:**  According to the UN Declaration on the Elimination of Violence against Women (1993), Violence against Women is “Any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life. Violence against women shall be understood to encompass, but not be limited to, the following: […], Physical, sexual and psychological violence occurring within the general community, including rape, sexual abuse, sexual harassment and intimidation at work, in educational institutions and elsewhere, trafficking in women and forced prostitution […]”. See here for full definition: http://www.un.org/documents/ga/res/48/a48r104.htm Sexual violence is defined as any sort of harmful or unwanted sexual behaviour that is imposed on someone. It includes acts of abusive sexual contact, forced engagement in sexual acts, attempted or completed sexual acts without consent, incest, sexual harassment, etc. However, in most surveys that collect data on sexual violence against women and girls by non-partners the information collected is limited to forcing someone into sexual intercourse when she does not want to, as well as attempting to force someone to perform a sexual act against her will or attempting to force her into sexual intercourse.  For a more detailed definition of sexual violence against women see Guidelines for Producing Statistics on Violence against Women- Statistical Surveys (UN, 2014).  **Computation Method:**  This indicator calls for disaggregation by age group and place of occurrence. No standard definitions and methods have been globally agreed yet to collect data on the place where the violence occurs, therefore this is not presented at this point in the computation method below.  Number of women and girls aged 15 years and above who experience sexual violence by persons other than an intimate partner in the previous 12 months divided by the number of women and girls aged 15 years and above in the population multiplied by 100. | Household Survey | National Statistics Office | VAW, BBS | VAW Survey/GBVS BBS | * Age: 15-24 yrs, 25-34 yrs, 35-44 yrs, 45+ yrs * place of occurrence * income/wealth quantile * education, ethnicity (including indigenous status) * disability status: Disable/Non Disable * geographic location: Urban/Rural * relationship with the perpetrator (including sex of perpetrator) * frequency and type of sexual violence | Triennial | Group 1 | 1st Round:  2015  2nd Round:  July, 2019  3rd Round:  July, 2022  4th Round:  July, 2025  5th Round:  July, 2028 |  |
| Target 5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation | | | | | | | | | | | | | |
| 5.3.1 Proportion of women aged 20–24 years who were married or in a union before age 15 and before age 18 | UNICEF  **Partner Agencies:**  WHO,  UNFPA,  UN Women,  DESA Population Division | | Tier I | **Definition:**  Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18.  **Concepts:**  Both formal (i.e., marriages) and informal unions are covered under this indicator. Informal unions are generally defined as those in which a couple lives together for some time, intends to have a lasting relationship, but for which there has been no formal civil or religious ceremony (i.e., cohabitation).  **Computation Method:**  Number of women aged 20-24 who were first married or in union before age 15 (or before age 18) divided by the total number of women aged 20-24 in the population multiplied by 100. | Household Survey | National Statistical Office | a) MICS, BBS  b) BDHS, NIPORT | a) (GBVS/MICS/SVRS/  PHC), SID, BBS  b) (BDHS), MEFWD, NIPORT | * Age: 20-24 * Income: High/Medium/Low * Place of residence: Urban/Rural * Geographic location: Division * Education * Ethnicity: Ehtnic/ Non Ethnic | Triennial | Group 1 | 1st Round:  2014  2nd Round:  July, 2019  3rd Round:  July, 2022  4th Round:  July, 2025  5th Round:  July, 2028 | Data availability reviewed in May 2019 (classified as Tier I)  IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II) |
| 5.3.2 Proportion of girls and women aged 15–49 years who have undergone female genital mutilation/cutting, by age | UNICEF  **Partner Agencies:**  UNFPA, WHO | | Tier I | **Definition:**  Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting is currently being measured by the proportion of girls aged 15-19 years who have undergone female genital mutilation/cutting.  **Concepts:**  Female genital mutilation/cutting (FGM/C) refers to “all procedures involving partial or total removal of the female external genitalia or other injury to the female genital organs for non-medical reasons" (World Health Organization, Eliminating Female Genital Mutilation: An interagency statement, WHO, UNFPA, UNICEF, UNIFEM, OHCHR, UNHCR, UNECA, UNESCO, UNDP, UNAIDS, WHO, Geneva, 2008, p.4).  **Computation Method:**  Number of girls and women aged 15-49 who have undergone FGM/C divided by the total number of girls and women aged 15-49 in the population multiplied by 100. | Household Survey | National Statistical Office | Not Available | Not required | * Age: 15-49 * Income: High/Medium/Low * Place of residence: Urban/Rural * Geographic location: Division * Ethnicity * Education | Not Applicable | Group 3 | 1st Round:  June 2020  2nd Round:  July, 2021  3rd Round:  July, 2022  4th Round:  July, 2023  5th Round:  July, 2024 | Not Applicable in Bangladesh Context. |
| Target 5.4: Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate | | | | | | | | | | | | | |
| 5.4.1: Proportion of time spent on unpaid domestic and care work, by sex, age and location | UNSD,  UN Women | | Tier II | **Definition:**  This indicator is defined as the proportion of time spent in a day on unpaid domestic and care work by men and women. Unpaid domestic and care work refers to activities related to the provision of services for own final use by household members, or by family members living in other households. These activities are listed in ICATUS 2016 under the major divisions “3. Unpaid domestic services for household and family members” and “4. Unpaid caregiving services for household and family members”.  **Concepts:**  Unpaid domestic and care work refers to activities including food preparation, dishwashing, cleaning and upkeep of the dwelling, laundry, ironing, gardening, caring for pets, shopping, installation, servicing and repair of personal and household goods, childcare, and care of the sick, elderly or disabled household and family members, among others. These activities are listed in ICATUS 2016 under the major divisions “3. Unpaid domestic services for household and family members” and “4. Unpaid caregiving services for household and family members”.  Concepts and definitions for this indicator are based on the following international standards:   * System of National Accounts 2008 (SNA 2008) * The Resolution concerning statistics of work, employment and labour underutilization, adopted by the International Conference of Labour Statisticians (ICLS) at its 19th Session in 2013 * International Classification of Activities for Time Use Statistics 2016 (ICATUS 2016)   Relevant specific concepts are presented below:   * An activity is said to be productive or to fall within the “general production boundary” if it satisfies the third-person criterion (the activity can be delegated to another person and yield the same desired results). * Productive activities can be further classified based on the ILO framework for work statistics (included in the 19th ICLS resolution) into:   a) Own-use production work (activities to produce goods and services for own final use; the intended destination of the output is mainly for final use of the producer in the form of capital formation, or final consumption by household members or by family members living in other households; in the case of agricultural, fishing, hunting or gathering goods intended mainly for own consumption, a part or surplus may nevertheless be sold or bartered)  b) Employment (activities to produce goods or provide services for pay or profit)  c) Unpaid trainee work (any unpaid activity to produce goods or provide services for others, in order to acquire workplace experience or skills in a trade or profession)  d) Volunteer work (any unpaid, non-compulsory activity to produce goods or provide services for others)  e) Other forms of work  The own-use production work can be differentiated based on whether goods or services are produced.  Indicator 5.4.1 only considers the own-use production work of services, or in other words, the activities related to unpaid domestic services and unpaid caregiving services undertaken by households for their own use. These activities are listed in ICATUS 2016 under the major divisions “3. Unpaid domestic services for household and family members” and “4. Unpaid caregiving services for household and family members”.  As much as possible, statistics compiled by UNSD are based on the International Classification of Activities for Time Use Statistics 2016 (ICATUS 2016), which classifies activities undertaken by persons during the survey period. ICATUS 2016 was adopted by the United Nations Statistical Commission for use as an international statistical classification at its 48th session, 7-10 March 2017.  **Computation Method:**  Data presented for this indicator are expressed as a proportion of time in a day. Weekly data is averaged over seven days of the week to obtain the daily average time.  Proportion of time spent on unpaid domestic and care work is calculated by dividing the daily average number of hours spent on unpaid domestic and care work by 24 hours.  Proportion of time spent on unpaid domestic and care work (Indicator 5.4.1) is calculated as:  Indicator 5.4.1=  ×100  Where,  𝐷𝑎𝑖𝑙𝑦 𝑛𝑢𝑚𝑏𝑒𝑟 𝑜𝑓 ℎ𝑜𝑢𝑟𝑠 𝑠𝑝𝑒𝑛𝑡 𝑜𝑛 𝑟𝑒𝑙𝑒𝑣𝑎𝑛𝑡 𝑎𝑐𝑡𝑖𝑣𝑖𝑡𝑖𝑒𝑠=  If data on time spent are weekly, data are averaged over seven days of the week to obtain daily time spent.  Average number of hours spent on unpaid domestic and care work derives from time use statistics that is collected through stand-alone time-use surveys or a time-use module in multi-purpose household surveys. Data on time-use may be summarized and presented as either (1) average time spent for participants (in a given activity) only or (2) average time spent for all population of a certain age (total relevant population). In the former type of averages, the total time spent by the individuals who performed an activity is divided by the number of persons who performed it (participants). In the latter type of averages, the total time is divided by the total relevant population (or a sub-group thereof), regardless of whether people performed the activity or not.  SDG indicator 5.4.1 is calculated based on the average number of hours spent on unpaid domestic and unpaid care work for the total relevant population. This type of measures can be used to compare groups and assess changes over time. Differences among groups or over time may be due to a difference (or change) in the proportion of those participating in the specific activity or a difference (or change) in the amount of time spent by participants, or both. | Dedicated time use surveys or from time-use modules integrated in multi-purpose household surveys | National Statistical Office | * Time Use Survey, BBS | * Time Use Survey, BBS * QLFS, BBS | * *Sex:* female/male, both; * *Age:* the recommended age groups are: 15+, 15-24, 25-44, 45-54, 55-64 and 65+ * *Location:* urban/rural (following national definitions given the lack of international definition) * type of household work: domestic/care | Triennial | Group 1 | 1st Round:  2012  2nd Round:  December 2019  3rd Round:  December 2022  4th Round:  December 2025  5th Round:  December 2028 | 2nd round Time Use Survey should be conducted |
|  | | Target 5.5: Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life | | | | | | | | | | | |
| 5.5.1: Proportion of seats held by women in (a) national parliaments and (b) local governments | IPU,  UN Women  Partner Agency:  World Bank | | Tier I | **5.5.1(a): Proportion of seats held by women in national parliaments:**  **Definition:**  The proportion of seats held by women in (a) national parliaments, currently as at 1 February of reporting year, is currently measured as the number of seats held by women members in single or lower chambers of national parliaments, expressed as a percentage of all occupied seats.  National parliaments can be bicameral or unicameral. This indicator covers the single chamber in unicameral parliaments and the lower chamber in bicameral parliaments. It does not cover the upper chamber of bicameral parliaments. Seats are usually won by members in general parliamentary elections. Seats may also be filled by nomination, appointment, indirect election, rotation of members and byelection.  Seats refer to the number of parliamentary mandates, or the number of members of parliament.  **Concepts:**  Seats refer to the number of parliamentary mandates, also known as the number of members of parliament. Seats are usually won by members in general parliamentary elections. Seats may also be filled by nomination, appointment, indirect election, rotation of members and by-election.  **Computation Method:**  The proportion of seats held by women in national parliament is derived by dividing the total number of seats occupied by women by the total number of seats in parliament.  There is no weighting or normalising of statistics.  **5.5.1(b): Proportion of seats held by women in local governments:**  **Definition:**  Indicator 5.5.1 (b) measures the proportion of positions held by women in local government.  It is expressed as a percentage of elected positions held by women in legislative/ deliberative bodies of local government.  **Concepts:**  Local government is one of the sub-national spheres of government and a result of decentralization, a process of transferring political, fiscal, and administrative powers from the central government to subnational units of government distributed across the territory of a country to regulate and/or run certain government functions or public services on their own.  The definition of local government follows the 2008 System of National Accounts (SNA) distinction between central, state, and local government (para 4.129). Local government consists of local government units, defined in the SNA as “institutional units whose fiscal, legislative and executive authority extends over the smallest geographical areas distinguished for administrative and political purposes” (para 4.145). What constitutes local government of a given country is defined by that country’s national legal framework, including national constitutions and local government acts or equivalent legislation.  Each local government unit typically includes a legislative/ deliberative body and an executive body. Legislative/ deliberative bodies, such as councils or assemblies, are formal entities with a prescribed number of members as per national or state legislation. They are usually elected by universal suffrage and have decision-making power, including the ability to issue by-laws, on a range of local aspects of public affairs.  Executive bodies, consisting of an executive committee or a mayor, may be elected, appointed or nominated and they prepare and execute decisions made by the legislative/ deliberative body.  Elected positions are the most common manner of selection of local government members. They are selected in local elections, based on a system of choosing political office holders in which the voters cast ballots for the person, persons or political party that they desire to see elected. The category of elected positions includes both elected persons who competed on openly contested seats and persons selected during the electoral processes on reserved seats or through a candidate quota.  By comparison, members selected on appointed positions (the least common manner of selection of local government members) are nominated, typically by government officials from higher-ranking tiers of government. Appointed members of local government are more frequent among the leadership positions, such as the heads of the executive body, representatives of specific groups (e.g., women, disadvantaged groups, youth); and, temporary committees/delegations/caretakers appointed by government officials when a council has been dissolved.  **Computation Method:**  The method of computation is as follows:  Indicator 5.5.1 (b)= | Administrative Record | 1. *Parliament:*  * Official statistics received from parliaments. * Electoral management body * Parliamentary web sites * Internet searches   *(b) Local Government:*   * Electoral Management Bodies * National Statistical Offices | a) LPAD  b) LGD | a) LGD  b. BPS  Administrative Data | *(a) Parliament:*   * Geographical region and sub-region, legislature type * (single or lower, parliamentary or presidential), the method of filling seats (directly elected, indirectly * Elected, appointed) and the use of special measures.   (b) Local Government: | Annual | Group 1 | 1st Round:  2016  2nd Round:  December, 2020  3rd Round:  December, 2021  4th Round:  December, 2022  5th Round:  December, 2023 | According to Rules of Business and Allocation of Business, LPAD is not responsible to provide such data. Relevant Ministries / Divisions (Election Commission and Parliament Secretariat may provide such data) |
| 5.5.2: Proportion of women in managerial positions | ILO | | Tier I | **Definition:**  This indicator refers to the proportion of females in the total number of persons employed in managerial positions. It is recommended to use two different measures jointly for this indicator: the share of females in (total) management and the share of females in senior and middle management (thus excluding junior management). The joint calculation of these two measures provides information on whether women are more represented in junior management than in senior and middle management, thus pointing to an eventual ceiling for women to access higher-level management positions. In these cases, calculating only the share of women in (total) management would be misleading, in that it would suggest that women hold positions with more decision-making power and responsibilities than they actually do.  **Concepts:**  - Employment comprises all persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit.  - Employment in management is determined according to the categories of the latest version of the International Standard Classification of Occupations (ISCO-08), which organizes jobs into a clearly defined set of groups based on the tasks and duties undertaken in the job. For the purposes of this indicator, it is preferable to refer separately to senior and middle management only on one hand, and to total management (including junior management) on the other. The share of women tends to be higher in junior management than in senior and middle management, so limiting the indicator to a measure including junior management may introduce a bias. Senior and middle management correspond to sub-major groups 11, 12 and 13 in ISCO-08 and sub-major groups 11 and 12 in ISCO-88. If statistics are not available disaggregated at the sub-major group level (two-digit level of ISCO), then major group 1 of ISCO-88 and ISCO-08 can be used as a proxy and the indicator would then refer only to total management (including junior management).  **Computation Method:**  *Using ISCO-08:*  Proportion of women in senior and middle management  =  ×100  And  Proportion of women in management  =×100  *Using ISCO-88:*  Proportion of women in senior and middle management  =  ×100  And  Proportion of women in management  =×100 | Labour force survey  or,  if not available, other similar types of household surveys, including a module on employment | National Statistical Office | LFS, BBS | QLFS, BBS | * Occupation   Economic activity: ISIC | Triennial | Group 1 | 1st Round:  2016  2nd Round:  December 2019  3rd Round:  December 2022  4th Round:  December 2025  5th Round:  December 2028 |  |
| Target 5.6: Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences | | | | | | | | | | | | | |
| 5.6.1: Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care | UNFPA  Partner Agency:  UN Women | | Tier II | **Definition:**  Proportion of women aged 15-49 years (married or in union) who make their own decision on all three selected areas i.e. can say no to sexual intercourse with their husband or partner if they do not want; decide on use of contraception; and decide on their own health care. Only women who provide a “yes” answer to all three components are considered as women who “make her own decisions regarding sexual and reproductive”.  Whilst the aspiration of the indicator is to measure, among the three components, women’s decision– making on reproductive health care, current data provides information on women’s decision- making on health care in general. Expert group consultations recommended a specific, scenario-based question that speaks directly to decision-making about reproductive health care as follows:  *“Who takes the decision on when you can go to seek reproductive health care, for example, if you experience a painful or burning sensation when urinating?”*   * Mainly respondent * Mainly husband/ partner * Joint decision * Other (specify)………………   Efforts are under way to pilot and refine the question for inclusion in future national surveys including in DHS and MICS. Whilst the process to collect data on women’s decision on reproductive health care are under way, data on Indicator 5.6.1 will be based on available information on women’s decision-making on “health care”.  Women’s autonomy in decision-making and exercise of their reproductive rights is assessed from responses to the following three questions:  *1. Can you say no to your (husband/partner) if you do not want to have sexual intercourse?*   * Yes ………………………………. 1 * No . . . . . . . . . . . . . . . . . . . . . . . . . . . ……... 2 * Depends/ not sure . . . . . . . . . . . . . . . . . . . . . . 8   *2. Would you say that using contraception is mainly your decision, mainly your (husband's/ partner's) decision, or did you both decide together?*   * Mainly respondent . . . . . . . . . . . . . …. . . . . 1 * Mainly husband/partner . . . . . . . …... . . . . 2 * Joint decision . . . . . . . . . . . . . . . . . . ... . . . . . 3 * Other (specify…………………...) ...… 4   *3. Who usually makes decisions about health care for yourself?*   * You ………………………………. 1 * Your (husband/partner) ……………….. 2 * You and your (husband/partner) jointly …... 3 * Someone else? ……………………... 4   A woman is considered to have autonomy in reproductive health decision making and to be empowered to exercise their reproductive rights if they (1) can say “NO’ to sex with their husband/partner if they do not want to, (2) decide on use/ non-use of contraception and (3) decide on health care for themselves.  **Concepts:**  A union involves a man and a woman regularly cohabiting in a married like relationship.  **Computation Method:**  Numerator: Number of married or in union women aged 15-49 years old:   * who can say “no” to sex; and * for whom the decision on contraception is not mainly made by the husband/partner; and * for whom decision on health care for themselves is not usually made by the husband/partner or someone else   Only women who satisfy all three empowerment criteria are included in the numerator.  *Denominator:* Total number women aged 15-49 years old), who are married or in union.  *Proportion=* Numerator X 100/Denominator | Household Survey including DHS, MICS, etc. | 1. Agency Responsible for DHS; 2. National Statistics Office | a) BDHS, NIPORT | a) BDHS, MEFWD, NIPORT  b) GBVS (VAW),SID BBS | * Age: 15-49 * Geographic Location:Division * Place of Residence: Urban/Rural * Education * Wealth Quintile. | Triennial | Group 1 | 1st Round:  2014  2nd Round:  September 2019  3rd Round:  September 2022  4th Round:  September 2025  5th Round:  September 2028 | BBS should incorporate the prescribed questions in the MICS/SVRS/ GBVS (VAW), surveys. |
| 5.6.2: Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education  No data for this indicator is currently available and its methodology is still under development, please see | UNFPA  *Partner Agency:*  UN Women,  DESA Population Division,  WHO | | Tier II | **Definition:**  Sustainable Development Goal (SDG) Indicator 5.6.2 seeks to measure the extent to which countries have national laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education.  The indicator is a percentage (%) scale of 0 to 100 (national laws and regulations exist to guarantee full and equal access), indicating a country’s status and progress in the existence of such national laws and regulations. Indicator 5.6.2 measures only the existence of laws and regulations; it does not measure their implementation.  **Concepts:**  Laws: laws and statutes are official rules of conduct or action prescribed, or formally recognized as binding, or enforced by a controlling authority that governs the behavior of actors (including people, corporations, associations, government agencies). They are adopted or ratified by the legislative branch of government and may be formally recognized in the Constitution or interpreted by courts. Laws governing sexual and reproductive health are not necessarily contained in one law.  Regulations: are considered to be executive, ministerial or other administrative orders or decrees. At the municipal level, regulations are sometimes called ordinances. Regulations and ordinances issued by governmental entities have the force of law, although circumscribed by the level of the issuing authority. Under this methodology, only regulations with national-level application are considered.  Restrictions: many laws and regulations contain restrictions in the scope of their applicability. Such restrictions, which include, though are not limited to, those by age, sex, marital status, and requirement for third party authorization, represent barriers to full and equal access to sexual and reproductive health care, information and education.  Plural legal systems: are defined as legal systems in which multiple sources of law co-exist. Such legal systems have typically developed over a period of time as a consequence of colonial inheritance, religion and other socio-cultural factors. Examples of sources of law that might co-exist under a plural legal system include: English common law, French civil or other law, statutory law, and customary and religious law. The co-existence of multiple sources of law can create fundamental contradictions in the legal system, which result in barriers to full and equal access to sexual and reproductive health care, information and education.  “Guarantee” (access): for the purpose of this methodology, “guarantee” is understood in relation to a law or regulation that assures a particular outcome or condition. The methodology recognizes that laws can only guarantee “in principle”; for the outcomes to be fully realized in practice, additional steps, including policy and budgetary measures will need to be in place.  **Computation Method:**  The indicator measures specific legal enablers and barriers for 13 components across four sections. The calculation of the indicator requires data for all 13 components.  The 13 components are placed on the same scale, with 0% being the lowest value and 100% being the most optimal value. Each component is calculated independently and weighted equally. Each component is calculated as:  : Data for component i  : Total number of enablers in component i  : Number of enablers that exist in component i  : Total number of barriers in component i  : Number of barriers that exist in component i  Value for Indicator 5.6.2 is calculated as the arithmetic mean of the 13 component data. Similarly, the value for each section is calculated as the arithmetic mean of its constituent component data. | Administrative Record | Data will be provided by relevant government ministries, departments and agencies |  | a) HDS  b) MEFWD  Literature Review | * sex: male/female * age: 15-24 yrs, 25-64 yrs, 64+ | Triennial | Group 3 | 1st Round:  December, 2020  2nd Round:  December, 2023  3rd Round:  December, 2026  4th Round:  December, 2029  5th Round:  December, 2030 | * Information was provided based on provisional metadata. |
| Target 5.a: Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws | | | | | | | | | | | | | |
| 5.a.1: (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure | FAO  *Partner Agencies:*  UN Women,  UNSD,  UNEP,  World Bank,  UN-Habitat | | Tier II | **Definition:**  The indicator is divided in two sub-indicators.  *Sub-indicator (a)* is a prevalence measure. It measures the prevalence of people in the agricultural population with ownership or tenure rights over agricultural land, disaggregated by sex.  ×100, by sex  *Sub-indicator (b)*focusses on the gender parity, measuring the extent to which women are disadvantaged in ownership / tenure rights over agricultural land.  ×100  **Concepts:**  Definition of all concepts and terms associated with the indicator are reported below:  *Agricultural land:* In compliance with the classification proposed by the World Census of Agriculture 2020 (WCA 2020), land is considered ‘agricultural land’ according to its use. Moreover, a reference period is usually required in order to characterize the use of a specific area of agricultural land and identify subcategories.  As clearly shown in the figure [Classification of land use (WCA 2020)] below, agricultural land is a subset of the total land:    In particular, following the WCA 2020, agricultural land includes:   * *Land under temporary crops:* “all land used for crops with a less than one-year growing cycle” (WCA 2020). Temporary crops comprise all the crops that need to be sown or planted after each harvest for new production (e.g. cereals). The full list of crops classified as ‘temporary’ is provided in the WCA 2020, page 165 (http://www.fao.org/3/a-i4913e.pdf). * *Land under temporary meadows and pastures:* Land that has been cultivated for less than five years with herbaceous or forage crops for mowing or pasture. * *Land temporarily fallow:* When arable land is kept at rest for at least one agricultural year because of crop rotation or other reasons, such as the impossibility to plant new crops, this is defined as temporarily fallow. This category does not include the land that it is not cultivated at the time of the survey but will be sowed and planted before the end of the agricultural year. * *Land under permanent crops:* Area that is cultivated with long term crops that do not need to be replanted every year, such as fruits and nuts, some types of stimulant crops, etc. * *Land under permanent meadows and pastures:* Land cultivated with herbaceous forage crops or is left as wild prairie or grazing land for more than five years.   It excludes:   * Land under farm buildings and farmyards * Forest and other wooded land * Area used for aquaculture (including inland and coastal waters if part of the holding) * Other area not elsewhere classified   Since the indicator 5.a.1 focuses on agricultural land, it excludes all the forms of land that are not considered ‘agricultural’, including land under farm buildings and farmyards.  *Agricultural population:* Indicator 5.a.1 uses ‘agricultural population’ as denominator, instead of the total population, because tenure rights over agricultural land are relevant especially for individuals whose livelihood relies on agriculture. As a consequence, in the context of 5.a.1, the term ‘agricultural population’ has to be interpreted as equivalent of ‘individuals engaged in agriculture’. Although an official definition of ‘agricultural population’ does not exist, an operational definition of this term shall be proposed for the scope of indicator 5.a.1.  Investigating involvement in agriculture is not trivial, because:  I. Agricultural work is highly irregular and strongly affected by seasonality, therefore if the survey questions adopt a short recall period, we risk excluding individuals engaged in agriculture because they did not practice agriculture at the time of the survey or simply because they were interviewed off-season.  II. Agricultural work may take a lot of individual’s time – so be the main activity – but not necessarily be the main source of income  III. Agriculture is sometimes practiced only or mainly for self-consumption, without any market orientation (so, with no or little income) and therefore not necessarily perceived an economic activity.  IV. Finally, the individual’s livelihood cannot be completely detached from the livelihood of the other household members, thus the necessity of a household-level perspective.  In view of this, in the context of the indicator 5.a.1, an individual is part of ‘adult agricultural population’ if the following conditions are met:  I. is adult  II. s/he belongs to a household where at least one member is mainly engaged in an agricultural work over the past 12 months, regardless the final purpose (whether for income-generation or self-consumption) and the status in employment.  The adoption of a household perspective is particularly important from the gender perspective, because in many agricultural households, women often consider themselves as ‘not involved in agriculture’ whereas they provide substantive support to the household’s agricultural activities.  *Ownership and tenure rights over agricultural land:*  It is challenging to define and to operationalize ownership and tenure rights in a way that provides reliable and comparable figures across countries.  Land ownership is a legally recognised right to acquire, to use and to transfer land. In private property systems, this is a right akin to a freehold tenure. However, in systems where land is owned by the State, the term ‘land ownership’ refers to possession of the rights most akin to ownership in a private property system – for instance, long-term leases, occupancy, tenancy or use rights granted by the State, often for several decades, and that are transferrable. In this context, it is more appropriate to speak of tenure rights.  Nonetheless, as emphasized by the EDGE (Evidence and Data for Gender Equality) project, focusing on legally recognized documents is not sufficient to analyse the complexity of rights related to land, especially in developing countries and from the gender perspective. The main factor limiting the universal applicability of legally recognized documents is the diverse penetration of such legally binding documents.  Considering the above, as well as the need to propose an indicator valid at global level, the indicator 5.a.1 relies on the three conditions (proxies): 1) Presence of legally recognised documents in the name of the individual; 2) right to sell; 3) right to bequeath.  *1) Presence of legally recognised documents in the name of the individual:*  It refers to the existence of any document an individual can use to claim property rights before the law over an asset by virtue of the individual’s name being listed as owner or holder on the document. Given the differences between legal systems across countries it is not possible to clearly define an exhaustive list of documents that could be considered a proof of tenure security. However, depending on the national legal framework the following documents may be considered as formal titles:   * Title deed: “a written or printed instrument that effects a legal disposition” * Certificate of occupancy or land certificate “A land certificate is a certified copy of an entry in a land title system and provides proof of the ownership and of encumbrances on the land at that time” * Purchase agreement: a contract between a seller and a buyer to dispose of land Registered certificate of hereditary acquisition Certificate of customary tenure: an official state document indicating the owner or holder of the land because customary law has recognized that particular person as the rightful owner. It can be used as proof of legal right over the land. These certificates include, among others, certificates of customary ownership and customary use. * Registered certificate of perpetual / long term lease: “a contractual agreement between a landlord and a tenant for the tenancy of land. A lease or tenancy agreement is the contractual document used to create a leasehold interest or tenancy” * Registered short term (less than Triennial) rental contract * Certificate issued for adverse possession or prescription: is a certificate indicating that the adverse possessor acquires the land after a prescribed statutory period.   In order to overcome the lack of written documentation and to generate a globally valid indicator it becomes crucial to take into account also the alienation rights over land, which can be present even in contexts where tenure rights are not documented.  Alienation is defined as the ability to transfer a given asset during lifetime or after death. The right to sell and to bequeath are considered as objective facts that carry legal force as opposed to a simple self-reported declaration of tenure rights over land. In particular:  2) Right to sell: It refers to the ability of an individual to permanently transfer the asset in question in return for cash or in-kind benefits.  3) Right to bequeath: It refers to the ability of an individual to pass on the asset in question to another person(s) after his or her death, by written will, oral will (if recognized by the country) or when the deceased left no will, through intestate succession.  The decision to rely on the three proxies above (availability of a legal document, right to sell, right to bequeath) is justified by the results of the seven field tests conducted under the framework on the EDGE project. In particular, the tests demonstrated:  The lack of reliability of reported ownership/possession. In fact reported ownership/possession was often neither supported by any kind of documentation nor by the possession of any alienation right.  The need to consider as ‘owners’ or ‘holders of tenure rights’ only the individuals who are linked to the agricultural land by an objective right over it, including both formal legal possession and alienation rights. The need to combine different proxies, as no single proxy is universally valid.  **Computation Method:**  How the indicator is calculated:  The indicator 5.a.1 considers as owners or holders of tenure rights all the individuals in the reference population (agricultural population) who:   * Are listed as ‘owners’ or ‘holders’ on a certificate that testifies security of tenure over agricultural land   OR   * Have the right to sell agricultural land   OR   * Have the right to bequeath agricultural land   The presence of one of the three proxies is sufficient to define a person as ‘owner’ or ‘holder’ of tenure rights over agricultural land. The advantage of this approach is its applicability to different countries. Indeed, based on the analysis of the seven EDGE pilot countries, these proxies provide the most robust measure of ownership/tenure rights that is comparable across countries with diverse prevalence of documentation. In fact, individuals may still have the right to sell or bequeath an asset in the absence of legally recognized document, therefore the indicator combines documented ownership / tenure rights with the right to sell or bequeath to render it comparable across countries.  Operationalization of indicator 5.a.1 expressed through mathematical formulas are the following:  **Sub-indicator (a)=**  ×100, by sex  **Sub-indicator (b)=**  ×100 | Household Survey | National Statistics Office |  | * Agriculture Sample Census, BBS | *Sub-indicator (a):*   * Sex of the individuals   *For both sub-indicators:*   * Income level * Age group * Ethnic group * Geographic location (urban/rural) * Tenure type * Type of legally recognized document | 5 Years | Group 3 | 1st Round:  June 2019  2nd Round:  December, 2020  3rd Round:  December, 2025  4th Round:  December, 2030 | BBS should incorporate a module in the agriculture sample census questionnaire for the indicator. |
| 5.a.2: Proportion of countries where the legal framework (including customary law) guarantees women’s equal rights to land ownership and/or control | FAO  *Partner Agencies:*  World Bank,  UN Women | | Tier II | **Definition:**  Indicator 5.a.2 looks at the extent to which the legal framework (including customary law) guarantees women’s equal rights to land ownership and/or control.  The indicator “measures” the level to which a country’s legal framework supports women’s land rights, by testing that framework against six proxies drawn from international law and internationally accepted good practices , in particular the Convention on the Elimination of Discrimination Against Women (CEDAW) ratified by 189 countries, and the Voluntary Guidelines for the Responsible Governance of the Tenure of Land Fisheries and Forestry (VGGT) endorsed unanimously by Committee of Food Security (CFS) members in 2012.  The six proxies through which indicator 5.a.2 is monitored are the following:  Proxy A: Joint registration of land compulsory or encouraged through economic incentives  Proxy B: Compulsory spousal consent for land transactions  Proxy C: Women’s and girls’ equal inheritance rights  Proxy D: Allocation of financial resources to increase women’s ownership and control over land  Proxy E: In legal systems that recognise customary land tenure, existence of explicit protection of the land rights of women  Proxy F: Mandatory quotas for women’s participation in land management and administration institutions  **Key definitions are the following:***Land:*Land is defined as all immovable property – for instance the house, the land upon which a house is built and land which is used for other purposes, such as agricultural production. It also encompasses any other structures built on land to meet permanent purposes. Legal frameworks commonly use the terms ‘immovable property’ or ‘real property’ when referring to land.  *Land ownership:* Land ownership is a legally recognised right to acquire, to use and to transfer land. In private property systems, this is a right akin to a freehold tenure. In systems where land is owned by the state, the term land ownership refers to possession of the rights most akin to ownership in a private property system– for instance, long-term leases, occupancy, tenancy or use rights granted by the state that are transferrable and are granted to users for several decades (for instance 99 years).  *Control over land:* Control over land is the ability to make decisions over land. It may include rights to make decisions about how the land should be used, including what crops should be planted, and to benefit financially from the sale of crops.  *Customary land tenure:* Customary land tenure is defined as the bodies of rules and institutions governing the way land and natural resources are held, managed, used and transacted within customary legal systems.  *Customary legal systems:* Customary legal systems are systems that exist at the local or community level, that have not been set up by the state, and that derive their legitimacy from the values and traditions of the indigenous or local group. Customary legal systems may or may not be recognized by national law.  *Legal and policy framework:* The legal and policy framework encompasses the Constitution, policy, primary legislation and secondary legislation. The legal and policy framework includes customary legal systems where they have been recognised by statutory law.  *Personal laws:* Personal law is defined as a set of codified rules and norms applying to a group of people sharing a common religious faith with regard to personal matters. These laws usually cover family relations, marriage, and inheritance. The term can be used interchangeably with ‘religious laws’.  *Primary legislation:* Primary legislation refers to (i) acts or statutes that have been formally adopted at national level following the official parliamentary procedure for the passage of laws (in parliamentary systems); (ii) other acts at the national level with the force of law, such as decree-laws and legislative decrees and otherwise (in parliamentary systems); (iii) other legal instruments that have that have been formally endorsed by a law-making body, for instance presidential and royal orders or presidential and royal decrees (in non-parliamentary systems or systems where law-making power lies in an additional institution to the parliament). In all cases, primary legislation must have the force of law, be binding. For the purposes of this assessment primary legislation also includes the Constitution.  *Secondary legislation:* Secondary legislation includes subsidiary, delegated or subordinate legal instruments that have the force of law, are binding and shall not be in contradiction with primary legislation. They are usually passed by the executive, such as national regulations, rules, by-laws, determinations, directions, circulars, orders, and implementing decrees.  *Joint registration:* Joint registration is where the names of both spouses or both partners in an unmarried couple, are entered into the land registry as the owners or principal users of the land being registered. Joint registration signifies a form of shared tenure over the land– usually either a joint tenancy/occupancy or a tenancy in common). In legal systems which include a framework for land titling, joint registration is commonly referred to as joint titling.  *Unmarried couples:* Unmarried couples are defined as couples who live together (cohabit) in an intimate relationship, but who are not married in accordance with the marriage law of the country. Often this will refer to couples who were married under custom or religious laws, where such marriages are not recognised or do not comply with the requirements of the formal law. It may also refer to relationships that are recognised by the state but that are not considered a marriage – for instance a civil partnership and a de facto relationship that is registered with the state. The term ‘unmarried couples’ is often used interchangeably with ‘de facto unions’, ‘consensual unions’ or ‘irregular unions’. The members of an unmarried couple are referred to as ‘partners’.  *Land transactions:* Land transactions for the purpose of the methodology are major land transactions, specifically the sale and encumbrance (mortgage) of land.  *Inheritance:* Inheritance is defined as property passing at the owner's death to the heir or those entitled to succeed.  *Deceased’s estate:* The deceased’s estate encompasses the legal rights, interests and entitlements, to property of any kind (not only land) which the deceased spouse or partner enjoyed at the time of death, less any liabilities. Depending on the legal system, marital property may be excluded fully from the calculation of deceased’s estate, or, the deceased’s 50% share in the marital property will be included.  *Equal inheritance rights for sons and daughters:* Equal inheritance rights for sons and daughters refer to the situation when the lines of succession in the legal and policy framework governing inheritance states equality of rank and shares between brothers and sisters or between daughters and sons, or are gender neutral.  **Concepts:**  The indicator tracks progress on legal reforms that guarantee women’s land rights (including customary) in terms of ownership and/or control.  The indicator refers to customary law. The inclusion of the customary dimension in the indicator is very important because in many contexts in which these systems prevail, women’s land rights tend to be denied or insecure. However, the enormous diversity of customs and social norms that govern customary land among countries and their unwritten nature, create a significant challenge for assessing whether the proxies are present in these systems. To solve this issue, it is proposed that the customary dimension will be considered only when the formal legal framework recognizes customary land tenure.  Finally, the indicator refers to ownership and/or control of land which are two critical but different dimensions regarding women’s land rights. Land ownership refers to the legally recognised right to acquire, to use and to transfer landed property, while the control over land is associated with the ability to make decisions over land.  **Computation Method:**  The qualitative and legal nature of this indicator required the development of nuanced and articulated methodology that could be feasible, universally relevant and meaningful.  The computation of results under Indicator 5.a.2 involves three different steps: (1) assignments of a “stage of incorporation” for each proxy, (2) classification of country according the number of proxies located in primary or primary and secondary legislation and (3) consolidation of all country results for global reporting.  *Step 1: Assignment of stage of incorporation for each proxy Countries collect the information for each of the six proxies and then is computed by stage of incorporation in the policy and legal framework, using a scale from 0 to 3.*  Each number refers to the stage of incorporation of the proxy into the policy and legal framework, as laid out hereunder.  Stage 0 : Proxy is absent / could not be located in the legal and policy framework.  Stage 1 : A policy is in place, incorporating the proxy.  Stage 2 : Primary legislation includes the proxy  Stage 3 : Secondary legislation contains the proxy  Non-Applicable (NA): The proxy does not apply to the country  *Step 2: Classification categories of country*  The country will then be classified according to the total number of proxies found in primary legislation or primary and secondary legislation. Given that not in all countries customary land tenure rules exist or customary law is recognised (related to proxy E), for the purpose of computation a two-scale (or dual) approach has been developed:  For countries where customary land tenure is NOT recognised in the legal framework (either via statute or the constitution), regardless of whether it exists de facto or not, Proxy E is marked non-applicable and the country will be assessed out of the five remaining proxies. | Official Legal and Policy Documents | Ministry of Land or Ministry of Women Affairs |  | * LPAD | *Not Applicable* | 5 Years | Group 3 | 1st Round:  January 2019  2nd Round:  January 2024  3rd Round:  January 2029  4th Round:  January 2030  5th Round: | * Article 28 (2) of the Constitution of People’s Republic of Bangladesh states “Women shall have equal rights with men in all spheres of the State and of public life”. * With respect to economic empowerment of women, one of the goals of National Women Development Policy 2011 is to provide rights of full control of women in earnings, inheritance, credit, land and resources gained through market management |
|  | | Target 5.b: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women | | | | | | | | | | | |
| 5.b.1: Proportion of individuals who own a mobile telephone, by sex | ITU | | Tier II | **Definition:**  The proportion of individuals who own a mobile telephone, by sex is defined as the ‘proportion of individuals who own a mobile telephone, by sex’.  **Concepts:**  An individual owns a mobile cellular phone if he/she has a mobile cellular phone device with at least one active SIM card for personal use. Mobile cellular phones supplied by employers that can be used for personal reasons (to make personal calls, access the Internet, etc.) are included. Individuals who have only active SIM card(s) and not a mobile phone device are excluded. Individuals who have a mobile phone for personal use that is not registered under his/her name are also included. An active SIM card is a SIM card that has been used in the last three months.  A mobile (cellular) telephone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems and technologies such as IMT-2000 (3G) and IMT-Advanced. Users of both post-paid subscriptions and prepaid accounts are included.  **Computation Method:**  Countries can collect data on this indicator through national household surveys. This indicator is calculated by dividing the total number of in-scope individuals who own a mobile phone by the total number of in-scope individuals. | Household Survey | National Statistics Office | BTRC | LAS/QLFS/ Access and Use of ICT Survey/PHC/ HIES/CPHS, BBS | * Sex : female, male, both * Region (geographic and/or urban/rural) * Age group * Educational level * Labour force status * Occupation | Annual | Group 1 | 1st Round:  2015  2nd Round:  December 2020  3rd Round:  December 2021  4th Round:  December 2022  5th Round:  December 2023 | Administrative Records/Household level ownership should not be reported as per metadata. |
|  | | Target 5.c: Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels | | | | | | | | | | | |
| 5.c.1: Proportion of countries with systems to track and make public allocations for gender equality and women’s empowerment | UN Women,  OECD | | Tier II | **Concepts and definitions:**  Sustainable Development Goal (SDG) Indicator 5.c.1 seeks to measure government efforts to track budget allocations for gender equality throughout the public finance management cycle and to make these publicly available. This is an indicator of characteristics of the fiscal system. It is not an indicator of quantity or quality of finance allocated for gender equality and women’s empowerment (GEWE). The indicator measures three criteria. The first focuses on the intent of a government to address GEWE by identifying if it has programs/policies and resource allocations to foster GEWE. The second assesses if a government has planning and budget tools to track resources for GEWE throughout the public financial management cycle. The third focuses on transparency by identifying if a government has provisions to make allocations for GEWE publicly available.  The indicator aims to encourage national governments to develop appropriate budget tracking and monitoring systems and commit to making information about allocations for gender equality readily available to the public. The system should be led by the Ministry of Finance in collaboration with the sectoral ministries and National Women’s Machineries and overseen by an appropriate body such as Parliament or Public Auditors.  **Concepts:**  To determine if a country has a system to track and make public allocations for gender equality and women’s empowerment, the following questionnaire will be sent to its Ministry of Finance, or agency in charge of the government budget:  *Criterion 1. Which of the following aspects of public expenditure are reflected in your government programs and its resource allocations? (In the last completed fiscal year)*  Question 1.1. Are there policies and/or programs of the government designed to address well identified gender equality goals, including those where gender equality is not the primary objective (such as public services, social protection and infrastructure) but incorporate action to close gender gaps? (Yes=1/No=0)  Question 1.2. Do these policies and/or programs have adequate resources allocated within the budget, sufficient to meet both their general objectives and their gender equality goals?  (Yes=1/No=0)  Question 1.3. Are there procedures in place to ensure that these resources are executed according to the budget? (Yes=1/No=0)  *Criterion 2. To what extent does your Public Financial Management system promote gender-related or gender-responsive goals? (In the last completed fiscal year)*  Question 2.1. Does the Ministry of Finance/budget office issue call circulars, or other such directives, that provide specific guidance on gender-responsive budget allocations? (Yes=1/No=0)  Question 2.2. Are key policies and programs, proposed for inclusion in the budget, subject to an ex ante gender impact assessment? (Yes=1/No=0)  Question 2.3. Are sex-disaggregated statistics and data used across key policies and programs in a way which can inform budget-related policy decisions? (Yes=1/No=0)  Question 2.4. Does the government provide, in the context of the budget, a clear statement of gender-related objectives (i.e. gender budget statement or gender responsive budget legislation)? (Yes=1/No=0)  Question 2.5. Are budgetary allocations subject to “tagging” including by functional classifiers, to identify their linkage to gender-equality objectives? (Yes=1/No=0)  Question 2.6. Are key policies and programs subject to ex post gender impact assessment? (Yes=1/No=0)  Question 2.7. Is the budget as a whole subject to independent audit to assess the extent to which it promotes gender-responsive policies? (Yes=1/No=0)  *Criterion 3. Are allocations for gender equality and women’s empowerment made public? (In the last completed fiscal year)*  Question 3.1. Is the data on gender equality allocations published? (Yes=1/No=0)  Question 3.2. If published, has this data been published in an accessible manner on the Ministry of Finance (or office responsible for budget) website and/or related official bulletins or public notices? (Yes=1/No=0)  Question 3.3. If so, has the data on gender equality allocations been published in a timely manner? (Yes=1/No=0)  **Computation Method:**  **The method of computation is as follows:**  **Scoring:**  A country will be considered to satisfy each criterion as follows:   |  |  | | --- | --- | | Satisfaction Level | Requirements per criterion | | A country will satisfy Criterion 1 | if it answers “Yes” to 2 out of 3 questions in Criterion 1 | | A country will satisfy Criterion 2 | if it answers “Yes” to 4 out of 7 questions in Criterion 2 | | A country will satisfy Criterion 3 | if it answers “Yes” to 2 out of 3 questions in Criterion 3 |   Each question within each criterion has the same weight. A country would need to satisfy the threshold of “yes” responses per criterion to satisfy a criterion. Countries then will be classified as ‘fully meets requirements’, ‘approaches requirements’, and ‘does not meet requirements’ per the following matrices (There are 8 possible combinations of criteria being satisfied, Cases A-G below):   |  |  |  |  | | --- | --- | --- | --- | | Fully meets requirements | | | | |  | Criterion 1 | Criterion 2 | Criterion 3 | | Case A | 🗸 | 🗸 | 🗸 |   *Note: “Checked” boxes represent satisfied criteria; “unchecked” boxes represent unsatisfied criteria.*   |  |  |  |  | | --- | --- | --- | --- | | Approaches requirements | | | | |  | Criterion 1 | Criterion 2 | Criterion 3 | | Case B | 🗸 |  |  | | Case C |  | 🗸 |  | | Case D |  |  | 🗸 | | Case E | 🗸 | 🗸 |  | | Case F | 🗸 |  | 🗸 | | Case G |  | 🗸 | 🗸 |   *Note: “Checked” boxes represent satisfied criteria; “unchecked” boxes represent unsatisfied criteria.*   |  |  |  |  | | --- | --- | --- | --- | | Does not meet requirements | | | | |  | Criterion 1 | Criterion 2 | Criterion 3 | | Case H |  |  |  |   *Note: “Checked” boxes represent satisfied criteria; “unchecked” boxes represent unsatisfied criteria.*  Because the three criteria are equally important, a country would need to satisfy the three to fully meet requirements.  **Concept Definitions:**  *For Criterion 1:*   * **“Programs or policies of the government, that are designed to address well-identified gender equality goals”** can be defined as:   + Programs or policies that specifically target only women and/or girls. For example, a government program that provides scholarships for girls only, or a prenatal care program, or a National Action Plan on Gender Equality; or   + Programs or policies that target both women or girls and men or boys and have gender equality as the primary objective. For example, a national public information campaign against gender violence, or on-the-job training programs on gender equality; or   + Programs or policies where gender equality is not the primary objective but the program includes action to close gender gaps. These programs could include provision of infrastructure, public services and social protection. For example, an infrastructure program that has a provision for using women labour, or a public transportation program that takes into consideration the mobility needs of women in its design. * **“Programs or policies have adequate resources allocated within the budget, sufficient to meet both their general objectives and their gender equality goals”** can be defined as:   + The programs or policies that are designed to address well-identified gender equality goals are allocated sufficient resources to cover the costs of meeting those goals from funding that is included in the budget rather than from off-budget sources. * **“Procedures in place to ensure that these resources are executed according to the budget”** can be defined as:   + There are procedures established in laws or regulations so that resources for programs or policies that are designed to address well-identified gender equality goals are executed as specified in the budget or if there are deviations in the exercise from the budgeted allocations, government agencies must justify to a supervising entity (e.g. ministries of finance, parliaments, audit bodies, or other relevant authorities) the reason for not executing resources according to budget.   *For Criterion 2:*   * **“Call circulars”** can be defined as: * Call circulars are the official notices that are issued by the Ministry of Finance or Budget Office in a country towards the beginning of each annual budget cycle. The circular instructs government agencies how they must submit their bids or demands for budget allocations for the coming year (in some countries the notice may have another name, such as budget guidelines or Treasury guidelines). It may inform each agency what its budget “ceiling” for the next fiscal year. * **“Key programs and policies”** can be defined as:   + Programs or policies of the government, that are designed to address well-identified gender   + equality goals (as identified in Criterion 1). * **“Ex-ante gender impact assessment”** can be defined as:   + Assessing individual resource allocations, in advance of their inclusion in the budget, specifically for their impact on gender equality. For example, before its inclusion in the budget, there is an estimate of how a conditional cash transfer program will impact school attendance of girls. * **“Sex-disaggregated statistics and data are available in a systematic manner across all key programs and policies”** can be defined as:   + There is routine availability of gender-specific data sets and statistics that would greatly facilitate the evidential basis for the identification of gender equality gaps, design of policy interventions, and the evaluation of impacts. * **“Gender budget statements”** can be defined as:   + A document that, either as part of the budget documentation or separately, provides a clear statement of gender-related goals. It is a document produced by a government agency, usually the Ministry of Finance or Budget Office, to show what its programs and budgets are doing in respect of gender. It is generally prepared after government agencies have completed the process of drawing up the budget and allocating resources to different programs in response to the annual call circular. * **“Functional classifiers”** can be defined as:   + Categorization of expenditure according to the purposes and objectives for which they are intended. A functional classifier on gender would identify expenditure that goes to programs or activities that address gender issues. * **“Ex-post gender impact assessment”** can be defined as:   + Assessing individual resource allocations, after their implementation, specifically for their impact on gender equality. For example, once the resources are spent and the program executed, how did a conditional cash transfer program affected the school attendance rate of girls as when compared to boys’ attendance rate? * **“The budget as a whole is subject to independent audit, to assess the extent to which it promotes gender-responsive policies”** can be defined as:   + Independent, objective analysis, conducted by a competent authority different from the central budget authority, of the extent to which gender equality is effectively promoted and/or attained through the policies set out in the annual budget.   *For Criterion 3:*   * **“Published in an accessible manner”** can be defined as:   + Allocations for gender equality and women’s empowerment are published on the Ministry of Finance (or office responsible for budget) website and/or related official bulletins or public notices in a way that is clearly signalled and/or made available in hard copies that are distributed to parliamentarians and NGOs. * **“Published in a timely manner”** can be defined as:   + Allocations for gender equality and women’s empowerment and/or its exercise are published in the same quarter as when approved/exercised. | Electronic questionnaire with accompanying monitoring guidance | National Data Coordination Agency |  | a) FD  b) MoWCA  Administrative Data | * achievement of meeting the requirements: yes, no * region: Division | Annual | Group 3 | 1st Round:  January 2019  2nd Round:  December, 2020  3rd Round:  December, 2021  4th Round:  December, 2022  5th Round:  December, 2023 | Though Bangladesh has system to track and make public allocations for gender equality and women’s empowerment, the reporting should follow the guideline checklist and questionnaire coordinated by NDCC. |

Ensure availability and sustainable management of water and sanitation for all

Total Target 8, Total Indicators: 11

*\* 1 Indicator classified both as Tier I and Tier II*

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

|  |  |
| --- | --- |
|  | Ensure availability and sustainable management of water and sanitation for all |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier Classifi-cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***1*** | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** | ***8*** | ***9*** | ***10*** | ***11*** | ***12*** | ***13*** |
| Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all | | | | | | | | | | | | |
| 6.1.1 Proportion of population using safely managed drinking water services | WHO,  UNICEF  **Partner Agencies:**  UNEP,  UN-Habitat | Tier II | Definition:  Proportion of population using safely managed drinking water services is currently being measured by the proportion of population using an improved basic drinking water source which is located on premises, available when needed and free of faecal (and priority chemical) contamination. ‘Improved’ drinking water sources include: piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tube-wells; protected dug wells; protected springs; packaged water; delivered water and rainwater.  **Concepts:**  Improved drinking water sources include the following: piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tubewells; protected dug wells; protected springs; packaged water; delivered water and rainwater.  A water source is considered to be ‘located on premises’ if the point of collection is within the dwelling, yard, or plot.  ‘Available when needed’: households are able to access sufficient quantities of water when needed.  ‘Free from faecal and priority chemical contamination’: water complies with relevant national or local standards. In the absence of such standards, reference is made to the WHO Guidelines for Drinking Water Quality (http://www.who.int/water\_sanitation\_health/dwq/guidelines/en/).  E. coli or thermotolerant coliforms are the preferred indicator for microbiological quality, and arsenic and fluoride are the priority chemicals for global reporting.  **Comments and limitations:**  Data on availability and safety of drinking water is increasingly available through a combination of household surveys and administrative sources including regulators, but definitions have yet to be standardized. Data on faecal and chemical contamination, drawn from household surveys and regulatory databases, will not cover all countries immediately. However, sufficient data were available to make global and regional estimates of safely managed drinking water services for four out of eight SDG regions  **Computation Method:**  Household surveys and censuses currently provide information on types of basic drinking water sources listed above, and also indicate if sources are on premises. These data sources often have information on the availability of water and increasingly on the quality of water at the household level, through direct testing of drinking water for faecal or chemical contamination. These data will be combined with data on availability and compliance with drinking water quality standards (faecal and chemical) from administrative reporting or regulatory bodies.  The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) estimates access to basic services for each country, separately in urban and rural areas, by fitting a regression line to a series of data points from household surveys and censuses. This approach was used to report on use of ‘improved water’ sources for MDG monitoring. The JMP is evaluating the use of alternative statistical estimation methods as more data become available.  The JMP 2017 update and SDG baselines report describes in more detail how data on availability and quality from different sources, can be combined with data on use of different types of supplies, as recorded in the current JMP database to compute the safely managed drinking water services indicator.  https://washdata.org/report/jmp-2017-report-final. | Household survey or census administrative survey | * National statistics offices * Ministries of water, sanitation, health, environment. * Regulators of water and sanitation services. | MICS, BBS | MICS, BBS | * Place of Residence: Urban, Rural * Socioeconomic Status: Wealth, Affordability * Drinking Water Services: JMP Drinking Water Ladder (No Services, Basic, Safely Managed Services)   Inequality: Sub-National, Gender, Disadvantaged Groups | Triennial | Group 1 | 1st Round:  July, 2019  2nd Round:  July, 2022  3rd Round:  July, 2025  4th Round:  July, 2028  5th Round:  July, 2030 | Data availability reviewed in Nov. 2017 (classified as Tier II) |
| Target 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations | | | | | | | | | | | | |
| 6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water | WHO,  UNICEF  **Partner Agencies:**  UNEP | Tier II | **Definition:**  The Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water is currently being measured by the proportion of the population using a basic sanitation facility which is not shared with other households and where excreta is safely disposed in situ or treated off-site. ‘Improved’ sanitation facilities include: flush or pour flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets.  Population with a basic handwashing facility: a device to contain, transport or regulate the flow of water to facilitate handwashing with soap and water in the household.  **Concepts:**  Improved sanitation facilities include the following: flush or pour flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets.  Safely disposed in situ; when pit latrines and septic tanks are not emptied, the excreta may still remain isolated from human contact and can be considered safely managed. For example, with the new SDG indicator, households that use twin pit latrines or safely abandon full pit latrines and dig new facilities, a common practice in rural areas, would be counted as using safely managed sanitation services.  Treated offsite; not all excreta from toilet facilities conveyed in sewers (as wastewater) or emptied from pit latrines and septic tanks (as faecal sludge) reaches a treatment site. For instance, a portion may leak from the sewer itself or, due to broken pumping installations, be discharged directly to the environment. Similarly, a portion of the faecal sludge emptied from containers may be discharged into open drains, to open ground or water bodies, rather than being transported to a treatment plant. And finally, even once the excreta reaches a treatment plant a portion may remain untreated, due to dysfunctional treatment equipment or inadequate treatment capacity, and be discharged to the environment. For the purposes of SDG monitoring, adequacy of treatment will initially be assessed based on the reported level of treatment.  A handwashing facility with soap and water: a handwashing facility is a device to contain, transport or regulate the flow of water to facilitate handwashing. This indicator is a proxy of actual handwashing practice, which has been found to be more accurate than other proxies such as self-reports of handwashing practices.  **Comments and limitations:**  A framework for measuring faecal waste flows and safety factors has been developed and piloted in 12 countries (World Bank Water and Sanitation Program, 2014), and is being adopted and scaled up within the sanitation sector. This framework has served as the basis for indicators 6.2.1 and 6.3.1. Data on safe disposal and treatment are not available for all countries. However, sufficient data were available to make global and regional estimates of safely managed sanitation services in 2017.  Presence of a handwashing station with soap and water does not guarantee that household members consistently wash hands at key times, but has been accepted as the most suitable proxy. Data were available for 70 countries in 2017.  **Computation Method:**  Method of computation: Household surveys and censuses provide data on use of types of basic sanitation facilities listed above, as well as the presence of handwashing materials in the home.  The percentage of the population using safely managed sanitation services is calculated by combining data on the proportion of the population using different types of basic sanitation facilities with estimates of the proportion of faecal waste which is safely disposed in situ or treated off-site.  The JMP estimates use of basic sanitation facilities for each country, separately in urban and rural areas, by fitting a regression model to a series of data points from household surveys and censuses. This approach was used to report on use of ‘improved sanitation’ facilities for MDG monitoring. The JMP is evaluating the use of alternative statistical estimation methods as more data become available.  The JMP 2017 update and SDG baselines report describes in more detail how estimates of the proportion of household wastewater that is safely disposed of in situ or treated off-site have been combined with data on use of different types of sanitation facilities, as recorded in the JMP global database. | Household survey or census administrative survey | * National statistics offices, * Ministries of water, sanitation, health, environment. * Regulators of water and sanitation services. | MICS  BBS | MICS/PHC/SVRS  BBS | * Socioeconomic status: wealth, affordability * Drinking water services: JMP drinking water ladder (no services, basic, safely managed services) * Inequality: sub-national, gender, disadvantaged groups * Place of residence: urban, rural | Triennial | Group 1 | 1st Round:  December 2020  2nd Round:  December 2023  3rd Round:  December 2026  4th Round:  December 2029  5th Round:  December 2030 | Data availability reviewed in Nov. 2017 (classified as Tier II) |
| Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally | | | | | | | | | | | | |
| 6.3.1 Proportion of domestic and industrial wastewater flows safely treated | WHO,  UN-Habitat,  UNSD  **Partner Agencies:** UNEP,  OECD,  Eurostat | Tier II | **Definition:**  Proportion of wastewater generated by households and by economic activities which is safely treated based on treatment ladders as defined by the SEEA: (http://unstats.un.org/unsd/envaccounting/water.asp, and International Recommendations for Water Statistics and IRWS: http://unstats.un.org/unsd/envaccounting/irws/irwswebversion.pdf) compared to total wastewater generated by households and economic activities.  This indicator covers households and the entire economy, and builds on the monitoring framework of JMP, UNSD/UNEP Water Questionnaire for non OECD/Eurostat countries, OECD/Eurostat Questionnaire for OECD countries, AQUASAT, IBNET. Statistical methods for measurement of wastewater treatment is aligned with the SEEA21 statistical standard and associated definitions, classifications and treatment categories (Encompasses all wastewater generated and treated by the economy. Treatment Categories will be consistent, as much as possible within the context of global monitoring purposes, with those defined in the SEEA (http://unstats.un.org/unsd/envaccounting/water.asp), and International Recommendations for Water Statistics (IRWS: http://unstats.un.org/unsd/envaccounting/irws/irwswebversion.pdf)  In addition, combining UNIDO industries database (http://stat.unido.org/) ISIC standard Classification system ( http://unstats.un.org/unsd/publication/seriesM/seriesm\_4rev4e.pdf ), will allow for data to be disaggregated for industrial/commercial wastewater into various economic activities, as well as differentiate hazardous industries from the rest. USEPA has harmonized hazardous waste classification with EU regulations compliment ISIC codes for all waste classes. (www.epa.ie/pubs/reports/waste/stats/wasteclassification/EPA\_Waste\_Classification\_2015\_Web.pdf)  The household portion of wastewater is the same indicator as 6.2.1, and the monitoring of that will be interlinked to JMP monitoring for 6.2.1. Over the last 25 years the JMP has established global norms and standards for monitoring drinking water, sanitation and hygiene. The proposed 6.2.1. indicator builds on these and was developed following extensive consultations with sector experts. Major international consultations took place in 2011 and 2012, as well as many regional and country consultations in various parts of the world.  Existing global norms and standards and technical recommendations for SDG monitoring are documented here: http://www.wssinfo.org/fileadmin/user\_upload/resources/Methodological-note-on-monitoring-SDG-targets-for-WASH-and-wastewater\_WHO-UNICEF\_8October2015\_Final.pdf.  Rationale:  Purpose and rationale for this indicator can also be found in the methods document: http://www.wssinfo.org/post-2015-monitoring/ and summarised in the following methodological note (p12): http://www.wssinfo.org/fileadmin/user\_upload/resources/Methodological-note-on-monitoring-SDG-targets-for-WASH-and-wastewater\_WHO-UNICEF\_8October2015\_Final.pdf  **Concepts:**  See above. Global norms and standards and technical recommendations for SDG monitoring are documented here: http://www.wssinfo.org/fileadmin/user\_upload/resources/Methodological-note-on-monitoring-SDG-targets-for-WASH-and-wastewater\_WHO-UNICEF\_8October2015\_Final.pdf.  System of Environmental and Economic Accounting for Water, adopted by Statistical Commission in 2014. This accounting structure means that these activities cover the whole economy and are considered for each industry, which are defined according to the International Standard Industrial Classification of all Economic Activities (ISIC), and covering 1) abstraction and distribution of water, 2) discharge, reuse and treatment of wastewater, and 3) consumption and returns of water back to the environment, in this accounting structure, disaggregated by industry in a standardised way. Economic activities by ISIC broadly covers agriculture, hazardous industries and other economic activities  **Comments and limitations:**  The main issue regarding safely managed drinking water services will be comparability of data on the definition of what is considered safe treatment. Although there are international guidelines and standards, their compliance by countries is not internationally binding. Countries can set their own standards which can vary from international norms and standards. For this reason, country data may not follow the international standard that JMP likes to follow for its global monitoring purposes.  Having said the above, using MDG experiences of data reconciliation, and working collaboratively with JMP on this will help reconciling definitional discrepancies and hence variations in estimates. This vast experience in dealing with such issues will be very useful in dealing with the above issues for the SDG period.  **Computation Method:**  The calculation of the indicator value as derived from the framework is the amount treated (off-site and on-site) divided by the total amount of waste produced. Data on treatment of domestic wastewater will come from the multi- purpose indicator 6.2.1. Data on volumes of industrial wastewater can be estimated from inventories of industries, which will be available in the majority of Member States disaggregated by ISIC classifications. The breakdown of treated wastewater can be calculated based on compliance records, related to national standards. Unless verified otherwise, through audited compliance records, the waste generated will be considered untreated. | Household Survey | National statistics offices,  Ministries of water, sanitation, health, environment.  Regulators of sanitation services. | Data not generated yet | a) Household Survey by LGD (WASA for City Corporations)  c) DoE  d) WARPO | Not Applicable | Annual | Group 2 | 1st Round:  December, 2020  2nd Round:  December 2021  3rd Round:  December 2022  4th Round:  December 2023  5th Round:  December 2024 | UNSC 51 revision included in the 2020 comprehensive review  Fast Track; Reviewed at 5th IAEG-SDG meeting (classified as Tier II) |
| 6.3.2 Proportion of bodies of water with good ambient water quality | UNEP  **Partner Agencies:** UN-Water | Tier II | Definition:  The indicator is defined as the proportion of water bodies in the country that have good ambient water quality. Ambient water quality refers to natural, untreated water in rivers, lakes and groundwaters and represents a combination of natural influences together with the impacts of all anthropogenic activities. The indicator relies on water quality data derived from in situ measurements and the analysis of samples collected from surface and groundwaters. Water quality is assessed by means of core physical and chemical parameters that reflect natural water quality related to climatological and geological factors, together with major impacts on water quality. The continuous monitoring of all surface and groundwaters is economically unfeasible and not required to sufficiently characterize the status of ambient water quality in a country. Therefore, countries select river, lake and groundwater bodies that are representative and significant for the assessment and management of water quality to monitor and report on indicator 6.3.2. The quality status of individual water bodies is classified based on the compliance of the available water quality monitoring data for the core parameters with target values defined by the country. The indicator is computed as the proportion of the number of water bodies classified as having good quality (i.e. with at least 80 % compliance) to the total number of assessed water bodies, expressed as a percentage.    Concepts:  The concepts and definitions used in the methodology have been based on existing international frameworks and glossaries (WMO 2012) unless where indicated otherwise below.  Aquifer: Geological formation capable of storing, transmitting and yielding exploitable quantities of water.  Classification of water quality: If at least 80% of the monitoring values for prescribed parameters in a water body comply with their respective target values, the water body is classified as having a “good” water quality status. Each water body is classified as being of “good” or “not good” status.  Groundwater: Subsurface water occupying the saturated zone.  Groundwater body: A distinct volume of groundwater within an aquifer or aquifers (EU 2000). Groundwater bodies that cross river basin district (RBD) boundaries should be divided at the boundary with each separate portion of the groundwater body being reported separately along with its respective RBD.  Lake: Inland body of standing surface water of significant extent.  Non-point-source pollution: Pollution of water bodies from dispersed sources such as fertilizers, chemicals and pesticides used in agricultural activities.  Parameter: Water quality variable or characteristic of water quality, also called a determinand.  Point source pollution: Pollution with a precisely located origin.  Pollution (of water): Introduction into water of any undesirable substance which renders the water unfit for its intended use.  Pollutant: Substance which disrupts and interferes with the equilibrium of a water system and impairs the suitability of using the water for a desired purpose.  Reservoir: Body of water, either natural or man-made, used for storage, regulation and control of water resources.  River: Large stream which serves as the natural drainage for a basin.  River basin: Geographical area having a common outlet for its surface runoff.  River basin district: Area of land, made up of one or more neighbouring river basins together with their associated groundwaters (EU, 2000).  River water body: A coherent section of a river that is discrete (does not overlap with another water body) and is significant rather than arbitrarily designated.  Stream: Flowing body of water in a natural surface channel.  Surface water: Water which flows over, or lies on, the ground surface. Note: Indicator 6.3.2 does not include the monitoring of water quality in wetlands under monitoring level 1.  Target value: A value (or range) for any given water quality parameter that indicates the threshold for a designated water quality, such as good water quality rather than acceptable water quality.  Toxic substance: Chemical substance which can disturb the physiological functions of humans, animals and plants.  Transboundary waters: Surface or ground waters which mark, cross or are located on boundaries between two or more States; wherever transboundary waters flow directly into the sea, these transboundary waters end at a straight line across their respective mouths between points on the low-water line of the banks (UNECE, 1992).  Water quality index: The measured water quality results for all parameters combined into a numeric value for each monitoring location. These scores are then aggregated over the time of the assessment period. The index score can range between zero (worst) to 100 (best).  Comments and limitations:  The monitoring and reporting of SDG Indicator 6.3.2 requires considerable national financial and human capacities to regularly measure water quality parameters at sufficient spatial and temporal resolutions, and to consistently collect, quality-assure and process the monitoring data to compute the indicator. Substantial investments in monitoring and data management infrastructures, as well as targeted capacity development in water quality monitoring programme design and operation, will be required in many countries to enhance national capacities to regularly and consistently report on the indicator.  Recognizing the differences in monitoring and data processing capacities among countries, the indicator methodology offers a progressive monitoring approach allowing countries to start with reporting based on their existing capacity and progressively enhance the data coverage and indicator significance with increasing capacity.  Level 1 monitoring includes a set of general, easily measurable, physico-chemical water quality parameters that can indicate water quality degradation. They can be used to assess the quality status of water bodies, facilitating global comparability and maintaining a balance between the significance of the indicator and the monitoring requirements for each country.  Level 2 monitoring allows countries with enhanced capacities to include additional water quality parameters, such as toxic substances and biological monitoring, as well as more sophisticated quality classification schemes to assess and report on the quality of their water bodies more accurately.  Computation Method:  The indicator is computed by first classifying all assessed water bodies based on the compliance of the monitoring data collected for selected parameters at monitoring locations within the water body with parameter-specific target values:  Where  is the percentage compliance [%];  is the number of monitoring values in compliance with the target values;  is the total number of monitoring values.  A threshold value of 80% compliance is defined to classify water bodies as “good” quality. Thus, a body of water is classified as having a good quality status if at least 80% of all monitoring data from all monitoring stations within the water body are in compliance with the respective targets.  In a second step, the classification results are used to compute the indicator as the proportion of the number of water bodies classified as having a good quality status to the total number of classified water bodies expressed in percentage:  Where  is the percentage of water bodies classified as having a good quality status;  is the number of classified water bodies classified as having a good quality status;  is the total number of monitored and classified water bodies. | The data will be collected by UN Environment and its Global Environment Monitoring System for Water (GEMS/Water) through electronic reporting in the global water quality information system GEMStat. | GEMS/Water National Focal Points in relevant Ministries, Water Authorities, etc.  or their nominated representative. | Data not generated yet | Water Quality Monitoring Survey by DoE, MoEFCC | * water body type (river, lake, groundwater) * By district/division | Triennial | Group 2 | 1st Round:  December, 2020  2nd Round:  December, 2023  3rd Round:  December, 2026  4th Round:  December, 2029  5th Round:  December, 2030 | Data will beprovided inDecember 2020  Reviewed at 7th IAEG-SDG meeting (classified as Tier II) |
| Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity | | | | | | | | | | | | |
| 6.4.1 Change in water-use efficiency over time | **FAO**  **Partner Agencies:**  UNEP,  IUCN,  UNSD,  OECD,  Eurostat | Tier I | **Definition:**  The change in water use efficiency over time (CWUE). The change in the ratio of the value added to the volume of water use, over time.  Water Use Efficiency (WUE) is defined as the value added of a given major sector[[1]](#footnote-2) divided by the volume of water used. Following ISIC 4 coding, sectors are defined as:   1. agriculture; forestry; fishing (ISIC A), hereinafter “agriculture”; 2. mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; constructions (ISIC B, C, D and F), hereinafter “MIMEC”; 3. all the service sectors (ISIC E and ISIC G-T), hereinafter “services”.   The unit of the indicator is expressed in Value/Volume, commonly USD/m3.  **Concepts:**   * Water use: water that is received by an industry or households from another industry or is directly abstracted. [SEEA-Water (ST/ESA/STAT/SER.F/100), par. 2.21] * Water abstraction: water removed from the environment by the economy. [SEEA-Water (ST/ESA/STAT/SER.F/100), par. 2.9] * Water use for irrigation (km³/year)   + Annual quantity of water used for irrigation purposes. It includes water from renewable freshwater resources, as well as water from over-abstraction of renewable groundwater or abstraction of fossil groundwater, direct use of agricultural drainage water, (treated) wastewater, and desalinated water. [AQUASTAT Glossary] * Water use for livestock (watering and cleaning) (km³/year)   + Annual quantity of water used for livestock purposes. It includes water from renewable freshwater resources, as well as water from over-abstraction of renewable groundwater or abstraction of fossil groundwater, direct use of agricultural drainage water, (treated) wastewater, and desalinated water. It includes livestock watering, sanitation, cleaning of stables, etc. If connected to the public water supply network, water used for livestock is included in the services water use. [AQUASTAT Glossary] * Water use for aquaculture (km³/year)   + Annual quantity of water used for aquaculture. It includes water from renewable freshwater resources, as well as water from over-abstraction of renewable groundwater or abstraction of fossil groundwater, direct use of agricultural drainage water, (treated) wastewater, and desalinated water. Aquaculture is the farming of aquatic organisms in inland and coastal areas, involving intervention in the rearing process to enhance production and the individual or corporate ownership of the stock being cultivated. [AQUASTAT Glossary] * Water use for the MIMEC sectors (km³/year)   + Annual quantity of water used for the MIMEC sector. It includes water from renewable freshwater resources, as well as over-abstraction of renewable groundwater or abstraction of fossil groundwater and use of desalinated water or direct use of (treated) wastewater. This sector refers to self-supplied industries not connected to the public distribution network. [AQUASTAT Glossary. To be noted that in AQUASTAT, the sectors included in the MIMEC group are referred to as “industry”][[2]](#footnote-3) * Water use for the services sectors (km³/year)   + Annual quantity of water used primarily for the direct use by the population. It includes water from renewable freshwater resources, as well as over-abstraction of renewable groundwater or abstraction of fossil groundwater and the use of desalinated water or direct use of treated wastewater. It is usually computed as the total water used by the public distribution network. It can include that part of the industries, which is connected to the municipal network. [AQUASTAT Glossary. To be noted that in AQUASTAT, the sectors included in “services” are referred to as “municipal”] * Value added (gross)   + Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The industrial origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 4. [WB Databank, metadata glossary, modified] * Arable land   + Arable land is the land under temporary agricultural crops (multiple-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category. Data for “Arable land” are not meant to indicate the amount of land that is potentially cultivable. [FAOSTAT] * Permanent crops   + Permanent crops are the land cultivated with long-term crops which do not have to be replanted for several years (such as cocoa and coffee); land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be classified under "forest"). Permanent meadows and pastures are excluded from land under permanent crops. [FAOSTAT] * Proportion of irrigated land on the total cultivated land   + Part of cultivated land that is equipped for irrigation, expressed in percentage   **Comments and limitations:**  The corrective coefficient Cr for the agricultural sector is needed in order to focus the indicator on the irrigated production. This is done for two main reasons:   * To ensure that only runoff water and groundwater (so-called blue water) are considered in computing the indicator; * To eliminate a potential bias of the indicators, which otherwise would tend to decrease if rainfed cropland is converted to irrigated.   **Computation Method:**  Water use efficiency is computed as the sum of the three sectors listed above, weighted according to the proportion of water used by each sector over the total use. In formula:  Where:  WUE = Water use efficiency  Awe = Irrigated agriculture water use efficiency [USD/m3]  Mwe = MIMEC water use efficiency [USD/m3]  Swe = Services water use efficiency [USD/m3]  PA = Proportion of water used by the agricultural sector over the total use  PM = Proportion of water used by the MIMEC sector over the total use  PS = Proportion of water used by the service sector over the total use  The computing of each sector is described below.  *Water use efficiency in irrigated agriculture* is calculated as the agricultural value added per agricultural water use, expressed in USD/m3.  In formula:  Where:  Awe = Irrigated agriculture water use efficiency [USD/m3]  GVAa = Gross value added by agriculture (excluding river and marine fisheries and forestry) [USD]  Cr = Proportion of agricultural GVA produced by rainfed agriculture  Va = Volume of water used by the agricultural sector (including irrigation, livestock and aquaculture) [m3]  The volume of water used by the agricultural sectors (V) is collected at country level through national records and reported in questionnaires, in units of m3/year (see example in AQUASTAT <http://www.fao.org/nr/water/aquastat/sets/aq-5yr-quest_eng.xls>). Agricultural value added in national currency is obtained from national statistics, converted to USD and deflated to the baseline year.  Cr can be calculated from the proportion of irrigated land on the total Arable land and Permanent crops (hereinafter “cultivated land”, as follows:  Where:  Ai = proportion of irrigated land on the total cultivated land, in decimals  0.375 = generic default ratio between rainfed and irrigated yields  More detailed estimations are however possible and encouraged at country level.  *Water efficiency of the MIMEC sectors (including power production):* MIMEC value added per unit of water used for the MIMEC sector, expressed in USD/m3.  In formula:  Where:  Mwe = Industrial water use efficiency [USD/m3]  GVAm = Gross value added by MIMEC (including energy) [USD]  Vm = Volume of water used by MIMEC (including energy) [m3]  MIMEC water use (Vm) is collected at country level through national records and reported in questionnaires, in units of m3/year (see example in AQUASTAT http://www.fao.org/nr/water/aquastat/sets/aq-5yr-quest\_eng.xls). MIMEC value added is obtained from national statistics, deflated to the baseline year.  *Services water supply efficiency* is calculated as the service sector value added (ISIC 36-39 and ISIC 45-98) divided by water used for distribution by the water collection, treatment and supply industry (ISIC 36), expressed in USD/m3.  In formula:  Where:  Swe = *Services water use efficiency [USD/m3]*  GVAs = Gross value added by services [USD]  Vs = Volume of water used by the service sector [m3]  Data on volumes of used and distributed water are collected at country level from the municipal supply utilities records and reported in questionnaires, in units of km3/year or million m3/year (see example in AQUASTAT <http://www.fao.org/nr/water/aquastat/sets/aq-5yr-quest_eng.xls>). Services value added is obtained from national statistics, deflated to the baseline year.  Change in water use efficiency (CWUE) is computed as the ratio of water use efficiency (WUE) in time t minus water use efficiency in time t-1, divided by water use efficiency in time t-1 and multiplied by 100:  It must be noted that computing the indicator in an aggregated manner, i.e. total GDP over total water use, would lead to an overestimation of the indicator. That is due to the fact that, for the agricultural sector, only the value produced under irrigation has to be counted in calculating the indicator. Hence, the sum of the value added of the various sectors used in these formulas is not equivalent to the total GDP of the country. |  | National Statistical Office (NSO), |  | a) DPHE, LGD  b) DoE, MoEFCC  c) DAE, MoA  d) WARPO, MoWR  Administrative Data | * economic sector: ISIC Rev. 4▪ Agriculture, Forestry and Fisheries (ISIC A); ▪ Mining and Quarrying (ISIC B); ▪ Manufacturing (ISIC C); ▪ Electricity, Gas, Steam and Air Conditioning Supply (ISIC D); ▪ Water Supply, Sewerage, Waste Management and Remediation Activities (ISIC E), by ▪ Water Collection, Treatment and Supply (ISIC 36) ▪ Sewerage (ISIC 37) ▪ Construction (ISIC F) ▪ Other industries (sum of remaining industries) * geographic location: computing the indicator by river basin, watershed or administrative units within a country. | Triennial | Group 2 | 1st Round:  June, 2019  2nd Round:  June, 2022  3rd Round:  June, 2025  4th Round:  June, 2028  5th Round:  June, 2030 | Data availability reviewed in Oct. 2019  (classified as Tier I)  Reviewed at 6th IAEG-SDG meeting (classified as Tier II)  Fast Track; Reviewed at 5th IAEG-SDG meeting; More information on terminology is requested (classified as TBD) |
| 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources | **FAO**  **Partner Agencies:**  UNEP,  IUCN,  UNSD,  OECD,  Eurostat | Tier I | **Definition:**  The level of water stress: freshwater withdrawal as a proportion of available freshwater resources is the ratio between total freshwater withdrawn by all major sectors and total renewable freshwater resources, after taking into account environmental water requirements. Main sectors, as defined by ISIC standards, include agriculture; forestry and fishing; manufacturing; electricity industry; and services. This indicator is also known as water withdrawal intensity.  **Concepts:**  This indicator provides an estimate of pressure by all sectors on the country’s renewable freshwater resources. A low level of water stress indicates a situation where the combined withdrawal by all sectors is marginal in relation to the resources, and has therefore little potential impact on the sustainability of the resources or on the potential competition between users. A high level of water stress indicates a situation where the combined withdrawal by all sectors represents a substantial share of the total renewable freshwater resources, with potentially larger impacts on the sustainability of the resources and potential situations of conflicts and competition between users.  Total renewable freshwater resources (TRWR) are expressed as the sum of internal and external renewable water resources. The terms “water resources” and “water withdrawal” are understood here as freshwater resources and freshwater withdrawal.  Internal renewable water resources are defined as the long-term average annual flow of rivers and recharge of groundwater for a given country generated from endogenous precipitation.  .  External renewable water resources refer to the flows of water entering the country, taking into consideration the quantity of flows reserved to upstream and downstream countries through agreements or treaties.  Total freshwater withdrawal (TWW) is the volume of freshwater extracted from its source (rivers, lakes, aquifers) for agriculture, industries and municipalities. It is estimated at the country level for the following three main sectors: agriculture, municipalities (including domestic water withdrawal) and industries. Freshwater withdrawal includes primary freshwater (not withdrawn before), secondary freshwater (previously withdrawn and returned to rivers and groundwater, such as discharged wastewater and agricultural drainage water) and fossil groundwater. It does not include non-conventional water, i.e. direct use of treated wastewater, direct use of agricultural drainage water and desalinated water. TWW is in general calculated as being the sum of total water withdrawal by sector minus direct use of wastewater, direct use of agricultural drainage water and use of desalinated water.  Environmental water requirements (Env.) are the quantities of water required to sustain freshwater and estuarine ecosystems. Water quality and also the resulting ecosystem services are excluded from this formulation which is confined to water volumes. This does not imply that quality and the support to societies which are dependent on environmental flows are not important and should not be taken care of. Methods of computation of Env. are extremely variable and range from global estimates to comprehensive assessments for river reaches. For the purpose of the SDG indicator, water volumes can be expressed in the same units as the TWW, and then as percentages of the available water resources.  **Comments and limitations:**  Water withdrawal as a percentage of water resources is a good indicator of pressure on limited water resources, one of the most important natural resources. However, it only partially addresses the issues related to sustainable water management.  Supplementary indicators that capture the multiple dimensions of water management would combine data on water demand management, behavioural changes with regard to water use and the availability of appropriate infrastructure, and measure progress in increasing the efficiency and sustainability of water use, in particular in relation to population and economic growth. They would also recognize the different climatic environments that affect water use in countries, in particular in agriculture, which is the main user of water. Sustainability assessment is also linked to the critical thresholds fixed for this indicator and there is no universal consensus on such threshold.  Trends in water withdrawal show relatively slow patterns of change. Usually, three-five years are a minimum frequency to be able to detect significant changes, as it is unlikely that the indicator would show meaningful variations from one year to the other.  Estimation of water withdrawal by sector is the main limitation to the computation of the indicator. Few countries actually publish water use data on a regular basis by sector.  Renewable water resources include all surface water and groundwater resources that are available on a yearly basis without consideration of the capacity to harvest and use this resource. Exploitable water resources, which refer to the volume of surface water or groundwater that is available with an occurrence of 90% of the time, are considerably less than renewable water resources, but no universal method exists to assess such exploitable water resources.  There is no universally agreed method for the computation of incoming freshwater flows originating outside of a country's borders. Nor is there any standard method to account for return flows, the part of the water withdrawn from its source and which flows back to the river system after use. In countries where return flow represents a substantial part of water withdrawal, the indicator tends to underestimate available water and therefore overestimate the level of water stress.  Other limitations that affect the interpretation of the water stress indicator include:  • difficulty to obtain accurate, complete and up-to-date data;  • potentially large variation of sub-national data;  • lack of account of seasonal variations in water resources;  • lack of consideration to the distribution among water uses;  • lack of consideration of water quality and its suitability for use; and  • the indicator can be higher than 100 per cent when water withdrawal includes secondary freshwater (water withdrawn previously and returned to the system), non-renewable water (fossil groundwater), when annual groundwater withdrawal is higher than annual replenishment (over-abstraction) or when water withdrawal includes part or all of the water set aside for environmental water requirements.  Some of these issues can be solved through disaggregation of the index at the level of hydrological units and by distinguishing between different use sectors. However, due to the complexity of water flows, both within a country and between countries, care should be taken not to double-count.  **Computation Method:**  Method of computation: The indicator is computed as the total freshwater withdrawn (TWW) divided by the difference between the total renewable freshwater resources (TRWR) and the environmental water requirements (Env.), multiplied by 100. All variables are expressed in km3/year (109 m3/year).  Stress (%) = TWW / (TRWR - Env.) \* 100  It is proposed to classify the level of water stress in three main categories (levels): low, high and very high. The thresholds for the indicator could be country specific, to reflect differences in climate and national water management objectives. Alternatively, uniform thresholds could be proposed using existing literature and taking into account environmental water requirements. |  | Ministry of Agriculture,  Ministry of Water,  Ministry of Environment,  and  sometimes through the National statistical Office. | FAO | a)WDB, MoWR  b) BADC/ BMDA, MoA  c) UNSC | * economic sector: agriculture * hydrological unit of water resources: river basin, aquifers | Triennial | Group 2 | 1st Round:  June 2016  2nd Round:  June 2019  3rd Round:  June 2022  4th Round:  June 2025  5th Round:  June 2028 | Data availability reviewed in Oct. 2019  (classified as Tier I)  Reviewed at 6th IAEG-SDG meeting (classified as Tier II)  Fast Track; Reviewed at 5th IAEG-SDG meeting; More information on terminology is requested (classified as TBD) |
| Target 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate | | | | | | | | | | | | |
| 6.5.1 Degree of integrated water resources management implementation (0–100) | UNEP  **Partner Agencies:**  UN-Water,  IUCN,  Ramsar | Tier I | Definition:  The indicator degree of implementation of Integrated Water Resources Management (IWRM), measured in per cent (%) from 0 (implementation not yet started) to 100 (fully implemented) is currently being measured in terms of different stages of development and implementation of Integrated Water Resources Management (IWRM).  The definition of IWRM is based on an internationally agreed definition, and is universally applicable. IWRM was officially established in 1992 and is defined as “a process which promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.” (GWP 2010).  The method builds on official UN IWRM status reporting, from 2008 and 2012, of the Johannesburg Plan of Implementation from the UN World Summit for Sustainable Development (1992).  Concepts:  The concept of IWRM is measured in 4 main components:  1. Enabling environment: this includes the policies, laws, plans and strategies which create the ‘enabling environment’ for IWRM.  2. Institutions: includes the range and roles of political, social, economic and administrative institutions that help to support the implementation of IWRM.  3. Management Instruments: The tools and activities that enable decision-makers and users to make rational and informed choices between alternative actions.  4. Financing: Budgeting and financing made available and used for water resources development and management from various sources.  The indicator is based on a national survey structured around these four main components (UNEP 2016). Each component is split into two parts: questions concerning the ‘National level’ and ‘Other levels’ respectively. ‘Other levels’ includes sub-national (including provinces/states for federated countries), basin level, and the transboundary level as appropriate. These two parts address the wording of Target 6.5 ‘implement [IWRM] at all levels …’.  Comments and limitations:  The challenge of subjectivity in responses associated with this type of survey is being addressed in a number of ways:  a. Draft responses are reviewed by a number of governmental and non-governmental stakeholders in an open, inclusive and transparent process.  b. Countries are encouraged to provide further information to qualify their responses and/or set them in the national context.  c. Guidelines are provided for each of the four main components, each question, and each of the six thresholds for every single question, to ensure responses are as objective as possible, and are comparable both between countries, and between reporting periods.  To achieve robust indicator results requires a country process involving a wide range of stakeholders which will require a certain amount of time and resources. The advantage of this is that it puts in place a process that addresses the integrated and indivisible nature of the SDG targets, as well as stressing the importance of “leaving no on behind”.  Computation Method:  1. The survey contains 32 questions divided into the four main components described above.  2. Each question is given a score between 0 and 100, in increments of 10, based on the following 6 main categories:   * Very low (0) * Low (20) * Medium-low (40) * Medium-high (60) * High (80) * Very high (100)   Note that guidance is provided for each threshold for each question, to ensure objective and comparable results.  3. The un-weighted average of the question scores within each of the four components is calculated to give a score of 0 – 100 for each component.  4. The component scores are averaged (un-weighted) to give the indicator score, expressed as a percentage between 0 and 100. | Survey | Ministry of Water in coordination with Ministry of Environment, Ministry of Finance, Ministry of Planning, Ministry of Lands and Agriculture, Ministry of Industry and Mining etc | UNEP | BWDB, MoWR | * IWRM: four main components * inequality: gender, vulnerable groups, geographic coverage, stakeholder participation in water resource development and management | Triennial | Group 1 | 1st Round:  2017  2nd Round:  December 2020  3rd Round:  December 2023  4th Round:  December 2026  5th Round:  December 2029 | Data availability reviewed in Nov. 2017 (classified as Tier I)  IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II) |
| 6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation | UNESCO-IHP,  UNECE | Tier I | **Definition:**  The proportion of transboundary basin area with an operational arrangement for water cooperation is defined as the proportion of transboundary basins area within a country with an operational arrangement for water cooperation. It is derived by adding up the surface area in a country of those transboundary surface water catchments and transboundary aquifers (i.e. ‘transboundary’ basins) that are covered by an operational arrangement and dividing the obtained area by the aggregate total area in a country of all transboundary basins (both catchments and aquifers). The result is multiplied by 100 to obtain it expressed as percentage share.  **Concepts:**  "The proposed monitoring has as basis the spatial coverage of transboundary basins shared by each country, and focuses on monitoring whether these are covered by cooperation arrangements that are operational. The criteria needing to be met for the cooperation on a specific basin being considered “operational” seeks to capture whether the arrangement(s) indeed provide an adequate basis for cooperation in water management.  Transboundary basins are basins of transboundary waters, that is, of any surface waters (notably rivers, lakes) or groundwaters which mark, cross or are located on boundaries between by two or more states. For the purpose of the calculation of this indicator, for surface waters, the basin is the extent of the catchment area; for groundwater, the area considered is the extent of the aquifer.  Arrangement for water cooperation: a bilateral or multilateral treaty, convention, agreement or other formal arrangement, such as memorandum of understanding) between riparian countries that provides a framework for cooperation on transboundary water management. Agreements or other kind of formal arrangements may be interstate, intergovernmental, interministerial, interagency or between regional authorities.  Operational: For an agreement or other kind of formal arrangement (e.g. a memorandum of understanding) for cooperation between the riparian countries to be considered operational, all the following criteria needs to be fulfilled:  - There is a joint body, joint mechanism or commission (e.g. a river basin organization) for transboundary cooperation  - There are regular formal communications between riparian countries in form of meetings  - There is a joint or coordinated water management plan(s), or joint objectives have been set  - There is a regular exchange of data and information.  **Comments and limitations:**  The spatial information on transboundary surface water basins’ boundaries and the extents of the catchment areas are commonly available and essentially static; consequently, once determined, no updating need is expected.  The information on the areal extent of transboundary aquifers may evolve over time as such information is generally more coarse but likely to improve because of the evolving knowledge on aquifers. Technical studies and exchange of information will improve the delineation and might also lead to the identification of additional transboundary aquifers.  In situations where more than two riparian countries share a basin, but only some of them have operational cooperation arrangements, the indicator value may mask the gap that a riparian country does not have cooperation arrangements with both its upstream and downstream neighbours. Such complementary information can be obtained by aggregating data at the level of the basins but not from the reporting at the national level.  The legal basis for cooperation develops slowly: conclusion of new agreements on transboundary waters is commonly a long process that takes many years.  The operationality of cooperation is more dynamic as it evolves with the expansion of cooperation. The operationality can be expected to evolve over shorter time frames, and in a year or two, progress could potentially be observed.  **Computation Method:**  Step 1 Identify the transboundary surface waters and aquifers  While the identification of transboundary surface water is straightforward, the identification of transboundary aquifers requires investigations.  If there are no transboundary surface waters or groundwaters, reporting is not applicable.  Step 2 Calculate the surface area of each transboundary basin and the total sum  Commonly at least the basins of the rivers and lakes have been delineated through topographic maps and the basin area is known or easily measurable.  The total transboundary surface area in the country is the sum of the surface areas in the country of each of the transboundary basins and aquifers (expressed in km2). Transboundary areas for different types of systems (e.g. river basin and aquifer) or multiple aquifers may overlap. The area of transboundary aquifers, even if located within a transboundary river basin, should be added to be able to track progress of cooperation on transboundary aquifers.  The calculations can most easily be carried with Geographical Information Systems (GIS). Once generated, with appropriate tools for spatial analysis, the shapes of the surface catchments and the aquifers can be used to report both disaggregated (for the surface water basin or aquifer) and aggregated (agreement exists on either one).  Step 3 Review existing arrangements for transboundary cooperation in water management and verify which transboundary waters are covered by a cooperation arrangement  Some operational arrangements for integrated management of transboundary waters in place cover both surface waters and groundwaters. In such cases, it should be clear that the geographical extent of both is used to calculate the indicator value.  In other cases, the area of application may be limited to a border section of the watercourse and in such cases only the corresponding area should be considered as potentially having an operational arrangement for calculating the indicator value.  At the end of this step, it should be known which transboundary basins are covered by cooperation arrangements (and their respective areas).  Step 4 Check which of the existing arrangements for transboundary cooperation in water management are operational  The following check-list allows determining whether the cooperation arrangement on a particular basin or in relation to a particular co-riparian country is operational:  - existence of a joint body, joint mechanism or commission for transboundary cooperation  - regularity of formal communication in form of meetings  - existence of joint or coordinated water management plan(s), or of joint objectives  - regular exchange of information and data  If any of the conditions is not met, the cooperation arrangement cannot be considered operational. This information is currently available in countries and can also be withdrawn from global, regional or basin reporting systems.  Step 5  Calculate the indicator value, that is, the area share by adding up the surface area in the country of those transboundary surface water basins or aquifers that are covered by an operational cooperation arrangement and dividing it by the total summed up area in the country of all transboundary basins (including aquifers), multiplied by 100 to obtain a percentage share." | Administrative record | Ministries or agencies responsible for water resources. | MoWR (JRC) | MoWR (JRC)  Administrative Data | • country level  • Regional level: Division | 5-yearly | Group 1 | 1st Round:  2018  2nd Round:  December 2020  3rd Round:  December 2025  4th Round:  December 2030 | Data availability reviewed in Nov. 2018 (classified as Tier I)  Fast Track; Reviewed at 5th IAEG-SDG meeting (classified as Tier II) |
|  | Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes | | | | | | | | | | | |
| 6.6.1 Change in the extent of water-related ecosystems over time | UNEP,  Ramsar  **Partner Agencies:**  UN-Water,  IUCN | Tier I | **a)Definition:**  The indicator includes five categories: 1) vegetated wetlands, 2) rivers and estuaries, 3) lakes, 4) aquifers, and 5) artificial waterbodies. For purposes of this methodology, the text refers only to these five ecosystem category terminologies. To address its complexity, Indicator 6.6.1 has been divided into 5 Sub-Indicators to capture the various data sources and methodologies required for monitoring components of the Indicator. Data sources come from a combination of ground sampling and earth observations. Depending on the type of ecosystem and the type of extent being measured, the data collection methodology can also differ greatly. A progressive monitoring approach with two levels is proposed:  Level 1: 2 Sub-Indicators based on globally available data from earth observations which will be validated by countries against their own methodologies and datasets:  • Sub-Indicator 1 – spatial extent of water-related ecosystems  • Sub-Indicator 2 – water quality of lakes and artificial water bodies  Level 2: Data collected by countries through 3 Sub-Indicators:  • Sub-Indicator 3 – quantity of water (discharge) in rivers and estuaries  • Sub-Indicator 4 – water quality imported from SDG Indicator 6.3.2  • Sub-Indicator 5 – quantity of groundwater within aquifers  A full methodology for this indicator is available in the document entitled, “Monitoring Methodology for SDG Indicator 6.6.1”.  **Concepts:**  The concepts and definitions used in the methodology have been based on existing international frameworks and glossaries unless where indicated otherwise below.  Water-related ecosystems – includes five categories: 1) vegetated wetlands, 2) rivers and estuaries, 3) lakes, 4) aquifers, and 5) artificial waterbodies. For purposes of this methodology, the text refers only to these five ecosystem category terminologies. The majority of water-related ecosystem types monitored in Indicator 6.6.1 contain freshwater, with the exception of mangroves and estuaries which contain brackish waters and are included in Indicator 6.6.1. Ecosystems containing or within salt waters are not included as these are covered within other SDG indicators (Goal 14). Other categories of wetlands aligning with the Ramsar Convention definitions are captured within the ecosystem category of ‘vegetated wetlands’.  Vegetated Wetlands – the water-related ecosystem category of vegetated wetlands includes swamps, fens, peatlands, marshes, paddies, and mangroves. This definition is closely related to the Ramsar Convention on Wetlands definition of wetlands, which is: “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres” with the exception that salt waters are not included in Indicator 6.6.1 reporting (as they are covered in SDG 14) and with the exception that vegetated wetlands are distinct from the other ecosystem categories of lakes, rivers and estuaries, aquifers, and artificial waterbodies. Vegetated wetlands have been separated as their own ecosystem category because of their importance for target achievement and because the methodology for monitoring them with earth observations is unique from other open waters. The data generated by applying this methodology will also generate data required by countries to report to the Ramsar Convention on Wetlands.  Artificial Waterbodies – the water-related ecosystem category of artificial waterbodies includes open waterbodies created by humans such as reservoirs, canals, harbors, mines and quarries. While it is recognized that these are not traditional water ecosystems which should be protected and restored, in some countries they hold a noteworthy amount of freshwater and have thus been included.  Open Water – as any area of surface water unobstructed by aquatic vegetation. This includes the following 3 water-related ecosystem categories: rivers and estuaries, lakes, and artificial waterbodies.  Extent – has been expanded beyond spatial extent to capture additional basic parameters needed for the protection and restoration of water-related ecosystems. Extent includes three components: the spatial extent or surface area, the quality, and the quantity of water-related ecosystems.  Change – a shift from one condition of extent to another over time within a water-related ecosystem, measured against a point of reference.  **Comments and limitations:**  This methodology mobilizes the collection of widely available earth observation data on spatial extent and some water quality parameters which will be validated by countries. The data itself in the form of images and numbers is straightforward to understand. However, the methodologies used to generate this data are technical in nature and some countries may wish understand these better. The methodology employs internationally recognized methods, from expert communities such as the Group on Earth Observation (GEO) and international space agencies, to derive statistically sound and the most technologically advanced earth observation datasets for Sub-Indicators 1 and 2. These organizations will also be engaged to provided tools and training to support countries. Sub-Indicator 2 only measures two water quality parameters, while it is recognized that to determine good water quality requires measuring multiple parameters. However, globally available data can indicate potential hot spots of pollution or human disturbance allowing countries to undertake more local assessments of water quality.  The Indicator is designed in a way to generate data to allow informed decision making towards protecting and restoring water-related ecosystems. It does not measure how many water-related ecosystems have been protected and restored. It is assumed that countries would use the data to actively make decisions, but these actions are not currently being measured. The data generated should be considered alongside other data such as land use change to enable decision-makers to protect and restore water-related ecosystems.  **Computation Method:**  The 5 Sub-Indicators are computed separately and thus Indicator 6.6.1 is comprised of 5 stand-alone methodologies.  **Sub-Indicator 1: Spatial Extent of Water-related Ecosystems**  The methodology for this Sub-Indicator describes how Earth observations are generated and processed into a global spatial extent of water-related ecosystems dataset. The basic premise of this approach is that different land covers, such as snow, bare rock, vegetation, and water, reflect different wavelengths of light. Satellites continually circulate our earth, capturing images and wavelengths reflected from every location on the globe. For any one location on earth, thousands of images can be combined to classify the site’s land cover. Advanced computing technology can be programmed to digest all of these images and split the earth into land cover type pixels, one of which is open water. Open water is defined as any area of surface water unobstructed by aquatic vegetation. Thus, changes in the spatial extent of open water locations over a long period of time can be discerned including new and lost waterbodies or seasonal changes.  To distinguish one water-related ecosystem type from another, further processing of this open water data is required in conjunction with other datasets. The data generated on open water is further distinguished into lakes, rivers and estuaries versus artificial waterbodies. In addition, vegetated wetlands are discerned through further processing. The method to detect vegetated wetlands from Earth observations is based on an approach which detects the physical properties of wetland areas (e.g. soil moisture and vegetation water content) from multi-temporal SAR (Synthetic Aperture Radar) and optical satellite imagery, combined with other geospatial datasets related to the topography of the area, the hydrography of the watershed and its drainage network, and the soil types. The resulting datasets obtained from earth observations on the spatial extent of vegetated wetlands and artificial waterbodies are excluded from the calculation of spatial extent values for lakes, rivers and estuaries, to prevent duplication of spatial extent estimations.  Thus, three global datasets are generated through this methodology annually: spatial extent of lakes, rivers, and estuaries; spatial extent of artificial waterbodies; and spatial extent of vegetated wetlands. These national spatial extent datasets are provided to countries to validate. Once validated, the annual datasets are used to calculate percentage change of spatial extent over time, using a 2001-2005 baseline period. Subsequent five year averages are compared to this baseline.   |  | | --- | | Where = the average national spatial extent from 2001-2005  Where = the average national spatial extent of any other 5 year period |   **Sub-Indicator 2: Water Quality of Lakes and artificial water bodies**  The methodology for this Sub-Indicator describes how Earth observations are generated and processed into two datasets of chlorophyll a (Chl) and total suspended solids (TSS) within lakes globally. Earth observations can only provide information on concentrations of in-water materials that affect the colour of water. These materials include Chl, which is the primary pigment in phytoplankton (the primary source of food on the food-chain), and TSS. The concentrations of Chl and TSS can be used as proxies to infer other important waterbody characteristics.  Chl and TSS results are derived using empirical algorithms, generated for each individual pixel to ensure the spatial variability within each lake is fully captured. Results are averaged over a year for each lake to produce lake-wide Chl and TSS concentrations and small localized fluctuations in concentration of these two parameters are not shown. On any one day, the pixels representing each concentration of Chl or TSS are quantified and a lake-wide average is determined for that day.  The change in concentration of both Chl and TSS can be determined from comparing an annual average against the baseline. This annual average Chl and TSS will be averaged every 5 years, which will be compared to the Chl and TSS baselines to generate a percentage change. The locations where percentage change is excessive can be targeted for increased water quality monitoring and management.  **Sub-Indicator 3: Quantity (Discharge) of Water in Rivers and Estuaries**  The methodology for this Sub-Indicator describes different techniques for countries to implement to monitor river and estuary discharge. These techniques can include gauging stations or discharge meters. The methodology does not prescribe the type of discharge measurement technique because selection should be based on the size and type of the waterbody, terrain and velocity of water flow, the desired accuracy of measurement, as well as finances available. However, any discharge data collected by countries must adhere to the following minimum criteria:   * Discharge data from each river/estuary monitored should be collected at least once per month. This data should then be averaged to obtain an annual average discharge per river/estuary monitored. * Each basin should have at minimum of one sampling location, at the point where its water exits into another basin or crosses a national boundary.   Countries will submit 5 years of data on annual average discharges per basin to the custodian agencies. The data from these 5 years will be averaged to smooth short-term variability. To generate national percentage change of discharge over time, a common reference period for all basins must be established. This baseline period will be used to calculate percentage change of discharge for any subsequent 5-year period. To calculate percentage change in discharge for each five year period following the reference period, the following formula is used:   |  | | --- | | Where = historical 5 year reference discharge  Where = the average discharge of 5 year period of interest |   **Sub-Indicator 4: Quality of Water-related Ecosystems**  The methodology for this Sub-Indicator is described in SDG Indicator 6.3.2. The data collected for Indicator 6.3.2 is utilized for Sub-Indicator 4 to inform a calculation of percentage change over time in waterbodies with good ambient water quality.  **Sub-Indicator 5: Quantity of Groundwater within Aquifers**  The methodology for this Sub-Indicator describes a simplified technique for countries to monitor groundwater quantity within aquifers. The volume of groundwater stored in an aquifer is most traditionally estimated using a combination of parameters but for the purposes of Indicator 6.6.1 monitoring, the ‘head’ or level of groundwater within an aquifer can solely be measured as a proxy for groundwater volume within an aquifer. Measuring the level of groundwater within an aquifer is done through the use of boreholes. The methodology does not prescribe the number of boreholes to be monitored per aquifer because the distribution of groundwater can be variable depending on the location and characteristics of aquifers. However, any groundwater level data collected by countries must adhere to the following minimum criteria:   * Point measurements of groundwater level within aquifers should be collected at least twice per year. This data should then be averaged to obtain an annual average groundwater level per aquifer monitored. Understanding the seasonal and other short term changes is a necessary aspect of management of groundwater but should only be considered as part of the local management of the groundwater. * Each aquifer monitored should have at minimum one borehole that can be used for groundwater level measurements.   Countries will submit 5 years of data on annual average groundwater level per basin to the custodian agencies, which will be averaged to smooth short-term variability. To generate national percentage change of discharge over time, a common reference period for all basins must be established. This baseline period will be used to calculate percentage change of groundwater quantity for any subsequent 5-year period. To calculate percentage change in quantity for each five year period following the reference period, the following formula is used:   |  | | --- | | Where = historical 5 year reference groundwater level  Where = the average groundwater level of 5 year period of interest |   b) Definition:  Extent of wetlands: this term can be defined as the surface area of wetlands. It is measured in km2 or hectares. It is expected that the surface reported by countries corresponds to the 2017 situation; if not, the reference year should be indicated.  Change in the extent of wetlands: this term refers to the percentage change in area of wetlands from a baseline reference. For reporting such change, the previous extent, if known, and the period over which the change has taken place should be specified.  Concepts:  In order to provide a precise definition of the indicator, it is crucial to provide a definition of  “Water related ecosystems”.  - the Ramsar definition of “wetlands”  The Ramsar definition is very broad, reflecting the purpose and global coverage of the Convention:  In accordance with Article 1.1 of the Convention,  “Wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres”.  In addition, in accordance with Article 2.1, Ramsar Sites  “may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands”.  - the Ramsar system of classifying wetland types  Many national definitions and classifications of “wetlands” are in use. They have been developed in response to different national needs and take into account the main biophysical features (generally vegetation, landform and water regime, and sometimes also water chemistry such as salinity) and the variety and size of wetlands in the locality or region being considered.  The Ramsar Classification System for Wetland Types, adopted at COP4 in 1990, and amended at COP6 in 1996 (Resolution VI.5) and at COP7 in 1999 (Resolution VII.11) has value as a basic internationally applicable habitat description for sites designated for the Ramsar List of Wetlands of International Importance.  The System (see Annex 1) describes the types of wetland covered by each of the wetland type codes. Note that the wetland types are grouped in three major categories: marine/coastal, inland, and human-made wetlands. Within a single Ramsar Site or other wetland, there may be wetland types from two or more of these categories, particularly if the wetland is large.  For the purpose of the Target and Indicator, and based on the National Reports Parties report on the use of the three major categories. Countries also use Ramsar definition that has been internationally agreed under the Convention. The minimum information that should be provided is the total area of wetlands for each of these three categories with an emphasis on inland wetlands or freshwater ecosystems for purpose of indicator 6.6.1 (see table below, the explanations of each wetland type code is in Annex 1).   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Fresh water | Flowing water | Permanent | Rivers, streams, creeks | M | | Deltas | L | | Springs, oases | Y | | Seasonal/intermittent | Rivers, streams, creeks | N | | Lakes and pools | Permanent | > 8 ha | O | | < 8 ha | Tp | | Seasonal/intermittent | > 8 ha | P | |  | < 8 ha | Ts | | Marshes on inorganic soils | Permanent | Herb-dominated | Tp | | Permanent/ Seasonal/intermittent | Shrub-dominated | W | | Tree-dominated | Xf | | Seasonal/intermittent | Herb-dominated | Ts | | Marshes on peat soils | Permanent | Non-forested | U | | Forested | Xp | | Marshes on inorganic or peat soils | High altitude (alpine) | | Va | | Tundra | | Vt | | Saline, brackish or alkaline water | Lakes | Permanent | | Q | | Seasonal/intermittent | | R | | Marshes & pools | Permanent | | Sp | | Seasonal/intermittent | | Ss | | Fresh, saline, brackish or alkaline water | Geothermal | | | Zg | | Subterranean | | | Zk(b) |   Computation Method:  Wetland area (Km2 or ha, reference year)/ Change in the extent of wetlands (water-related ecosystems over time) a baseline reference and year.    Based upon the national wetland inventory (complete or partial) countries provide a baseline figure in square kilometres for the extent of wetlands (according to the Ramsar definition) for the year 2017. The minimum information that should be provided is the total area of wetlands for each of the three major categories; “marine/coastal”, “inland” and “human-made.  If the information is available countries indicate the % of change in the extent of wetlands over the last three years. If the period of data covers more than three years, countries provide the available information, and indicate the period of the change. For reporting such change, the previous extent, if known, and the period over which the change has taken place should be specified.  This indicator can be aggregated to global or regional level by adding all country values globally or in a specific region. |  | 1. GEMS/Water National Focal Points, in consultation with NSOs  2. Satellite data from ESA and NASA |  | a) DoE, MoEFCC  b) BWDB, MoWR  c) BFD, MoEFCC  d) WARPO, MoWR  Big Data | * Ecosystem type | 5-yearly | Group 2 | 1st Round:  June 2020  2nd Round:  June 2025  3rd Round:  June 2030 | Data availability reviewed in Nov. 2018 (classified as Tier I)  Reviewed at 7th IAEG-SDG meeting (classified as Tier II) |
| Target 6.a: By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies | | | | | | | | | | | | |
| 6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan | WHO,  OECD  **Partner Agencies:**  UNEP,  UN-Water | Tier I | **Definition:**  Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan is defined as the proportion of total water and sanitation-related Official Development Assistance (ODA) disbursements that are included in the government budget.  **Concepts:**  “International cooperation and capacity-building support” implies aid (most of it quantifiable) in the form of grants or loans by external support agencies. The amount of water and sanitation-related Official Development Assistance (ODA) can be used as a proxy for this, captured by OECD Creditor Reporting System (CRS). ODA is defined as flows of official financing administered with the promotion of the economic development and welfare of developing countries as the main objective, and which are concessional in character with a grant element of at least 25 per cent (using a fixed 10 per cent rate of discount). By convention, ODA flows comprise contributions of donor government agencies, at all levels, to developing countries (“bilateral ODA”) and to multilateral institutions. ODA receipts, from a recipient perspective, comprise disbursements by bilateral donors and multilateral institutions. Lending by export credit agencies—with the pure purpose of export promotion—is excluded (see http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm).  “Developing countries” refer to countries, which are eligible to receive official development assistance (see http://www.oecd.org/dac/stats/daclist.htm). This limits the scope of reporting to those countries receiving water and sanitation ODA, and the number of such countries is expected to decrease going forward.  Water and sanitation-related activities and programmes include those for water supply, sanitation and hygiene (WASH) (targets 6.1, 6.2), wastewater and water quality (6.3), water efficiency (6.4), water resource management (6.5), and water-related ecosystems (6.6). As per target 6.a wording, it includes activities and programmes for water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.  A government coordinated spending plan is defined as a financing plan/budget for the water and sanitation sector, clearly assessing the available sources of finance and strategies for financing future needs.  **Comments and limitations:**  Data on water and sanitation-related ODA included in the government budget will be available by end-2016 with the current cycle of UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) data. Until then, total water and sanitation-related ODA (denominator) will be reported. Total water and sanitation-related ODA will continue to be reported as an additional indicator going forward.  In addition, the proportion of ODA channelled through the government treasury will be reported as an additional indicator. ODA channelled through treasury indicates a high level of cooperation and alignment between donors and national government in which the donors channel funds through the national budget process.  The OECD Creditor Reporting System (CRS) currently disaggregates ODA for the water and sanitation among several categories including: sector policy and administration, water resources protection, large and basic water and sanitation systems, river basin infrastructure, waste management, agricultural water resources, and education and training. While these categories do not align directly with the target areas of SDG 6 individually, which limits the disaggregation of ODA among the SDG target areas, the combined ODA from these categories does align with a majority of the reported ODA to the water sector.  As the numerator and denominator come from different sources, there is the possibility of different underlying assumptions regarding what should be included/excluded in the ODA figures. This could lead to situations in which the proportion of ODA included in government budget is greater than 1 (100%) if total ODA reported to OECD is lower than ODA reported to be included the budget. To guard against this possibility, the OECD will supply GLAAS with the reported ODA figures, broken down to the project level, so that respondents can match these with their on-budget project data.  ODA represents only one aspect of international cooperation. To capture other dimensions, additional supporting indicators are available, including indicators for the Collaborative Behaviours identified by the Sanitation and Water for All (SWA) partnership. Each behaviour has one or two key indicators for governments and for development partners. If the behaviours are jointly adapted by governments and development partners, long-term sector performance and sustainability would improve. For additional information on the Collaborative Behaviours see: http://sanitationandwaterforall.org/about/the-four-swa-collaborative-behaviours.  **Computation Method:**  The indicator is computed as the proportion of total water and sanitation-related ODA that is included in the government budget, i.e. the amount of water and sanitation-related ODA in the government budget divided by the total amount of water and sanitation-related ODA.  The numerator on water and sanitation-related ODA in the government budget will be obtained from the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) survey for the 2016-2017 cycle. The question on external funding collects data on the amount of donor funds that were included in government budget. Data for 2015 ODA disbursements through GLAAS will be available by end-2016. The scope of the question on external funding has been expanded beyond WASH for the 2016-17 cycle to address all targets under SDG 6, including wastewater and water quality, water efficiency, water resource management, and water-related ecosystems.  The denominator on total water and sanitation-related ODA disbursements will be obtained through OECD Creditor Reporting System (CRS) (purpose codes 14000-series for the water sector and purpose code 31140 for agricultural water resources). Data on ODA disbursements for 2015 will be made available through CRS in December 2016. |  | Ministries with responsibilities related to finance, water supply and sanitation, agriculture, water resources development and management, environment, and foreign affairs | ERD | ERD  Administrative Data | * subsector: basic system, large system | Annual | Group 1 | 1st Round:  2015  2nd Round:  January 2019  3rd Round:  June 2020  4th Round:  June 2021  5th Round:  June 2022 |  |
| Target 6.b: Support and strengthen the participation of local communities in improving water and sanitation management | | | | | | | | | | | | |
| 6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management | WHO,  OECD  **Partner Agencies:**  UNEP | Tier I | **Definition:**  The indicator assesses the percentage of local administrative units (as defined by the national government) that have an established and operational mechanism by which individuals and communities can meaningfully contribute to decisions and directions about water and sanitation management.  The indicator Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management is currently being measured by the Proportion of countries with clearly defined procedures in law or policy for participation by service users/communities in planning program in water and sanitation management, and hygiene promotion and the Proportion of countries with high level of users/communities participating in planning programs in water and sanitation management, and hygiene promotion.  **Concepts:**  Stakeholder participation is essential to ensure the sustainability of water and sanitation management options over time, e.g. the choice of appropriate solutions for a given social and economic context, and the full understanding of the impacts of a certain development decision. Defining the procedures in policy or law for the participation of local communities is vital to ensure needs of all the community is met, including the most vulnerable and also encourages ownership of schemes which in turn contributes to their sustainability.  Local administrative units refers to non-overlapping sub-districts, municipalities, communes, or other local community-level units covering both urban and rural areas to be defined by the government.  Policies and procedures for participation of local communities in water and sanitation management would define a formal mechanism to ensure participation of users in planning water and sanitation activities.  A policy or procedure is considered to be established if the mechanism for participation of local communities is defined in law or has been formally approved and published. It is considered to be operational if the policy or procedure is being implemented, with appropriate funding in place and with means for verifying that participation took place.  ‘Water and sanitation’ includes all areas of management related to each of the targets under SDG 6, namely: water supply (6.1), sanitation and hygiene (6.2), wastewater treatment and ambient water quality (6.3), efficiency and sustainable use (6.4), integrated water resources management (6.5) and water-related ecosystems (6.6).  **Comments and limitations:**  Data on local administrative units with established and operational policies and procedures for local participation is being collected through the current cycle of GLAAS, and will be available by end-2016. Until then, the presence of policies and procedures as reported at the national level for different subsectors will be reported.  Additional data, including data measuring local participation from the OECD Water Governance Indicators and administrative data, will be progressively included in the calculation of the indicator as they become available.  **Computation Method:**  The UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) questionnaire provides information on whether there are “clearly defined procedures in laws or policies for participation by service users (e.g. households) and communities in planning programs”. For countries that have data available from the local administrative unit level, they are asked to provide data on the number of local administrative units for which policies and procedures for local participation (i) exist, and (ii) are operational, as well as (iii) the number of local administrative units assessed, and (iv) the total number of units in the country. The indicator is computed as (ii) the number of local admin units with operation policies and procedures for local participation divided by (iv) the total number of local administrative units in the country.  Both numerator and denominator will be obtained through the GLAAS survey for the 2016-2017 cycle. | Survey | Ministries with responsibilities related to water supply and sanitation, agriculture, water resources development and management, and environment |  | DPHE, LGD | Not Applicable | Bi-annual | Group 2 | 1st Round:  January 2019  2nd Round:  January 2021  3rd Round:  January 2023  4th Round:  January 2025  5th Round:  January 2027 |  |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

|  |  |
| --- | --- |
|  | Ensure access to affordable, reliable, sustainable and modern energy for all |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier Classifi-cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency**  **of**  **data**  **generation** | **Local**  **Indicator**  **Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* | *11* | *12* | *13* |
| Target **7**.1: By 2030, ensure universal access to affordable, reliable and modern energy services | | | | | | | | | | | | |
| 7.1.1 Proportion ofpopulation with access to electricity | **World Bank**  **Partner Agencies:**  IEA,  UN-Energy | Tier I | **Definition:**  Proportion of population with access to electricity is the percentage of population with access to electricity.  **Concepts:**  Please see method of computation for more details.  **Comments and limitations:**  While the existing global household survey evidence base provides a good starting point for tracking household energy access, it also presents a number of limitations that will need to be addressed over time. In many parts of the world, the presence of an electricity connection in the household does not necessarily guarantee that the energy supplied is adequate in quality and reliability or affordable in cost and it would be desirable to have fuller information about these critical attributes of the service, which have been highlighted in SDG7.  Substantial progress has already been made toward developing and piloting a new methodology known as the Multi-Tier Framework for Measuring Energy Access (World Bank) which is able to capture these broader dimensions of service quality and would make it possible to go beyond a simple yes/no measure of energy access to a more refined approach that recognizes different levels of energy access, and also takes into account the affordability and reliability of energy access explicitly referenced in the language of SDG7. The methodology for the Multi-Tier Framework for Measuring Energy Access has already been published based on a broad consultative exercise and represents a consensus view across numerous international agencies working in the field. A first Global Energy Access Survey using this methodology has already been launched and is underway expecting to yield results by early 2017. Discussions are also progressing with the World Bank’s Household Survey Technical Working Group regarding the mainstreaming of this methodology into the standardized household questionnaire design that will be applied every three years in all low income countries between 2015 and 2030 as part of the broader SDG monitoring exercise.  The adoption of this methodology will allow – over time – the more refined measurement of energy access, making it possible to report more disaggregated information regarding the type of electricity supply (grid or off-grid), the capacity of electricity supply provided (in Watts), the duration of service (daily hours and evening hours), the reliability of service (in terms of number and length of unplanned service interruptions), the quality of service (in terms of voltage fluctuations), as well as affordability and legality of service.  Another advantage of this approach is that they can be applied not only to measuring energy access at the household level, but also its availability to support enterprises and deliver critical community services, such as health and education.  Methodological challenges associated with the measurement of energy access are more fully described the Global Tracking Framework (2013) (Chapter 2, Section 1, page 75-82), and in the ESMAP (2015) Report “Beyond Connections: Energy Access Redefined” both of which are referenced below.  **Computation Method:**  Given the low frequency and the regional distribution of some surveys, a number of countries have gaps in available data. To develop the historical evolution and starting point of electrification rates, a simple modelling approach was adopted to fill in the missing data points - around 1990, 2000, 2010 and 2012. This modelling approach allowed the estimation of electrification rates for 212 countries over these time periods. The SE4ALL Global Tracking Framework Report (2013) referenced below provides more details on the suggested methodology for tracking access to energy (Chapter 2, Section 1, page 82-87). | Household Survey/Census | National Statistical Offices | BBS  SVRS | BBS  SVRS/PHC/MICS | * geographical location: urban/ rural | Annual | Group 1 | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 |  |
| 7.1.2 Proportion of population with primary reliance on clean fuels and technology | WHO  **Partner Agencies:**  **UN-Energy** | Tier I | **Definition:**  Proportion of population with primary reliance on clean fuels and technology is calculated as the number of people using clean fuels and technologies for cooking, heating and lighting divided by total population reporting that any cooking, heating or lighting, expressed as percentage. “Clean” is defined by the emission rate targets and specific fuel recommendations (i.e. against unprocessed coal and kerosene) included in the normative guidance WHO guidelines for indoor air quality: household fuel combustion.  **Concepts:**  Current global data collection focuses on the primary fuel used for cooking, categorized as solid or non-solid fuels, where solid fuels are considered polluting and non-modern, while non-solid fuels are considered clean. This single measure captures a good part of the lack of access to clean cooking fuels, but fails to collect data on type of device or technology is used for cooking, and also fails to capture other polluting forms of energy use in the home such as those used for lighting and heating.  New evidence-based normative guidance from the WHO (i.e. WHO Guidelines for indoor air quality guidelines: household fuel combustion), highlights the importance of addressing both fuel and the technology for adequately protecting public health. These guidelines provide technical recommendations in the form of emissions targets for as to what fuels and technology (stove, lamp, and so on) combinations in the home are clean. These guidelines also recommend against the use of unprocessed coal and discourage the use kerosene (a non-solid but highly polluting fuel) in the home. They also recommend that all major household energy end uses (e.g. cooking, space heating, lighting) use efficient fuels and technology combinations to ensure health benefits.  For this reason, the technical recommendations in the WHO guidelines, access to modern cooking solution in the home will be defined as “access to clean fuels and technologies” rather than “access to non-solid fuels.” This shift will help ensure that health and other “nexus” benefits are better counted, and thus realized.  **Comments and limitations:**  The indicator uses the type of primary fuels and technologies used for cooking, heating, and lighting as a practical surrogate for estimating human exposure to household (indoor) air pollution and its related disease burden, as it is not currently possible to obtain nationally representative samples of indoor concentrations of criteria pollutants, such as fine particulate matter and carbon monoxide. However epidemiological studies provide a science-based evidence for establishing those estimates using these surrogates.  The indicator is based on the main type of fuel and technology used for cooking as cooking occupies the largest share of overall household energy needs. However, many households use more than one type of fuel and stove for cooking and, depending on climatic and geographical conditions, heating with polluting fuels can also be a contributor to household (indoor) air pollution levels. In addition, lighting with kerosene, a very polluting and hazardous fuel is also often used, and in some countries is the main fuel used for cooking.  While the existing global household survey evidence base provides a good starting point for tracking household energy access for cooking fuel, it also presents a number of limitations that will need to be addressed over time. Currently there is a limited amount of available data capturing the type of fuel and devices used in the home for heating and lighting. Accordingly WHO in cooperation with World Bank, and the Global Alliance for Clean Cook stoves, is leading a survey enhancement process with representatives from country statistical offices and national household surveying agencies (e.g. Demographic and Health Survey, Multiple Indicator Cluster Survey, Living Standards Measurement Survey) to better gather efficiently and harmoniously information on the fuels and technologies for cooking, heating and lighting. This process is currently in the piloting phase with expected rollout of the final household surveys questions (~6 questions in total) expected in the coming year. These few questions will replace and slightly expand the current set of questions commonly used on national multipurpose surveys to assess household energy.  Substantial progress has already been made toward developing and piloting a new methodology known as the Multi-Tier Framework for Measuring Energy Access (World Bank) which is able to capture the affordability and reliability of energy access explicitly referenced in the language of SDG7 and harnesses the normative guidance in the WHO guidelines to benchmark tiers of energy access. The methodology for the Multi-Tier Framework for Measuring Energy Access has already been published based on a broad consultative exercise and represents a consensus view across numerous international agencies working in the field. A first Global Energy Access Survey using this methodology has already been launched and is underway expecting to yield results by early 2017.  **Computation Method:**  The indicator is modelled with household survey data compiled by WHO. The information on cooking fuel use and cooking practices comes from about 800 nationally representative survey and censuses. Survey sources include Demographic and Health Surveys (DHS) and Living Standards Measurement Surveys (LSMS), Multi-Indicator Cluster Surveys (MICS), the World Health Survey (WHS), and other nationally developed and implemented surveys.  Estimates of primary cooking energy for the total, urban and rural population for a given year are obtained separately using a multilevel model. The model only accounts for regions, countries and time as a spline function, and estimates are restricted to values ranging from zero to one. More details on the model are published elsewhere (Bonjour et al, 2013).  Estimates for countries with no available surveys were obtained as follows:  When survey data is available for a country, the regional population- weighted mean is used to derive aggregate estimates at a regional or global level, however no country point estimate is given for that country is reported  Countries classified as high-income with a Gross National Income (GNI) of more than US$ 12,746.- per capita are assumed to have made a complete transition to using clean fuels and technologies as the primary domestic energy source for cooking and the primary reliance on polluting (unclean) fuels and technologies use is reported to be less than 5% and assumed as zero for regional and global estimates.  For estimating the fraction of the population relying on clean fuels and technologies for heating and lighting, the same methodology using survey data to derive country estimates for a particular year will be used using the same above mentioned assumptions. | Household Survey/Census | National Statistical Offices | BBS  SVRS | BBS  SVRS/PHC/ MICS | * end-use * geographical location: urban/ rural * sex: male/female * gender head of household: Male, Female, Transgender | Triennial | Group 1 | 1st Round:  2015  2nd Round:  December 2019  3rd Round:  December 2022  4th Round:  December 2025  5th Round:  December 2028 |  |
| Target 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix | | | | | | | | | | | | |
| 7.2.1 Renewable energy share in the total final energy consumption | UNSD,  IEA,  IRENA  **Partner Agencies:**  World Bank,  UN-Energy | Tier I | **Definition:**  The renewable energy share in total final consumption is the percentage of final consumption of energy that is derived from renewable resources.  **Concepts:**  Renewable energy consumption includes consumption of energy derived from: hydro, solid biofuels, wind, solar, liquid biofuels, biogas, geothermal, marine and waste. Total final energy consumption is calculated from national balances and statistics as total final consumption minus non-energy use.  Comments with regard to specific renewable energy resources:   * Solar energy consumption includes solar PV and solar thermal * Liquid biofuel energy consumption includes biogasoline, biodiesels and other liquid biofuels * Solid biofuel consumption includes fuelwood, animal waste, vegetable waste, black liquor, bagasse and charcoal * Waste energy covers energy from renewable municipal waste   **Comments and limitations:**   * A limitation with existing renewable energy statistics is that they are not able to distinguish whether renewable energy is being sustainably produced. For example, a substantial share of today’s renewable energy consumption comes from the use of wood and charcoal by households in the developing world, which sometimes may be associated with unsustainable forestry practices. There are efforts underway to improve the ability to measure the sustainability of bio-energy, although this remains a significant challenge. * Off-grid renewables data is limited and not sufficiently captured in the energy statistics * The method of allocation of renewable energy consumption from electricity and heat output assumes that the share of transmission and distribution losses are the same between all technologies. However, this is not always true because renewables are usually located in more remote areas from consumption centers and may incur larger losses. * Likewise, imports and exports of electricity and heat are assumed to follow the share of renewability of electricity and heat generation, respectively. This is a simplification that in many cases will not affect the indicator too much, but that might do so in some cases, for example, when a country only generates electricity from fossil fuels but imports a great share of the electricity it uses from a neighbouring country’s hydroelectric power plant. * Methodological challenges associated with defining and measuring renewable energy are more fully described the Global Tracking Framework (IEA and World Bank, 2013) Chapter 4, Section 1, page 194-200. Data for traditional use of solid biofuels are generally scares globally, and developing capacity in tracking such energy use, including developing national level surveys, is essential for sound global energy tracking.   **Computation Method:**  This indicator is based on the development of comprehensive energy statistics across supply and demand for all energy sources – statistics used to produce a national energy balance. Internationally agreed methodologies for energy statistics are described in the “International Recommendations on Energy Statistics” (IRES), adopted by the UN Statistical Commission, available at: <https://unstats.un.org/unsd/energy/ires/>.  Once a national energy balance is developed, the indicator can be calculated by dividing consumption of energy from all renewable sources by total final energy consumption. Renewable energy consumption is derived from three tables of the IEA world energy statistics and balances: total final consumption, electricity output and heat output. All volumes reported in the total final consumption table are taken as reported. Since volumes for electricity and heat in the final consumption table are not broken down by technology, electricity and heat output tables are used instead to break down final consumption of electricity and heat by technology. The allocation by technology is done by deriving the share of technology in electricity and heat output tables and multiplying that share by final energy consumption of electricity and heat, respectively. For instance, if total final consumption table reports 150 TJ for biogas energy, while total final consumption of electricity is 400 TJ and heat 100 TJ, and the share of biogas in total electricity output is 10 percent and 5 percent in heat, the total reported number for biogas consumption will be 195 TJ (150 TJ+400TJ\*10%+100TJ\*5%). The Global Tracking Framework Report (IEA and World Bank, 2013) provides more details on the suggested methodology for defining and measuring renewable energy (Chapter 4, Section 1, page 201-202). | Industry surveys or household surveys | National statistical office | SREDA, PD  Combination of Survey and Administrative Data | SREDA, PD  Combination of Survey and Administrative Data | * Solar Energy: Grid-Capacity/ Off-Grid Capacity * Consumption of Renewable Energy: Resource-Capacity/ End-Use Capacity | Annual | Group 1 | 1st Round:  2015  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 |  |
|  | Target 7.3 By 2030, double the global rate of improvement in energy efficiency | | | | | | | | | | | |
| 7.3.1 Energy intensity measured in terms of primary energy and GDP | **UNSD,**  **IEA**  **Partner Agencies:**  UN-Energy | Tier I | **Definition:**  Energy intensity is defined as the energy supplied to the economy pet unit value of economic output.  **Rationale:**  Energy intensity is an indication of how much energy is used to produce one unit of economic output. It is a proxy of the efficiency with which an economy is able to use energy to produce economic output. A lower ratio indicates that less energy is used to produce one unit of output.  **Concepts:**  Total energy supply, as defined by the International Recommendations for Energy Statistics (IRES), as made up of production plus net imports minus international marine and aviation bunkers plus-stock changes. Gross Domestic Product (GDP) is the measure of economic output. For international comparison purposes, GDP is measured in constant terms at purchasing power parity  **Comments and limitations:**  Energy intensity is only an imperfect proxy for energy efficiency. It can be affected by a number of factors, such as climate, structure of the economy, nature of economic activities etc. that are not necessarily linked to pure efficiency.  **Computation Method:**  This indicator is based on the development of comprehensive energy statistics across supply and demand for all energy sources – statistics used to produce a national energy balance. Internationally agreed methodologies for energy statistics are described in the “International Recommendations for Energy Statistics” (IRES), adopted by the UN Statistical Commission, available at: https://unstats.un.org/unsd/energy/ires/.  Once a national energy balance is developed, the indicator can be obtained by dividing total energy supply over GDP. | Energy balances | National statistical office | HCU, EMRD  Administrative Data | HCU, EMRD  Administrative Data | * Final Consumption Sector or end uses: Industry/Residential/ Transport/ Agriculture/ Households * Sectoral Level Energy Intensity: Categories not decided yet. * Type of Vehicle: Categories not decided yet. | Annual | Group 1 | 1st Round:  2016  2nd Round:  January 2019  3rd Round:  January 2020  4th Round:  January 2021  5th Round:  January 2022 |  |
|  | Target 7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology | | | | | | | | | | | |
| 7.a.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems | OECD,  IRENA  **Partner Agencies:**  IEA,  UN-Energy,  UNEP | Tier I | **Definition:**  The flows are covered through two complementary sources.  OECD: The flows covered by the OECD are defined as all official loans, grants and equity investments received by countries on the DAC List of ODA Recipients from foreign governments and multilateral agencies, for the purpose of clean energy research and development and renewable energy production, including in hybrid systems extracted from the OECD/DAC Creditor Reporting System (CRS) with the following sector codes:   * 23210 Energy generation, renewable sources – multiple technologies - Renewable energy generation programmes that cannot be attributed to one single technology (codes 23220 through 23280 below). Fuelwood/charcoal production should be included under forestry 31261. * 23220 Hydro-electric power plants - Including energy generating river barges. * 23230 Solar energy - Including photo-voltaic cells, solar thermal applications and solar heating. * 23240 Wind energy - Wind energy for water lifting and electric power generation. * 23250 Marine energy - Including ocean thermal energy conversion, tidal and wave power. * 23260 Geothermal energy - Use of geothermal energy for generating electric power or directly as heat for agriculture, etc. * 23270- Biofuel-fired power plants Use of solids and liquids produced from biomass for direct power generation. Also includes biogases from anaerobic fermentation (e.g. landfill gas, sewage sludge gas, fermentation of energy crops and manure) and thermal processes (also known as syngas); waste fired power plants making use of biodegradable municipal waste (household waste and waste from companies and public services that resembles household waste, collected at installations specifically designed for their disposal with recovery of combustible liquids, gases or heat). See code 23360 for non-renewable waste-fired power plants.   Research and development of energy efficiency technologies and measures is captured under CRS sector code 23182 on Energy research. The above flows also include technical assistance provided to support production, research and development as defined above.  IRENA: The flows covered by IRENA are defined as all additional loans, grants and equity investments received by developing countries (defined as countries in developing regions, as listed in the UN M49 composition of regions) from all foreign governments, multilateral agencies and additional development finance institutions (including export credits, where available) for the purpose of clean energy research and development and renewable energy production, including in hybrid systems. These additional flows cover the same technologies and other activities (research and development, technical assistance, etc.) as listed above and exclude all flows extracted from the OECD/DAC CRS.  **Concepts:**  The definition and classification of renewable technologies complies with the UN Standard International Energy Product Classification (SIEC). Definitions of other concepts are given above.  **Comments and limitations:**  Data in the Creditor Reporting System are available from 1973. However, the data coverage is considered complete since 1995 for commitments at an activity level and 2002 for disbursements. At present, flows to clean energy research and development are only partially covered by the database and a few other areas (e.g. off-grid electricity supply, investments in improved cookstove projects) may be covered only partially.  The IRENA database currently only covers financial institutions that have invested a total of USD 400 million or more in renewable energy. The process of continuous improvement of the database includes verifying the data against data produced by the multilateral development banks for climate finance reporting and by comparing the data with other independent reporting by international development finance agencies.  **Computation Method:**  The OECD flows are calculated by taking the total official flows (ODA and OOF) from DAC member countries, multilateral organisations and other providers of development assistance to the sectors listed above. The IRENA (additional) flows are calculated by taking the total public investment flows from IRENA’s Public Renewable Energy Investment Database and excluding: domestic financial flows; international flows to countries outside developing regions; and flows reported by OECD (as described above). The flows are measured in current United States Dollars (USD). | Official and private resource flows | National administration | ERD  Administrative Data | ERD  Adminis  trative  Data | * Data in IRENA: type of technology of financial flow: bio-energy, geothermal energy, hydropower, ocean energy, solar energy, and wind energy * Data in IRENA: country: source country, recipient country * Data in IRENA: type of recipient: * Data in IRENA: geographical location: country, region * Data in IRENA: type of financial instrument * Data in CRS: type of flow: ODA, OOF * Data in CRS: donor country * Data in CRS: recipient country * Data in CRS: type of finance * Data in CRS: type of aid: project, agriculture sub-sector | Annual | Group 1 | 1st Round:  2016  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 | Data availability reviewed in Oct. 2019  (classified as Tier I)  Reviewed at 6th IAEG-SDG meeting (classified as Tier II)  UNSC 48 refinement, Reviewed at 5th IAEG-SDG meeting: Internationally agreed methodology and standard needs to be developed (classified as TBD) |
|  | Target 7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support | | | | | | | | | | | |
| 7.b.1 Installed renewable electricity generating capacity in developing countries (in watts per capita) | International Renewable Energy Agency (IRENA) | TBD | **Definition:**  The indicator is defined as the installed capacity of power plants that generate electricity from renewable energy sources divided by the total population of a country. Capacity is defined as the net maximum electrical capacity installed at the year-end and renewable energy sources are as defined in the IRENA Statute (see concepts below).  **Concepts:**  Electricity capacity is defined in the International Recommendations for Energy Statistics or IRES (UN, 2018) as the maximum active power that can be supplied continuously (i.e., throughout a prolonged period in a day with the whole plant running) at the point of outlet (i.e., after taking the power supplies for the station auxiliaries and allowing for the losses in those transformers considered integral to the station). This assumes no restriction of interconnection to the network. It does not include overload capacity that can only be sustained for a short period of time (e.g., internal combustion engines momentarily running above their rated capacity).    The IRENA Statute defines renewable energy to include energy from the following sources: hydropower; marine energy (ocean, tidal and wave energy); wind energy; solar energy (photovoltaic and thermal energy); bioenergy; and geothermal energy.    **Comments and limitations:**  At present, electricity only accounts for about one-quarter of total energy use in the World and an even lower share of energy use in most developing countries. The focus of this indicator on electricity capacity does not capture any trends in the modernisation of technologies used to produce heat or provide energy for transport.    However, with the growing trend towards electrification of energy end-uses, the focus here on electricity may become less of a weakness in the future and may also serve as a general indicator of the progress towards greater electrification in developing counties. That, in itself, should be seen as a shift towards the use of more modern technology to deliver sustainable energy services.    Furthermore, as reflected in many national policies, plans and targets, increasing the production of electricity and, in particular, renewable electricity, is seen by many countries as a first priority in their transition to the delivery of more modern and sustainable energy services. Thus, this indicator is a useful first-step towards measuring overall progress on this target that reflects country priorities and can be used until other additional or better indicators can be developed.    **Computation Method:**  For each country and year, the renewable electricity generating capacity at the end of the year is divided by the total population of the country in that year. | IRENA’s annual questionnaire cycle | National Statistical Offices and National Energy Agencies of Ministries |  | a) SREDA, PD  Administrative Data | * by technology (solar, hydro, wind, etc.) * by on-grid and off-grid capacity | Annual |  | 1st Round:  July 2019  2nd Round:  July 2020  3rd Round:  July 2021  4th Round:  July 2022  5th Round:  July 2023 | UNSC 51 replacement included in the 2020 comprehensive review  [ Repeated 12.a.1 ] |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

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|  | Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier Classifi-cations** | Definition, Concept, Computation Methods and formula | **UN**  **Suggested activities of data generation** | **UN**  **Suggested**  **data**  **provider** | **Recent**  **Available**  **Data**  **Sources** | **Possible**  **future**  **Sources** | **Minimum**  **Disaggregation**  **Dimensions**  **and Categories** | **Frequency**  **of data**  **generation** | **Local**  **Indicator Group** | **Deadline**  **for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
| Target 8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries | | | | | | | | | | | | |
| 8.1.1 Annual growth rate of real GDP per capita | UNSD  **Partner Agencies:**  World Bank | Tier I | **Definition:**  Annual growth rate of real Gross Domestic Product (GDP) per capita is calculated as the percentage change in the real GDP per capita between two consecutive years. Real GDP per capita is calculated by dividing GDP at constant prices by the population of a country or area. The data for real GDP are measured in constant US dollars to facilitate the calculation of regional and global aggregates.  **Concepts:**  GDP measures the monetary value of final goods and services produced in an economic territory/country in a given period of time (say a quarter or a year). It is calculated without making deductions for depreciation of produced assets or for depletion and degradation of natural resources. GDP can be measured using the expenditure approach as the sum of expenditure on final consumption plus gross capital formation plus exports less imports, the production approach as the value of output less intermediate consumption plus any taxes less subsidies on products not already included in the value of output, or the income approach as compensation of employees plus gross operating surplus plus gross mixed incomes plus taxes less subsidies on both production and imports.  **Comments and limitations:**  Although countries or areas calculate GDP using the common principles and recommendations in the United Nations System of National Accounts (SNA), there are still problems in international comparability of GDP estimates. These include:  Different versions of the SNA (for example, 1968, 1993 or 2008) countries or areas use in calculating their GDP estimates  Different degree of coverage of informal and non-observed economic activities in the GDP estimates  Further, as a necessary condition to being a key economic performance indicator of sustainable development, one of the often-cited limitations of GDP is that it does not account for the social and  environmental costs of production. It is designed as a measure of the level of overall well-being. For example, growth in real GDP per capita reveals nothing concerning energy and material interactions with the environment.  **Computation Method:**  The annual growth rate of real Gross Domestic Product (GDP) per capita is calculated as follows:  Convert annual real GDP in domestic currency at 2010 prices for a country or area to US dollars at 2010 prices using the 2010 exchange rates.  Divide the result by the population of the country or area to obtain annual real GDP per capita in constant US dollars at 2010 prices.    Calculate the annual growth rate of real GDP per capita in year t+ 1 using the following formula: [(G(t+1) – G(t))/G(t)] x 100, where G(t+1) is real GDP per capita in 2010 US dollars in year t+1 and G(t) is real GDP per capita in 2010 US dollars in year t. | Official national accounts estimate | National statistics offices, central banks or national agencies responsible for compiling official national accounts estimates for a country or area | BBS,  NAW | BBS,  NAW  Data | * By Region: Division | Annual | Group 1 | 1st Round: 2015  2nd Round: December 2019  3rd Round:  December 2020  4th Round:  December 2021  5th Round:  December 2022 |  |
| Target 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors | | | | | | | | | | | | |
| 8.2.1 Annual growth rate of real GDP per employed person | ILO  **Partner Agencies:**  UNSD,  World Bank | Tier I | **Definition:**  Annual growth rate of real GDP per employed person conveys the annual percentage change in real Gross Domestic Product per employed person.  **Concepts:**  Gross Domestic Product (GDP): It is the main measure of national output, representing the total value of all final goods and services within the System of National Accounts (SNA) production boundary produced in a particular economy (that is, the dollar value of all goods and services within the SNA production boundary produced within a country’s borders in a given year). According to the SNA, “GDP is the sum of gross value added of all resident producer units plus that part (possibly the total) of taxes on products, less subsidies on products, that is not included in the valuation of output … GDP is also equal to the sum of the final uses of goods and services (all uses except intermediate consumption) measured at purchasers’ prices, less the value of imports of goods and services GDP is also equal to the sum of primary incomes distributed by resident producer units.”  Real Gross Domestic Product (GDP): Real GDP refers to GDP calculated at constant prices, that is, the volume level of GDP, excluding the effect of inflation and favouring comparisons of quantities beyond price changes. Constant price estimates of GDP are calculated by expressing values in terms of a base period. In theory, the price and quantity components of a value are identified and the price in the base period is substituted for that in the current period.  Employed persons: Persons of working age (usually defined as persons aged 15 and above) who, during a short reference period such as a day or a week, performed work for others in exchange for pay or profit (as stated in the *Resolution concerning statistics of work, employment and labour underutilization* adopted by the 19th International Conference of Labour Statisticians.  **Comments and limitations:**  Output measures are obtained from national accounts and represent, as much as possible, GDP at market prices for the aggregate economy. However, despite common principles that are mostly based on the United Nations System of National Accounts, there are still significant problems in international consistency of national accounts estimates, based on factors such as differences in the treatment of output in services sectors, differences in methods used to correct output measures for price changes (in particular, the use of different weighting systems to obtain deflators) and differences in the degree of coverage of informal economic activities.  Data on employment used in the denominator of this indicator refer, as much as possible, to the average number of persons with one or more paid jobs during the year. That is, the reliability of the employment data is also dependent on the degree of coverage of informal activities by the statistical source used.  **Computation Method:**  The numerator and denominator of the equation above should refer to the same reference period, for example, the same calendar year.  If we call the real GDP per employed person “LabProd”, then the annual growth rate of real GDP per employed person is calculated as follows: | Production side of national accounts and household survey | Mainly National Statistical Offices, in some cases Labour Ministries or other related agencies. | ILO | a)BBS,  NAW/QLFS  b) ILO | * Sex: male/female * Legality of employment: formal, informal   Economic sector: agriculture, industry, | Annual | Group 1 | 1st Round: 2015  2nd Round: December 2019  3rd Round:  December 2020  4th Round:  December 2021  5th Round:  December 2022 |  |
| Target 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services | | | | | | | | | | | | |
| 8.3.1 Proportion of informal employment in total employment, by sector and sex | ILO | Tier II | **Definition:**  This indicator presents the share of non-agricultural employment which is classified as informal employment.  **Rationale:**  Informal employment offers a necessary survival strategy in countries that lack social safety nets, such as unemployment insurance, or where wages and pensions are low, especially in the public sector. In these situations, indicators such as the unemployment rate and time-related underemployment are not sufficient to describe the labour market completely. Statistics on informality are key to assessing the quality of employment in an economy, and are relevant to developing and developed countries alike (ILOSTAT indicator description for informality, available at <http://www.ilo.org/ilostatfiles/Documents/description_IFL_EN.pdf>).  **Concepts:**  Employment comprises all persons of working age who during a specified brief period, such as one week or one day, performed work for others in exchange for pay or profit.  Informal employment comprises persons who in their main or secondary jobs were in one of the following categories:  - Own-account workers, employers and members of producers’ cooperatives employed in their own informal sector enterprises (the characteristics of the enterprise determine the informal nature of their jobs);  - Own-account workers engaged in the production of goods exclusively for own final use by their household (e.g. subsistence farming);  - Contributing family workers, regardless of whether they work in formal or informal sector enterprises (they usually do not have explicit, written contracts of employment, and are not subject to labour legislation, social security regulations, collective agreements, etc., which determines the informal nature of their jobs);  - Employees holding informal jobs, whether employed by formal sector enterprises, informal sector enterprises, or as paid domestic workers by households (employees are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits).  An enterprise belongs to the informal sector if it fulfils the three following conditions:  - It is an unincorporated enterprise (it is not constituted as a legal entity separate from its owners, and it is owned and controlled by one or more members of one or more households, and it is not a quasi-corporation: it does not have a complete set of accounts, including balance sheets);  - It is a market enterprise (it sells at least some of the goods or services it produces);  - The enterprise is not registered or the employees of the enterprise are not registered or the number of persons engaged on a continuous basis is below a threshold determined by the country.  **Comments and limitations:**  The considerable heterogeneity of definitions and operational criteria used by countries to measure informal employment greatly hinders the international comparability of statistics on informality.  Also, the scope of this indicator is limited to non-agriculture. However, to have a comprehensive picture of the importance of informality in the economy and to better understand its patterns, statistics on informal employment should be produced and analysed for both agricultural and non-agricultural activities.  **Computation Method:** | Survey | National statistical office | BBS, QLFS | BBS, QLFS | * Sex: male/femal   Type of employment | Triennial | Group 1 | 1st Round:  2016  2nd Round:  December 2019  3rd Round:  December 2022  4th Round:  December 2025  5th Round:  December 2028 | UNSC 51 revision included in the 2020 comprehensive review |
| Target 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10‑Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead | | | | | | | | | | | | |
| 8.4.1 Material footprint, material footprint per capita, and material footprint per GDP | UNEP  **Partner Agencies:**  OECD | Tier II | **Definition:**  Material Footprint (MF) is the attribution of global material extraction to domestic final demand of a country. The total material footprint is the sum of the material footprint for biomass, fossil fuels, metal ores and non-metal ores.  **Concepts:**  Domestic Material Consumption (DMC) and MF need to be looked at in combination as they cover the two aspects of the economy, production and consumption. The DMC reports the actual amount of material in an economy, MF the virtual amount required across the whole supply chain to service final demand. A country can, for instance have a very high DMC because it has a large primary production sector for export or a very low DMC because it has outsourced most of the material intensive industrial process to other countries. The material footprint corrects for both phenomena.  **Comments and limitations:**  The global material flows database is based on country material flow accounts from the European Union and Japan and estimated data for the rest of the world.  **Computation Method:**  It is calculated as raw material equivalent of imports (RMEIM) plus domestic extraction (DE) minus raw material equivalents of exports (RMEEX). For the attribution of the primary material needs of final demand a global, multi-regional input-output (MRIO) framework is employed. The attribution method based on I-O analytical tools is described in detail in Wiedmann et al. 2015. It is based on the EORA MRIO framework developed by the University of Sydney, Australia (Lenzen et al. 2013) which is an internationally well-established and the most detailed and reliable MRIO framework available to date. | The IRP Global Material Flows and Resource Productivity working group compiles the data from countries and from other sources. | National statistical office |  | BBS, NAW | * four main material categories * economic sector   type of domestic final demand sector: household | Annual | Group 2 | 1st Round:  Decembe r 2020  2nd Round:  Decembe r 2021  3rd Round:  Decembe r 2022  4th Round:  Decembe r 2023  5th Round:  Decembe r 2024 | Reviewed at 9th IAEG-SDG meeting. Agreed methodology only at global level. Not for country level monitoring (classified as Tier II)  Reviewed at Jan. 2019 WebEx meeting: request UNEP to do additional methodological work and await approval as international standard before indicator  reclassified. (classified as TBD)  IAEG-SDG 3rd meeting: There is no established methodology for the indicator (classified as TBD)  [ Repeated 12.2.1 ] |
| 8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP | UNEP  **Partner Agencies:**  OECD | Tier I | **Definition:**  Domestic Material Consumption (DMC) is a standard material flow accounting (MFA) indicator and reports the apparent consumption of materials in a national economy.  **Concepts:**  Domestic Material Consumption (DMC) and MF need to be looked at in combination as they cover the two aspects of the economy, production and consumption. The DMC reports the actual amount of material in an economy, MF the virtual amount required across the whole supply chain to service final demand. A country can, for instance have a very high DMC because it has a large primary production sector for export or a very low DMC because it has outsourced most of the material intensive industrial process to other countries. The material footprint corrects for both phenomena.  **Comments and limitations:**  DMC cannot be disaggregated to economic sectors which limits its potential to become a satellite account to the System of National Accounts (SNA).  **Computation Method:**  It is calculated as direct imports (IM) of material plus domestic extraction (DE) of materials minus direct exports (EX) of materials measured in metric tonnes. DMC measure the amount of materials that are used in economic processes. It does not include materials that are mobilized the process of domestic extraction but do not enter the economic process. DMC is based on official economic statistics and it requires some modelling to adapt the source data to the methodological requirements of the MFA. The accounting standard and accounting methods are set out in the EUROSTAT guidebooks for MFA accounts in the latest edition of 2013. MFA accounting is also part of the central framework of the System of integrated Environmental-Economic Accounts (SEEA). | The IRP Global Material Flows and Resource Productivity working group compiles the data from countries and from other sources | National statistical office |  | BBS, NAW | * material follow categories: biomass, fossil fuels, metal ores, non-metallic minerals at highest disaggregation level; DMC: 11 categories; DE: 44 categories   trade flows: imports, exports, domestic extraction | Annual | Group 2 | 1st Round:  Decembe r 2020  2nd Round:  Decembe r 2021  3rd Round:  Decembe r 2022  4th Round:  Decembe r 2023  5th Round:  Decembe r 2024 | Data availability reviewed in Nov. 2017 (classified as Tier I)  Repeated 12.2.2 |
| Target 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value | | | | | | | | | | | | |
| 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities | ILO | Tier II | **Definition:**  This indicator provides information on the mean hourly earnings from paid employment of employees by sex, occupation, age and disability status.  **Concepts:**  Earnings refer to the gross remuneration in cash or in kind paid to employees, as a rule at regular intervals, for time worked or work done together with remuneration for time not worked, such as annual vacation, other type of paid leave or holidays. Earnings exclude employers’ contributions in respect of their employees paid to social security and pension schemes and also the benefits received by employees under these schemes. Earnings also exclude severance and termination pay.  For international comparability purposes, statistics of earnings used relate to employees’ gross remuneration, i.e. the total before any deductions are made by the employer in respect of taxes, contributions of employees to social security and pension schemes, life insurance premiums, union dues and other obligations of employees.  As stated in the indicator title, data on earnings should be presented on the basis of the arithmetic average of the hourly earnings of all employees.  **Comments and limitations:**  The variety of possible sources for statistics on earnings greatly hinders international comparability, as each type of source has its own coverage, scope and characteristics. It would not be fully accurate to compare, for example, hourly earnings from a labour force survey for one country with hourly earnings from an establishment survey for another.  The use of non-standard definitions and the heterogeneity of operational criteria applied further hamper cross-country comparisons.  **Computation Method:**  Statistics on average hourly earnings by sex can be used to calculate the gender pay gap, as follows:  Gender pay gap= (〖Average hourly earnings〗\_Men- 〖Average hourly earnings〗\_Women)/〖Average hourly earnings〗\_Men x 100 | Household Survey | Mainly National Statistical Offices, and in some cases Labour Ministries or other related agencies | BBS, LFS | BBS, QLFS | * Sex: Female, Male, Both * Occupation: ICSO Classification * Disability   Age | Triennial | Group 1 | 1st Round:  2016  2nd Round:  Decembe r 2020  3rd Round:  Decembe r 2023  4th Round:  Decembe r 2026  5th Round:  Decembe r 2029 |  |
| 8.5.2 Unemployment rate, by sex, age and persons with disabilities | ILO | Tier I | **Definition:**  The unemployment rate conveys the percentage of persons in the labour force who are unemployed.  **Rationale:**  The unemployment rate is a useful measure of the underutilization of the labour supply. It reflects the inability of an economy to generate employment for those persons who want to work but are not doing so, even though they are available for employment and actively seeking work. It is thus seen as an indicator of the efficiency and effectiveness of an economy to absorb its labour force and of the performance of the labour market. Short-term time series of the unemployment rate can be used to signal changes in the business cycle; upward movements in the indicator often coincide with recessionary periods or in some cases with the beginning of an expansionary period as persons previously not in the labour market begin to test conditions through an active job search.  **Concepts:**  Persons in unemployment are defined as all those of working age (usually persons aged 15 and above) who were not in employment, carried out activities to seek employment during a specified recent period and were currently available to take up employment given a job opportunity, where: (a) “not in employment” is assessed with respect to the short reference period for the measurement of employment; (b) to “seek employment” refers to any activity when carried out, during a specified recent period comprising the last four weeks or one month, for the purpose of finding a job or setting up a business or agricultural undertaking; (c) the point when the enterprise starts to exist should be used to distinguish between search activities aimed at setting up a business and the work activity itself, as evidenced by the enterprise’s registration to operate or by when financial resources become available, the necessary infrastructure or materials are in place or the first client or order is received, depending on the context; (d) “currently available” serves as a test of readiness to start a job in the present, assessed with respect to a short reference period comprising that used to measure employment (depending on national circumstances, the reference period may be extended to include a short subsequent period not exceeding two weeks in total, so as to ensure adequate coverage of unemployment situations among different population groups).  Persons in employment are defined as all those of working age (usually persons aged 15 and above) who, during a short reference period such as one week or one day, performed work for others in exchange for pay or profit.  The labour force corresponds to the sum of persons in employment and in unemployment  For more information on the definitions of employment and unemployment refer to the Resolution concerning statistics of work, employment and labour underutilization Adopted by the 19th International Conference of Labour Statisticians.  **Comments and limitations:**  Even though in most developed countries the unemployment rate continues to prove its usefulness as an important indicator of labour market performance, and specifically, as a key measure of labour underutilisation, in many developing countries, however, the significance and meaning of the unemployment rate could be questioned. In the absence of unemployment insurance systems or social safety nets, persons of working age must avoid unemployment, resorting to engaging in some form of economic activity, however insignificant or inadequate. Thus, in this context, other measures should supplement the unemployment rate to comprehensively assess labour underutilization.  Methodology  **Computation Method:** | Household Survey | Mainly National Statistical Offices, and in some cases Labour Ministries or other related agencies | BBS, LFS | BBS, QLFS/PHC | * sex: female, male, both * age: 15-24, 15 and older, 25 and older * disability: Disable/ Non Disable | Triennial | Group 1 | 1st Round:  2016  2nd Round:  Decembe r 2020  3rd Round:  Decembe r 2023  4th Round:  Decembe r 2026  5th Round:  Decembe r 2029 |  |
| Target 8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training | | | | | | | | | | | | |
| 8.6.1 Proportion of youth (aged 15–24 years) not in education, employment or training | ILO | Tier I | **Definition:**  This indicator conveys the proportion of youth (aged 15-24 years) not in education, employment or training (also known as "the youth NEET rate").  **Rationale:**  The share of youth not in employment, education or training (youth NEET rate) provides a measure of youth who are outside the educational system, not in training and not in employment, and thus serves as a broader measure of potential youth labour market entrants than youth unemployment. It includes discouraged worker youth as well as those who are outside the labour force due to disability and engagement in household chores, among other reasons. NEET is also a better measure of the current universe of potential youth labour market entrants as compared with the youth inactivity rate, as the latter includes those youth who are outside the labour force and are in education, and thus are furthering their skills and qualifications.  **Concepts:**  For the purposes of this indicator, youth is defined as all persons between the ages of 15 and 24 (inclusive).  According to the International Standard Classification of Education (ISCED), education is defined as organized and sustained communication designed to bring about learning. Formal education is defined in ISCED as education that is institutionalized, intentional, and planned through public organizations and recognized private bodies and, in their totality, make up the formal education system of a country.  Non-formal education, like formal education is defined in ISCED as education that is institutionalized, intentional and planned by an education provider but is considered an addition, alternative and/or a complement to formal education. It may be short in duration and/or low in intensity and it is typically provided in the form of short courses, workshops or seminars. Informal learning is defined in ISCED as forms of learning that are intentional or deliberate, but not institutionalized. It is thus less organized and less structured than either formal or non-formal education. Informal learning may include learning activities that occur in the family, in the work place, in the local community, and in daily life, on a self-directed, family-directed or socially-directed basis. For the purposes of this indicator, persons will be considered in education if they are in formal or non-formal education, as described above, but excluding informal learning.  Persons in employment are defined as all those who, during a short reference period, such as one week or one day, performed work for others in exchange for pay or profit.  For the purposes of this indicator, persons are considered to be in training if they are in a non-academic learning activity through which they acquire specific skills intended for vocational or technical jobs.  Vocational training prepares trainees for jobs that are based on manual or practical activities, and for skilled operative jobs, both blue and white collar related to a specific trade, occupation or vocation. Technical training on the other hand imparts learning that can be applied in intermediate-level jobs, in particular those of technicians and middle managers. The coverage of vocational and technical training includes only programmes that are solely school-based vocational and technical training. Employer-based training is, by definition, excluded from the scope of this indicator.  **Comments and limitations:**  The calculation of this indicator requires to have reliable information on both the labour market status and the participation in education or training of young persons. The quality of such information is heavily dependent on the questionnaire design, the sample size and design and the accuracy of respondents' answers.  In terms of the analysis of the indicator, in order to avoid misinterpreting it, it is important to bear in mind that it is composed of two different sub-groups (unemployed youth not in education or training and youth outside the labour force not in education or training). The prevalence and composition of each sub-group would have policy implications, and thus, should also be considered when analysing the NEET rate.  **Computation Method:**  It is important to note here that youth simultaneously in employment and education or training should not be double counted when subtracted from the total number of youth.  The formula can also be expressed as: | Household-based labour force survey | National Statistical Office | BBS, LFS | BBS, QLFS/PHC | * Age: 15-24   Sex: female, male, both | Triennial | Group 1 | 1st Round:  2016  2nd Round:  Decembe r 2019  3rd Round:  Decembe r 2022  4th Round:  Decembe r 2025  5th Round:  Decembe r 2028 |  |
| Target 8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms | | | | | | | | | | | | |
| 8.7.1 Proportion and number of children aged 5–17 years engaged in child labour, by sex and age | ILO,  UNICEF | Tier II | **Definition:**  The number of children engaged in child labour corresponds to the number of children reported to be in child labour during the reference period (usually the week prior to the survey). The proportion of children in child labour is calculated as the number of children in child labour divided by the total number of children in the population. For the purposes of this indicator, children include all persons aged 5 to 17. This indicator is disaggregated by sex and age group (age bands 5-14 and 15-17)  **Concepts:**  The term **child labour** refers to the subset of children’s activities that is injurious, negative or undesirable to children and that should be targeted for elimination. Child labour is a legal concept rather than a statistical one, and the international legal standards that define it are therefore the necessary frame of reference for child labour statistics. The three principal international conventions on child labour – ILO Convention No. 138 (Minimum Age) (C138), ILO Convention No. 182 (Worst Forms) (C182), and the United Nations Convention on the Rights of the Child (CRC), together set the legal boundaries for child labour, and provide the legal basis for national and international actions against it.  In December 2008, the International Conference of Labour Statisticians (ICLS) adopted the Resolution concerning statistics of child labour. This Resolution helps in translating the legal standards governing child labour into statistical terms. In particular, the Resolution is designed to set standards for the collection, compilation and analysis of national child labour statistics, and to guide countries in updating their existing statistical system in this field.  In accordance with the Resolution, and on the basis of the production boundary set by the United Nations System of National Accounts (SNA), child labour is defined for measurement purposes to include all persons aged 5 to 17 years who are engaged in one or more of the following activities during a specified time period:  • hazardous work (18th ICLS, paragraphs 21 to 32);  • worst forms of child labour other than hazardous work (18th ICLS, paragraphs 33 to 34); and  • employment below the minimum working age, excluding, where applicable, “light work”, performed by children aged not less than 12 or 1Triennial (18th ICLS, paragraphs 35 to 37).  If, depending upon national policies and circumstances, the general production boundary rather than the SNA production boundary is used for measuring productive activities by children, child labour will include, in addition to these three categories, hazardous unpaid household services. For the sake of clarity, child labour estimated on this basis should be called “child labour (general production boundary basis)”.  The measurement methodology used by the ILO in its global estimates on child labour, building on the ICLS statistical definition, classifies child labour on the basis of the following criteria:  • Ages 5 to 11: at least 1 hour of economic activity per week;  • Ages 12 to 14: at least 14 hour of economic activity per week in all forms of economic activity except permissible “light” work, where light work is operationally defined as economic activity that (i) does not exceed 14 hours per week and that (ii) is not hazardous in nature; and  • Ages 15 to 17: work in designated hazardous industries, or in designated hazardous occupations, or for long hours. Long hours are defined as 43 or more hours during the reference week.  Comments and limitations:  Child labour estimates based on the statistical standards set out in the ICLS resolution represent useful benchmarks for international comparative purposes but are not necessarily consistent with estimates based on national child labour legislation. ILO Convention No. 138 contains a number of flexibility clauses left to the discretion of the competent national authority in consultation (where relevant) with workers’ and employers’ organizations (e.g., minimum ages, scope of application). This means that there is no single legal definition of child labour across countries, and thus, no single statistical measure of child labour consistent with national legislation across countries.  **Computation Method:**  Children aged 5-17: Number of children aged 5-17 reported in child labour during the week prior to the survey divided by the total number of children aged 5-17 in the population, multiplied by 100.  Children aged 5-14: Number of children aged 5-14 reported in child labour during the week prior to the survey divided by the total number of children aged 5-14 in the population, multiplied by 100.  Children aged 15-17: Number of children aged 15-17 reported child labour during the week prior to the survey divided by the total number of children aged 15-17 in the population, multiplied by 100. | Household survey  Labour Force Survey | National Statistical Offices (for the most part) and line ministries/other government agencies and International agencies that have conducted labour force surveys or other household surveys through which data on child labour were collected. | Child Labour Survey | BBS  QLFS/Child Labour Survey/PHC | * Sex: male/female * Age: 5-17, 5-14 | Triennial | Group 1 | 1st Round:  2013  2nd Round:  July 2019  3rd Round: July 2022  4th Round: July 2025  5th Round: July 2028 | Data availability reviewed in Nov. 2017 (classified as Tier II) |
| Target 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment | | | | | | | | | | | | |
| 8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status | ILO | Tier II | Definition:  The frequency rates of fatal and non-fatal occupational injuries provide information on the number of cases of fatal and non-fatal occupational injury per hours worked by the concerned population during the reference period. It is a measure of the risk of having a fatal or a non-fatal occupational injury based on the duration of exposure to adverse work-related factors.  The incidence rates of fatal and non-fatal occupational injuries provide information on the number of cases of fatal and non-fatal occupational injury per workers in the reference group during the reference period. It is a measure of the personal likelihood of the workers in the reference group of suffering from work-related injuries.  For the purposes of international reporting on the SDG indicators, incidence rates are used, even though the indicator title of 8.8.1 calls for the use of frequency rates, as common practices around the world and data availability favour incidence rates.  Concepts:  Definitions of the main concepts presented below are derived from the Resolution concerning statistics of occupational injuries (resulting from occupational accidents), adopted by the 16th ICLS in 1998  (http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-byinternational-conferences-of-labour-statisticians/WCMS\_087528/lang--en/index.htm).  Occupational accident: an unexpected and unplanned occurrence, including acts of violence, arising out of or in connection with work which results in one or more workers incurring a personal injury, disease or death. Occupational accidents are to be considered travel, transport or road traffic accidents in which workers are injured and which arise out of or in the course of work; that is, while engaged in an economic activity, or at work, or carrying out the business of the employer.  Occupational injury: any personal injury, disease or death resulting from an occupational accident. An occupational injury is different from an occupational disease, which comes as a result of an exposure over a period of time to risk factors linked to the work activity. Diseases are included only in cases where the disease arose as a direct result of an accident. An occupational injury can be fatal or non-fatal (and non-fatal injuries could entail the loss of work days).  Fatal occupational injury: an occupational injury leading to death within one year of the day of the occupational accident.  Case of occupational injury: the case of one worker incurring one or more occupational injuries as a result of one occupational accident.  Workers in the reference group: workers in the reference group refer to the average number of workers in the particular group under consideration and who are covered by the source of the statistics on occupational injuries (for example, those of a specific sex or in a specific economic activity, occupation, region, age group, or any combination of these, or those covered by a particular insurance scheme, accident notification systems, or household or establishment survey).  Comments and limitations:  There may be problems of under reporting of occupational injuries, and proper systems should be put in place to ensure the best reporting and data quality. Under reporting is thought to be present in countries at all levels of development, but may be particularly problematic in some developing countries. Data users should be aware of this issue when analysing the data.  Double-counting of cases of occupational injury may also happen in cases where data from several registries (records kept by different agencies, for example) are consolidated to have more comprehensive statistics.  Because data quality issues may be present, it may be more relevant to analyse indicator trends rather than levels. When measured over a period of time, the data can reveal progress or deterioration in occupational safety and health, and thus point to the effectiveness of prevention measures. This indicator is volatile and strong annual fluctuations may occur due to unexpected but significant accidents or national calamities. The underlying trend should therefore be analysed.  Computation Method:  The frequency and incidence rates of fatal and non-fatal occupational injuries will be calculated separately, since statistics on fatal injuries tend to come from a different source than those on non-fatal injuries, which would make their sum into total occupational accidents inaccurate.  The fatal occupational injury frequency rate is expressed per 1’000’000 hours worked by the workers in the reference group. Thus, it is calculated as follows:  Fatal occupational injury frequency rate = (New cases of fatal injury during the reference year)/(total number of hours worked by workers in the reference group during the reference year) ×1'000'000  Similarly, the non-fatal occupational injury frequency rate is calculated as follows:  Non fatal occupational injury frequency rate = (New cases of non fatal injury during the reference year)/(total number of hours worked by workers in the reference group during the reference year) ×1'000'000  Ideally, the denominator should be the number of hours actually worked by workers in the reference group. When this is not possible, the denominator can be calculated on the basis of normal hours of work taking into account entitlements to periods of paid absence from work, such as paid vacations, paid sick leave and public holidays.  If the data needed to calculate frequency rates is not available, incidence rates may be calculated instead. Indeed, incidence rates are used for the purposes of international reporting on this indicator rather than frequency rates.  The fatal occupational injury incidence rate is expressed per 100’000 workers in the reference group, and thus, is calculated as follows:  Fatal occupational injury incidence rate = (New cases of fatal injury during the reference year)/(Workers in the reference group during the reference year) ×100'000  Similarly, the non-fatal occupational injury incidence rate is calculated as follows:  Non fatal occupational injury incidence rate = (New cases of non fatal injury during the reference year)/(Workers in the reference group during the reference year) ×100'000  In calculating the average number of workers, the number of part-time workers should be converted to full-time equivalents. For the calculation of rates, the numerator and the denominator should have the same coverage. For example, if self-employed persons are not covered by the source of statistics on fatal occupational injuries, they should also be taken out of the denominator. | Administrative record/ household survey/ establishment survey | Labour Ministries, Labour Inspection, National Insurances, and/or National Statistical Office | DIFE | a.BBS, QLFS  b.DIFE, MoLE | * sex: female, male, both * migrant status * economic activity: fatal, non-fatal * occupation | Triennial | Group 1 | 1st Round:  2015  2nd Round:  July 2019  3rd Round: July 2022  4th Round: July 2025  5th Round: July 2028 | Data availability reviewed in Nov. 2017 (classified as Tier II) |
| 8.8.2 Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status | ILO | Tier II | **Definition:**  The indicator will cover all ILO member states seeking to measure the level of national compliance with fundamental rights (freedom of association and collective bargaining, FACB) based on six international ILO supervisory body textual sources and also on national legislation. It is based on a coding process starting from coding the sources relevant to the year evaluated, coding the non-compliance identified in the collected sources and by converting the coding into indicators.  **Concepts:**   * Freedom of association and collective bargaining rights and their supervision   The principles of freedom of association and collective bargaining (FACB) are and have long been at the core of the ILO’s normative foundations. These foundations have been established in the ILO’s Constitution (1919), the ILO Declaration of Philadelphia (1944), in two key ILO Conventions (namely the *Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)* and the *Right to Organise and Collective Bargaining Convention, 1949 (No. 98)*) and the ILO Declaration on Fundamental Principles and Rights at Work (1998). They are also rights proclaimed in the Universal Declaration of Human Rights (1948) and other international and regional human rights instruments. With the adoption of the 1998 ILO Declaration, the promotion and realization of these fundamental principles and rights also became a constitutional obligation of all ILO member States.  FACB rights are considered as ‘enabling rights’, the realisation of which is necessary to promote and realise other rights at work. They provide an essential foundation for social dialogue, effective labour market governance and realization of decent work. They are vital in enabling employers and workers to associate and efficiently negotiate work relations, to ensure that both employers and workers have an equal voice in negotiations, and that the outcome is fair and equitable. As such they play a crucial role in the elaboration of economic and social policies that take on board the interests and needs of all actors in the economy. FACB rights are also salient because they are indispensable pillars of democracy as well as the process of democratization.  FACB rights, together with other international labour standards, are backed by the ILO’s unique supervisory system. The ILO regularly examines the application of standards in member States and highlights areas where those standards are violated and where they could be better applied. The ILO’s supervisory system includes two kinds of supervisory mechanisms: the regular system of supervision and the special procedures. The prior entails the examination of periodic reports submitted by member States on the measures taken to implement the provisions of ILO Conventions ratified by them. The special procedures, that is, representations, complaints and the special procedure for complaints regarding freedom of association through the Freedom of Association Committee, allow for the examination of violations on the basis of a submission of a representation or a complaint.  In an effort to address some of the shortcomings of previous methods, the ILO developed an alternative coding scheme which provides the foundation for its new method of constructing labour rights indicators (Sari and Kucera, 2011). Among the most important improvements over the previous method are the following:   * Coding seven rather than just three textual sources and thus making full use of textual sources available through the ILO’s supervisory system, as well as coding national legislation. * Distinct evaluation criteria for violations of FACB rights in law (*de jure*) and in practice (*de facto*). * Greater emphasis on violations of FACB rights regarding due process. * Greater emphasis on violations of FACB rights committed against officials of workers’ and employers’ organizations. * Eliminating catch-all evaluation criteria, such as “Other de jure acts of prohibitions, infringements and interference” or “Other de facto acts of prohibitions, infringements and interference”. * Coding violations against both workers and workers’ organizations and employers and employer’s organizations. * Following from the prior points, an increase in the number of evaluation criteria from 37 to 180 (103 evaluation criteria for workers’ organizations and 77 evaluation criteria for employers’ organizations). * More comprehensive definitions of what constitutes a violation of each of the evaluation criteria. * The use of the Delphi method of expert consultation to derive weights for each of the evaluation criteria. * Perhaps most fundamentally, whereas the previous method was the work of an economist, the new method was developed in equal measure by a labour lawyer and an economist working in close collaboration, with the coding done by labour lawyers rather than economists.   Regarding the main elements of the new method, the use of the Delphi method to derive weights, and the rules for converting the coded information into normalized indicators ranging in value from 0 to 10 (best and worst possible scores, respectively).   * **Key premises**   The key premises on which the indicators are based are: (i) definitional validity – the extent to which the evaluation criteria and their corresponding definitions accurately reflect the phenomena they are meant to measure; (ii) transparency – how readily a coded violation can be traced back to any given textual source; and (iii) inter-coder reliability – the extent to which different evaluators working independently are able to consistently arrive at the same results.  *Definitional validity*. As these are meant to be indicators of *international* FACB rights, the evaluation criteria and their corresponding definitions are directly based on the ILO Constitution, ILO Conventions No. 87 and 98 and the related body of comments of the ILO supervisory bodies.[[3]](#footnote-4) Given that the ILO supervisory system is also guided by these definitions, this facilitates the act of coding itself given the heavy reliance on ILO textual sources produced by the supervisory system.  *Transparency*. A key rationale for the large number of evaluation criteria is to eliminate catchall evaluation criteria for violations of FACB rights not elsewhere coded, that is, violations for which there are no explicit evaluation criteria. More generally, the aim was to avoid pigeon-holing violations that are not of similar character or severity. This level of detail also facilitates the transparency of the method, in that very specific violations can be readily traced back to individual textual sources. This is made possible by the coding itself, in which violations are coded with the letters “a” through “g,” with each letter standing for one of the seven textual sources coded, as discussed below.  *Inter-coder reliability*. The method is based on clear and comprehensive coding rules as well as definitions for each of the evaluation criteria with the aim of making the indicators reproducible. Inter-coder reliability was assessed in the process of training teams of lawyers (sequentially and independently of each other) to do the coding and in double-checking their coding, which resulted in a number of clarifications and refinements to the coding rules and definitions. This process led to the conclusion that the inter-coder reliability of the method depends first and foremost on the coders being sufficiently well-trained and in particular being sufficiently well-versed in the coding rules and definitions to be able to apply them consistently.  **Computation Method:**  Table 1enumerates the evaluation criteria for workers and their organizations and Table 2 the evaluation criteria for employers and their organizations. As shown in these tables, the evaluation criteria are grouped into broad categories represented by Roman numerals, which are themselves split into violations of FACB rights in law and in practice. In other words, most of the evaluation criteria representing violations in law have a partner representing violations in practice, and vice versa.   * Violations in law refer to national legislation that is not in conformity with FACB rights as defined by the ILO as well as to actions taken on the basis of such legislation. * Violations in practice refer to acts committed and in violation of the existing national legislation that is in conformity with FACB rights as defined by the ILO.[[4]](#footnote-5)  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Table 1: Evaluation Criteria, Delphi Method Results and Weights** | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  | |  |  |  | **Delphi method results** | | | | |  |  | |  |  |  | **1st round** | |  | **2nd round** | |  |  | |  | **Evaluation Criteria** |  | **Avg.** | **Std.** |  | **Avg.** | **Std.** |  | **Weights** | | **Workers and their organizations** | |  | **(1 to 5)** | **Dev.** |  | **(1 to 5)** | **Dev.** |  | **(1 to 2)** | | 0 | Establishment of a Commission of Inquiry under Article 26 of the ILO Constitution |  | NA | NA |  | NA | NA |  | 2.00 | |  | **Ia. Fundamental civil liberties in law** |  |  |  |  |  |  |  |  | | 1 | Arrest, detention, imprisonment, charging and fining of trade unionists in relation to their trade union activities |  | 4.92 | 0.27 |  | 5.00 | 0.00 |  | 2.00 | | 2 | Infringements of trade unionists' basic freedoms |  | 4.46 | 0.76 |  | 4.71 | 0.47 |  | 1.93 | | 3 | Infringements of trade unions' and trade unionists' right to protection of their premises and property |  | 3.85 | 0.83 |  | 3.93 | 0.62 |  | 1.73 | | 4 | Excessive prohibitions/restrictions on trade union rights in the event of state of emergency |  | 3.68 | 1.09 |  | 3.64 | 0.63 |  | 1.66 | | 5 | Lack of guarantee of due process and/or justice re violations nos. 1-4 |  | 4.23 | 0.91 |  | 4.43 | 0.65 |  | 1.86 | |  | **Ib. Fundamental civil liberties in practice** |  |  |  |  |  |  |  |  | | 6 | Killing or disappearance of trade unionists in relation to their trade union activities |  | 5.00 | 0.00 |  | 5.00 | 0.00 |  | 2.00 | | 7 | Committed against trade union officials re violation no. 6 |  | 4.92 | 0.27 |  | 5.00 | 0.00 |  | 2.00 | | 8 | Lack of guarantee of due process and/or justice re violation no.6 |  | 4.39 | 0.76 |  | 4.57 | 0.51 |  | 1.89 | | 9 | Other violent actions against trade unionists in relation to their trade union activities |  | 4.16 | 0.70 |  | 4.29 | 0.47 |  | 1.82 | | 10 | Committed against trade union officials re violation no.9 |  | 4.16 | 0.70 |  | 4.29 | 0.47 |  | 1.82 | | 11 | Lack of guarantee of due process and/or justice re violation no.9 |  | 4.01 | 0.83 |  | 4.36 | 0.50 |  | 1.84 | | 12 | Arrest, detention, imprisonment, charging and fining of trade unionists in relation to their trade union activities |  | 4.62 | 0.63 |  | 4.79 | 0.43 |  | 1.95 | | 13 | Committed against trade union officials re violation no.12 |  | 4.54 | 0.76 |  | 4.79 | 0.43 |  | 1.95 | | 14 | Lack of guarantee of due process and/or justice re violation no.12 |  | 4.23 | 0.83 |  | 4.50 | 0.52 |  | 1.88 | | 15 | Infringements of trade unionists' basic freedoms |  | 4.23 | 0.73 |  | 4.29 | 0.47 |  | 1.82 | | 16 | Committed against trade union officials re violation no.15 |  | 4.23 | 0.73 |  | 4.29 | 0.61 |  | 1.82 | | 17 | Lack of guarantee of due process and/or justice re violation no.15 |  | 4.16 | 0.89 |  | 4.50 | 0.52 |  | 1.88 | | 18 | Attacks against trade unions' and trade unionists' premises and property |  | 4.01 | 0.62 |  | 4.07 | 0.47 |  | 1.77 | | 19 | Committed against trade union officials re violation no.18 |  | 4.01 | 0.62 |  | 4.07 | 0.47 |  | 1.77 | | 20 | Lack of guarantee of due process and/or justice re violation no.18 |  | 4.08 | 0.77 |  | 4.07 | 0.62 |  | 1.77 | | 21 | Excessive prohibitions/restrictions on trade union rights in the event of state of emergency |  | 3.68 | 1.02 |  | 3.79 | 0.43 |  | 1.70 | | 22 | Lack of guarantee of due process and/or justice re violation no.21 |  | 3.85 | 1.07 |  | 3.93 | 0.62 |  | 1.73 | |  | **IIa. Right of workers to establish and join organizations in law** |  |  |  |  |  |  |  |  | | 23 | General prohibition of the right to establish and join organizations |  | 4.77 | 0.43 |  | 4.86 | 0.36 |  | 1.96 | | 24 | Exclusion of workers from the right to establish and join organizations |  | 4.23 | 0.73 |  | 4.43 | 0.51 |  | 1.86 | | 25 | Previous authorization requirements |  | 3.38 | 0.63 |  | 3.50 | 0.65 |  | 1.63 | | 26 | Restrictions on the freedom of choice of trade union structure and composition |  | 3.46 | 0.76 |  | 3.50 | 0.65 |  | 1.63 | | 27 | Imposed trade union unity |  | 3.83 | 0.93 |  | 3.71 | 0.61 |  | 1.68 | | 28 | Dissolution/suspension of legally functioning organizations |  | 4.45 | 0.74 |  | 4.57 | 0.51 |  | 1.89 | | 29 | Provisions in law allowing for anti-union discriminatory measures in relation to hiring, during employment (e.g. transfers and downgrading) and dismissal |  | 4.62 | 0.74 |  | 4.71 | 0.61 |  | 1.93 | | 30 | Lack of adequate legal guarantees against anti-union discriminatory measures |  | 3.85 | 1.07 |  | 4.00 | 0.55 |  | 1.75 | | 31 | Provisions in law allowing for interference of employers and/or public authorities |  | 4.08 | 0.83 |  | 4.21 | 0.70 |  | 1.80 | | 32 | Lack of adequate legal guarantees against acts of interference |  | 3.62 | 1.01 |  | 3.79 | 0.70 |  | 1.70 | | 33 | Infringements of the right to establish and join federations/confederations/international organizations |  | 3.85 | 0.77 |  | 3.93 | 0.73 |  | 1.73 | | 34 | Lack of guarantee of due process and/or justice re violations nos. 23-33 |  | 3.93 | 1.11 |  | 4.21 | 0.58 |  | 1.80 | |  | **IIb. Right of workers to establish and join organizations in practice** |  |  |  |  |  |  |  |  | | 35 | General prohibition of the development of independent workers' organizations |  | 4.54 | 0.65 |  | 4.71 | 0.61 |  | 1.93 | | 36 | Exclusion of workers from the right to establish and join organizations |  | 4.39 | 0.51 |  | 4.43 | 0.51 |  | 1.86 | | 37 | Previous authorization requirements |  | 3.77 | 0.70 |  | 3.79 | 0.43 |  | 1.70 | | 38 | Restrictions on the freedom of choice of trade union structure and composition |  | 3.62 | 0.74 |  | 3.79 | 0.58 |  | 1.70 | | 39 | Imposed trade union unity |  | 3.91 | 0.80 |  | 3.79 | 0.70 |  | 1.70 | | 40 | Dissolution/suspension of legally functioning organizations |  | 4.58 | 0.52 |  | 4.79 | 0.43 |  | 1.95 | | 41 | Anti-union discriminatory measures in relation to hiring, during employment (e.g. transfers and downgrading) and dismissal |  | 4.23 | 0.91 |  | 4.29 | 0.73 |  | 1.82 | | 42 | Committed against trade union officials re violation no. 41 |  | 4.39 | 0.65 |  | 4.57 | 0.51 |  | 1.89 | | 43 | Lack of guarantee of due process and/or justice re violation no. 41 |  | 3.93 | 1.18 |  | 4.21 | 0.58 |  | 1.80 | | 44 | Acts of interference of employers and/or public authorities |  | 3.85 | 0.83 |  | 4.00 | 0.68 |  | 1.75 | | 45 | Lack of guarantee of due process and/or justice re violation no. 44 |  | 3.85 | 1.14 |  | 4.07 | 0.73 |  | 1.77 | | 46 | Infringements of the right to establish and join federations/confederations/international organizations |  | 3.83 | 0.80 |  | 4.14 | 0.53 |  | 1.79 | | 47 | Lack of guarantee of due process and/or justice re violations nos. 35-46 |  | 3.93 | 1.11 |  | 4.07 | 0.62 |  | 1.77 | |  | **IIIa. Other union activities in law** |  |  |  |  |  |  |  |  | | 48 | Infringements of the right to freely draw up constitutions and internal rules and administration |  | 3.54 | 0.85 |  | 3.50 | 0.76 |  | 1.63 | | 49 | Infringements of the right to freely elect representatives |  | 3.93 | 0.96 |  | 4.21 | 0.80 |  | 1.80 | | 50 | Infringements of the right to freely organize and control financial administration |  | 3.46 | 0.94 |  | 3.36 | 0.93 |  | 1.59 | | 51 | Infringements of the right to freely organize activities/programmes |  | 3.99 | 0.83 |  | 4.21 | 0.43 |  | 1.80 | | 52 | Prohibition of all political activities |  | 3.62 | 1.34 |  | 3.93 | 0.92 |  | 1.73 | | 53 | Lack of guarantee of due process and/or justice re violations nos. 48-52 |  | 4.00 | 1.24 |  | 4.29 | 0.73 |  | 1.82 | |  | **IIIb. Other union activities in practice** |  |  |  |  |  |  |  |  | | 54 | Infringements of the right to freely draw up constitutions and internal rules and administration |  | 3.92 | 0.77 |  | 4.00 | 0.55 |  | 1.75 | | 55 | Infringements of the right to freely elect representatives |  | 4.16 | 0.70 |  | 4.29 | 0.61 |  | 1.82 | | 56 | Infringements of the right to freely organize and control financial administration |  | 3.92 | 0.66 |  | 3.86 | 0.53 |  | 1.71 | | 57 | Infringements of the right to freely organize activities/programmes |  | 4.07 | 0.96 |  | 4.14 | 0.77 |  | 1.79 | | 58 | Prohibition of all political activities |  | 3.69 | 1.33 |  | 3.79 | 1.05 |  | 1.70 | | 59 | Lack of guarantee of due process and/or justice re violations nos. 54-58 |  | 3.85 | 1.17 |  | 4.14 | 0.86 |  | 1.79 | |  | **IVa. Right to collective bargaining in law** |  |  |  |  |  |  |  |  | | 60 | General prohibition of the right to collective bargaining |  | 4.69 | 0.61 |  | 4.71 | 0.47 |  | 1.93 | | 61 | Insufficient promotion of collective bargaining |  | 2.77 | 0.97 |  | 2.79 | 0.70 |  | 1.45 | | 62 | Exclusion of workers from the right to collective bargaining |  | 4.15 | 0.77 |  | 4.29 | 0.47 |  | 1.82 | | 63 | Exclusion/restriction of subjects covered by collective bargaining |  | 3.46 | 0.85 |  | 3.71 | 0.61 |  | 1.68 | | 64 | Compulsory arbitration accorded to collective bargaining |  | 3.62 | 0.93 |  | 3.79 | 0.58 |  | 1.70 | | 65 | Excessive requirements and/or lack of objective, pre-established and precise criteria for the determination/recognition of trade unions entitled to collective bargaining |  | 3.23 | 0.99 |  | 3.36 | 0.74 |  | 1.59 | | 66 | Acts of interference in collective bargaining |  | 3.62 | 1.08 |  | 3.64 | 0.93 |  | 1.66 | | 67 | Violations of collective agreements |  | 3.68 | 1.16 |  | 3.57 | 0.85 |  | 1.64 | | 68 | Infringements of the consultation with workers' organizations |  | 3.46 | 1.02 |  | 3.43 | 0.94 |  | 1.61 | | 69 | Lack of guarantee of due process and/or justice re violations nos. 60-68 |  | 3.54 | 1.45 |  | 3.93 | 0.92 |  | 1.73 | |  | **IVb. Right to collective bargaining in practice** |  |  |  |  |  |  |  |  | | 70 | General prohibition of collective bargaining |  | 4.54 | 0.65 |  | 4.57 | 0.51 |  | 1.89 | | 71 | Insufficient promotion of collective bargaining |  | 2.92 | 0.83 |  | 2.79 | 0.70 |  | 1.45 | | 72 | Exclusion of workers from the right to collective bargaining |  | 4.08 | 0.66 |  | 4.36 | 0.50 |  | 1.84 | | 73 | Exclusion/restriction of subjects covered by collective bargaining |  | 3.38 | 0.50 |  | 3.36 | 0.50 |  | 1.59 | | 74 | Compulsory arbitration accorded to collective bargaining |  | 3.69 | 0.93 |  | 3.71 | 0.47 |  | 1.68 | | 75 | Excessive requirements and/or lack of objective, pre-established and precise criteria for the determination/recognition of trade unions entitled to collective bargaining |  | 3.62 | 0.84 |  | 3.57 | 0.76 |  | 1.64 | | 76 | Acts of interference in collective bargaining |  | 3.77 | 0.97 |  | 3.57 | 0.85 |  | 1.64 | | 77 | Violations of collective agreements |  | 4.07 | 0.88 |  | 3.93 | 0.73 |  | 1.73 | | 78 | Infringements of the consultation with workers' organizations |  | 3.54 | 0.85 |  | 3.36 | 0.84 |  | 1.59 | | 79 | Lack of guarantee of due process and/or justice re violations nos. 70-78 |  | 3.85 | 1.23 |  | 3.86 | 0.86 |  | 1.71 | |  | **Va. Right to strike in law** |  |  |  |  |  |  |  |  | | 80 | General prohibition of the right to strike |  | 4.62 | 0.74 |  | 4.79 | 0.43 |  | 1.95 | | 81 | Exclusion of workers from the right to strike |  | 4.16 | 0.89 |  | 4.29 | 0.73 |  | 1.82 | | 82 | Exclusion/restriction based on the objective and/or type of the strike |  | 2.77 | 1.25 |  | 2.86 | 0.95 |  | 1.46 | | 83 | Provisions in law allowing for the suspension and/or declaration of illegality of strikes by administrative authority |  | 3.16 | 0.89 |  | 3.36 | 0.63 |  | 1.59 | | 84 | Lack of compensatory guarantees accorded to lawful restrictions on the right to strike |  | 3.08 | 1.12 |  | 3.21 | 0.97 |  | 1.55 | | 85 | Infringements of the determination of minimum services |  | 2.77 | 0.70 |  | 2.79 | 0.43 |  | 1.45 | | 86 | Compulsory arbitration accorded to strikes |  | 3.54 | 1.22 |  | 3.57 | 0.94 |  | 1.64 | | 87 | Excessive prerequisites required for exercising the right to strike |  | 3.54 | 0.85 |  | 3.86 | 0.53 |  | 1.71 | | 88 | Acts of interference during the course of strike action |  | 3.31 | 1.07 |  | 3.43 | 0.65 |  | 1.61 | | 89 | Imposing excessive sanctions in case of legitimate strikes |  | 4.08 | 1.07 |  | 4.29 | 0.73 |  | 1.82 | | 90 | Lack of guarantee of due process and/or justice re violations nos. 80-89 |  | 4.08 | 1.17 |  | 4.21 | 0.89 |  | 1.80 | |  | **Vb. Right to strike in practice** |  |  |  |  |  |  |  |  | | 91 | General prohibition of strikes |  | 4.62 | 0.63 |  | 4.71 | 0.47 |  | 1.93 | | 92 | Exclusion of workers from the right to strike |  | 4.16 | 0.58 |  | 4.29 | 0.61 |  | 1.82 | | 93 | Exclusion/restriction based on the objective and/or type of the strike |  | 3.08 | 1.14 |  | 3.21 | 0.80 |  | 1.55 | | 94 | Suspension and/or declaration of illegality of strikes by administrative authority |  | 3.77 | 0.70 |  | 3.79 | 0.58 |  | 1.70 | | 95 | Lack of compensatory guarantees accorded to lawful restrictions on the right to strike |  | 3.17 | 0.90 |  | 3.36 | 0.74 |  | 1.59 | | 96 | Infringements of the determination of minimum services |  | 3.08 | 0.73 |  | 3.07 | 0.62 |  | 1.52 | | 97 | Compulsory arbitration accorded to strikes |  | 3.54 | 0.76 |  | 3.43 | 0.65 |  | 1.61 | | 98 | Excessive prerequisites required for exercising the right to strike |  | 3.54 | 0.76 |  | 3.71 | 0.61 |  | 1.68 | | 99 | Acts of interference during the course of strike action |  | 3.54 | 0.94 |  | 3.57 | 0.76 |  | 1.64 | | 100 | Imposing excessive sanctions in case of legitimate strikes |  | 4.08 | 0.92 |  | 4.29 | 0.61 |  | 1.82 | | 101 | Committed against trade union officials re violation no. 100 |  | 4.08 | 0.92 |  | 4.21 | 0.70 |  | 1.80 | | 102 | Lack of guarantee of due process and/or justice re violations nos. 91-101 |  | 3.93 | 1.11 |  | 4.07 | 0.83 |  | 1.77 | |  |  |  |  |  |  |  |  |  |  | |  | **Average** |  | 3.90 | 0.85 |  | 4.01 | 0.62 |  | 1.75 |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Table 2: Evaluation Criteria, Delphi Method Results and Weights** | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  | |  |  |  | **Delphi method results** | | | | |  |  | |  |  |  | **1st round** | |  | **2nd round** | |  |  | |  |  |  | **Avg.** | **Std.** |  | **Avg.** | **Std.** |  | **Weights** | | **Evaluation Criteria - Employers and their organizations** | |  | **(1 to 5)** | **Dev.** |  | **(1 to 5)** | **Dev.** |  | **(1 to 2)** | | 0 | Establishment of a Commission of Inquiry under Article 26 of the ILO Constitution |  | NA | NA |  | NA | NA |  | 2.00 | |  | **Ia. Fundamental civil liberties in law** |  |  |  |  |  |  |  |  | | 1 | Arrest, detention, imprisonment, charging and fining of members of employers' organizations |  | 4.92 | 0.27 |  | 5.00 | 0.00 |  | 2.00 | | 2 | Infringements of members of employers' organizations' basic freedoms |  | 4.46 | 0.76 |  | 4.71 | 0.47 |  | 1.93 | | 3 | Infringements of employers' organizations' right to protection of their premises and property |  | 3.85 | 0.83 |  | 3.93 | 0.62 |  | 1.73 | | 4 | Excessive prohibitions/restrictions on employers' organizations' rights in the event of state of emergency |  | 3.68 | 1.09 |  | 3.64 | 0.63 |  | 1.66 | | 5 | Lack of guarantee of due process and/or justice re violations nos. 1-4 |  | 4.23 | 0.91 |  | 4.43 | 0.65 |  | 1.86 | |  | **Ib. Fundamental civil liberties in practice** |  |  |  |  |  |  |  |  | | 6 | Killing or disappearance of members of employers' organizations in relation to their related activities |  | 5.00 | 0.00 |  | 5.00 | 0.00 |  | 2.00 | | 7 | Committed against officials of employers' organizations re violation no. 6 |  | 4.92 | 0.27 |  | 5.00 | 0.00 |  | 2.00 | | 8 | Lack of guarantee of due process and/or justice re violation no.6 |  | 4.39 | 0.76 |  | 4.57 | 0.51 |  | 1.89 | | 9 | Other violent actions against members of employers' organizations in relation to their related activities |  | 4.16 | 0.70 |  | 4.29 | 0.47 |  | 1.82 | | 10 | Committed against officials of employers' organizations re violation no.9 |  | 4.16 | 0.70 |  | 4.29 | 0.47 |  | 1.82 | | 11 | Lack of guarantee of due process and/or justice re violation no.9 |  | 4.01 | 0.83 |  | 4.36 | 0.50 |  | 1.84 | | 12 | Arrest, detention, imprisonment, charging and fining of members of employers' organizations in relation to their related activities |  | 4.62 | 0.63 |  | 4.79 | 0.43 |  | 1.95 | | 13 | Committed against officials of employers' organizations re violation no.12 |  | 4.54 | 0.76 |  | 4.79 | 0.43 |  | 1.95 | | 14 | Lack of guarantee of due process and/or justice re violation no.12 |  | 4.23 | 0.83 |  | 4.50 | 0.52 |  | 1.88 | | 15 | Infringements of members of employers' organizations' basic freedoms |  | 4.23 | 0.73 |  | 4.29 | 0.47 |  | 1.82 | | 16 | Committed against officials of employers' organizations re violation no.15 |  | 4.23 | 0.73 |  | 4.29 | 0.61 |  | 1.82 | | 17 | Lack of guarantee of due process and/or justice re violation no.15 |  | 4.16 | 0.89 |  | 4.50 | 0.52 |  | 1.88 | | 18 | Attacks against employers' organizations' premises and property |  | 4.01 | 0.62 |  | 4.07 | 0.47 |  | 1.77 | | 19 | Committed against officials of employers' organizations re violation no.18 |  | 4.01 | 0.62 |  | 4.07 | 0.47 |  | 1.77 | | 20 | Lack of guarantee of due process and/or justice re violation no.18 |  | 4.08 | 0.77 |  | 4.07 | 0.62 |  | 1.77 | | 21 | Excessive prohibitions/restrictions on employers' organizations' rights in the event of state of emergency |  | 3.68 | 1.02 |  | 3.79 | 0.43 |  | 1.70 | | 22 | Lack of guarantee of due process and/or justice re violation no.21 |  | 3.85 | 1.07 |  | 3.93 | 0.62 |  | 1.73 | |  | **IIa. Right of employers to establish and join organizations in law** |  |  |  |  |  |  |  |  | | 23 | General prohibition of the right to establish and join organizations |  | 4.77 | 0.43 |  | 4.86 | 0.36 |  | 1.96 | | 24 | Exclusion of other employers from the right to establish and join organizations |  | 4.23 | 0.73 |  | 4.43 | 0.51 |  | 1.86 | | 25 | Previous authorization requirements |  | 3.38 | 0.63 |  | 3.50 | 0.65 |  | 1.63 | | 26 | Restrictions on the freedom of choice of employers' organizations' stucture and composition |  | 3.46 | 0.76 |  | 3.50 | 0.65 |  | 1.63 | | 27 | Imposed unity of employers' organizations |  | 3.83 | 0.93 |  | 3.71 | 0.61 |  | 1.68 | | 28 | Dissolution/suspension of legally functioning organizations |  | 4.45 | 0.74 |  | 4.57 | 0.51 |  | 1.89 | | 29 | Provisions in law allowing for interference of workers' organizations and/or public authorities |  | 4.08 | 0.83 |  | 4.21 | 0.70 |  | 1.80 | | 30 | Lack of adequate legal guarantees against acts of interference |  | 3.62 | 1.01 |  | 3.79 | 0.70 |  | 1.70 | | 31 | Infringements of the right to establish and join federations/confederations/international organizations |  | 3.85 | 0.77 |  | 3.93 | 0.73 |  | 1.73 | | 32 | Lack of guarantee of due process and/or justice re violations nos. 23-31 |  | 3.93 | 1.11 |  | 4.21 | 0.58 |  | 1.80 | |  | **IIb. Right of employers to establish and join organizations in practice** |  |  |  |  |  |  |  |  | | 33 | General prohibition of the development of independent employers' organizations |  | 4.54 | 0.65 |  | 4.71 | 0.61 |  | 1.93 | | 34 | Exclusion of employers from the right to establish and join organizations |  | 4.39 | 0.51 |  | 4.43 | 0.51 |  | 1.86 | | 35 | Previous authorization requirements |  | 3.77 | 0.70 |  | 3.79 | 0.43 |  | 1.70 | | 36 | Restrictions on the freedom of choice of employers' organizations' stucture and composition |  | 3.62 | 0.74 |  | 3.79 | 0.58 |  | 1.70 | | 37 | Imposed unity of employers' organizations |  | 3.91 | 0.80 |  | 3.79 | 0.70 |  | 1.70 | | 38 | Dissolution/suspension of legally functioning organizations |  | 4.58 | 0.52 |  | 4.79 | 0.43 |  | 1.95 | | 39 | Acts of interference of workers' organizations and/or public authorities |  | 3.85 | 0.83 |  | 4.00 | 0.68 |  | 1.75 | | 40 | Lack of guarantee of due process and/or justice re violation no. 39 |  | 3.85 | 1.14 |  | 4.07 | 0.73 |  | 1.77 | | 41 | Infringements of the right to establish and join federations/confederations/international organizations |  | 3.83 | 0.80 |  | 4.14 | 0.53 |  | 1.79 | | 42 | Lack of guarantee of due process and/or justice re violations nos. 33-41 |  | 3.93 | 1.11 |  | 4.07 | 0.62 |  | 1.77 | |  | **IIIa. Other activities of employers' organizations in law** |  |  |  |  |  |  |  |  | | 43 | Infringements of the right to freely draw up constitutions and internal rules and administration |  | 3.54 | 0.85 |  | 3.50 | 0.76 |  | 1.63 | | 44 | Infringements of the right to freely elect representatives |  | 3.93 | 0.96 |  | 4.21 | 0.80 |  | 1.80 | | 45 | Infringements of the right to freely organize and control financial administration |  | 3.46 | 0.94 |  | 3.36 | 0.93 |  | 1.59 | | 46 | Infringements of the right to freely organize activities/programmes |  | 3.99 | 0.83 |  | 4.21 | 0.43 |  | 1.80 | | 47 | Prohibition of all political activities |  | 3.62 | 1.34 |  | 3.93 | 0.92 |  | 1.73 | | 48 | Prohibition of employers' access to their premises during industrial action |  | 3.31 | 1.07 |  | 3.43 | 0.65 |  | 1.61 | | 49 | Lack of guarantee of due process and/or justice re violations nos. 43-48 |  | 4.00 | 1.24 |  | 4.29 | 0.73 |  | 1.82 | |  | **IIIb. Other activities of employers' organizations in practice** |  |  |  |  |  |  |  |  | | 50 | Infringements of the right to freely draw up constitutions and internal rules and administration |  | 3.92 | 0.77 |  | 4.00 | 0.55 |  | 1.75 | | 51 | Infringements of the right to freely elect representatives |  | 4.16 | 0.70 |  | 4.29 | 0.61 |  | 1.82 | | 52 | Infringements of the right to freely organize and control financial administration |  | 3.92 | 0.66 |  | 3.86 | 0.53 |  | 1.71 | | 53 | Infringements of the right to freely organize activities/programmes |  | 4.07 | 0.96 |  | 4.14 | 0.77 |  | 1.79 | | 54 | Prohibition of all political activities |  | 3.69 | 1.33 |  | 3.79 | 1.05 |  | 1.70 | | 55 | Prohibition of employers' access to their premises during industrial action |  | 3.54 | 0.94 |  | 3.57 | 0.76 |  | 1.64 | | 56 | Lack of guarantee of due process and/or justice re violations nos. 50-55 |  | 3.85 | 1.17 |  | 4.14 | 0.86 |  | 1.79 | |  | **IVa. Right to collective bargaining in law** |  |  |  |  |  |  |  |  | | 57 | General prohibition of the right to collective bargaining |  | 4.69 | 0.61 |  | 4.71 | 0.47 |  | 1.93 | | 58 | Insufficient promotion of collective bargaining |  | 2.77 | 0.97 |  | 2.79 | 0.70 |  | 1.45 | | 59 | Exclusion of employers from the right to collective bargaining |  | 4.15 | 0.77 |  | 4.29 | 0.47 |  | 1.82 | | 60 | Exclusion/restriction of subjects covered by collective bargaining |  | 3.46 | 0.85 |  | 3.71 | 0.61 |  | 1.68 | | 61 | Compulsory arbitration accorded to collective bargaining |  | 3.62 | 0.93 |  | 3.79 | 0.58 |  | 1.70 | | 62 | Excessive requirements and/or lack of objective, pre-established and precise criteria for the determination/recognition of employers' organizations entitled to collective bargaining |  | 3.23 | 0.99 |  | 3.36 | 0.74 |  | 1.59 | | 63 | Acts of interference in collective bargaining |  | 3.62 | 1.08 |  | 3.64 | 0.93 |  | 1.66 | | 64 | Violations of collective agreements |  | 3.68 | 1.16 |  | 3.57 | 0.85 |  | 1.64 | | 65 | Infringements of the consultation with employers' organizations |  | 3.46 | 1.02 |  | 3.43 | 0.94 |  | 1.61 | | 66 | Lack of guarantee of due process and/or justice re violations nos. 57-65 |  | 3.54 | 1.45 |  | 3.93 | 0.92 |  | 1.73 | |  | **IVb. Right to collective bargaining in practice** |  |  |  |  |  |  |  |  | | 67 | General prohibition of collective bargaining |  | 4.54 | 0.65 |  | 4.57 | 0.51 |  | 1.89 | | 68 | Insufficient promotion of collective bargaining |  | 2.92 | 0.83 |  | 2.79 | 0.70 |  | 1.45 | | 69 | Exclusion of employers from the right to collective bargaining |  | 4.08 | 0.66 |  | 4.36 | 0.50 |  | 1.84 | | 70 | Exclusion/restriction of subjects covered by collective bargaining |  | 3.38 | 0.50 |  | 3.36 | 0.50 |  | 1.59 | | 71 | Compulsory arbitration accorded to collective bargaining |  | 3.69 | 0.93 |  | 3.71 | 0.47 |  | 1.68 | | 72 | Excessive requirements and/or lack of objective, pre-established and precise criteria for the determination/recognition of employers' organizations entitled to collective bargaining |  | 3.62 | 0.84 |  | 3.57 | 0.76 |  | 1.64 | | 73 | Acts of interference in collective bargaining |  | 3.77 | 0.97 |  | 3.57 | 0.85 |  | 1.64 | | 74 | Violations of collective agreements |  | 4.07 | 0.88 |  | 3.93 | 0.73 |  | 1.73 | | 75 | Infringements of the consultation with employers' organizations |  | 3.54 | 0.85 |  | 3.36 | 0.84 |  | 1.59 | | 76 | Lack of guarantee of due process and/or justice re violations nos. 67-75 |  | 3.85 | 1.23 |  | 3.86 | 0.86 |  | 1.71 | |  |  |  |  |  |  |  |  |  |  | |  | **Average** |  | 3.95 | 0.83 |  | 4.05 | 0.61 |  | 1.76 |   The rough doubling of evaluation criteria by splitting them into violations in law and in practice makes their sizeable number more tractable for coders. Such branching relationships among the evaluation criteria extend to two additional types of evaluation criteria addressing “Lack of guarantee of due process and/or justice” and “Violations committed against trade union officials” and “Violations committed against officials of employers’ organizations”.  The evaluation criteria “Lack of guarantee of due process and/or justice” are incorporated into the main categories of evaluation criteria as the last-listed evaluation criteria within each, with the exception of category on “Fundamental civil liberties in practice”. This is based on the premise that the exercise of FACB rights depends on their effective protection defined in terms of fair and sufficiently prompt trials by an independent and impartial judiciary. Under the category of “Fundamental civil liberties in practice,” on the other hand, these evaluation criteria are attached to each of the six more specific evaluation criteria. This emphasis on fundamental civil liberties in practice is meant to reflect the emphasis of the Committee of Experts on the Application of Conventions and Recommendations (CEACR) and Committee on Freedom of Association (CFA), in particular their view that a free and independent movement of workers and employers (and their organizations) can develop only to the extent that fundamental human rights are respected and where in the event of violations, measures are taken to identify, bring to trial and convict the guilty parties (ILO, 2006, Paras. 33 and 51). In addition, these criteria are attached to “Anti-union discriminatory measures” and “Acts of interference of employers and/or public authorities” and “Acts of interference of workers’ organizations and/or public authorities” under the category of “Right to establish and join organizations in practice”, motivated by Article 3 of ILO Convention 98 which states that “Machinery appropriate to national conditions shall be established, where necessary, for the purpose of ensuring respect for the right to organise...”.  The evaluation criteria “Violations committed against trade union officials” and “Violations committed against officials of employers’ organizations” are attached to the specific evaluation criteria under the category of “Fundamental civil liberties in practice” (the case of ‘excessive prohibitions/restriction in the event of state of emergency’ does not apply here). In addition, this criterion is attached to “Anti-union discriminatory measures” under the category of “Right of workers to establish and join organizations in practice” as well as to “Use of excessive sanctions in case of legitimate and peaceful strikes” under the category of “Right to strike in practice”. The emphasis on officials is motivated by the view that violations against them are particularly damaging to the exercise of FACB rights.  In keeping with the definition for SDG indicator 8.8.2, while all violations of FACB rights based sex or migrant status will be coded and embodied in the indicator, the textual information on which this coding is based will also be made available in a separate document in an effort to highlight such violations.   * **Textual sources**   The present method makes use of six ILO textual sources: *Reports of the Committee of Experts on the Application of Conventions and Recommendations; Reports of the Conference Committee on the Application of Standards; Country Baselines Under the ILO Declaration Annual Review; Representations under Article 24 of the ILO Constitution; Complaints under Article 26 of the ILO Constitution and Report on the Committee on Freedom of Association.*  The method also codes relevant national legislation for non-ratifying countries. The coding of national legislation is particularly important to offset information asymmetries between ratifying and non-ratifying countries as regards FACB rights in law. Note that ratifying countries are defined as those that have ratified both Conventions 87 and 98, in which case its national legislation is not coded at present. Non-ratifying countries, on the other hand, fall into two categories, those that have ratified neither 87 nor 98 and those that have ratified only one of these Conventions. If a country has ratified only 87, its national legislation is coded for violations pertaining to 98, as violations under 87 fall under the remit of the ILO’s Committee of Experts as well as Committee on the Application of Standards. Similarly, if a country has ratified only 98, its national legislation is coded for violations pertaining to 87. Note that for federal states, only federal-level legislation is coded.  The seven textual sources are recapitulated in Table 3, along with the associated letters by which they are coded as well as whether these sources pertain to ratifying countries, non-ratifying countries, or both.   |  |  |  |  | | --- | --- | --- | --- | | **Table 3: Textual Sources** | | | | |  | **Coding letter** | **Ratifying countries (Both C. 87 & C. 98)** | **Non-ratifying countries** | | *Reports of the Committee of Experts on the Application of Conventions and Recommendations* | a | X |  | | *Reports of the Conference Committee on the Application of Standards* | b | X |  | | *Country Baselines under the ILO Declaration Annual Review* | c |  | X | | *Representations under Article 24 of the ILO Constitution* | d | X |  | | *Complaints under Article 26 of the ILO Constitution* | e | X |  | | *Reports of the Committee on Freedom of Association* | f | X | X | | National legislation | g |  | X |  * **Using the Delphi Method to Construct Evaluation Criteria Weights**   The application of the Delphi method involved two rounds of surveys conducted via email of internationally-recognized experts in labour law having knowledge of the ILO’s supervisory system and particular knowledge of FACB rights as defined by the ILO. Regional representation was another consideration. Experts remained anonymous with respect to each other throughout the process. Initial invitations to participate were sent to 37 experts, of whom 18 initially agreed to participate and of whom 14 went through both survey rounds. Of these 14 experts, 13 were lawyers and one a political scientist, with five based in Western Europe, one in Eastern Europe, three in the US, two in Latin America, two in Asia and one in Africa.   * **Applying the weights, normalization and default scores**   The raw coding uses the letters “a” through “g” (again, with each letter corresponding to one of the seven textual sources) to represent coded violations of FACB rights for each evaluation criteria, yielding a column of 180 cells for any given country and year. In order to apply the weights, any cell containing one or more letters is assigned a value of 1 and any blank cell for which there are no coded violations is assigned a value of 0, creating a binary coding column. The number of letters in a cell does not affect the construction of the binary coding column, in order to avoid double-counting given that the textual sources commonly reference each other. The cells of the column of weights is then multiplied by corresponding cells of the binary coding column, and summing across the cells of the resultant column yields a weighted non-normalized score for any given country and year. A hypothetical example is provided in Table 4, showing only those evaluation criteria with coded violations. In this example, 24 evaluation criteria are coded. Applying the weights yields a non-normalized score of 42.3 and a normalized score of 4.5, based on the rules describe next.   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **Table 4: Hypothetical Example of Coding and Indicator Construction (for a Single Country and Year)** | | | | | | | | **Evaluation Criteria** | |  | **Textual coding** | **Binary coding** | **Weights** | **Binary coding x Weights** | |  | **Ia. Fundamental civil liberties in law** |  |  |  |  |  | | 2 | Infringements of trade unionists' basic freedoms |  | i | 1 | 1.93 | 1.93 | |  | **Ib. Fundamental civil liberties in practice** |  |  |  |  |  | | 6 | Killing or disappearance of trade unionists in relation to their trade union activities |  | fhi | 1 | 2.00 | 2.00 | | 9 | Other violent actions against trade unionists in relation to their trade union activities |  | fhi | 1 | 1.82 | 1.82 | | 12 | Arrest, detention, imprisonment, charging and fining of trade unionists in relation to their trade union activities |  | hi | 1 | 1.95 | 1.95 | |  | **IIa. Right of workers to establish and join organizations in law** |  |  |  |  |  | | 25 | Exclusion of other workers from the right to establish and join organizations |  | ahi | 1 | 1.86 | 1.86 | | 31 | Lack of adequate legal guarantees against anti-union discriminatory measures |  | a | 1 | 1.75 | 1.75 | | 34 | Infringements of the right to establish and join federations/confederations/international organizations |  | abhi | 1 | 1.73 | 1.73 | |  | **IIb. Right of workers to establish and join organizations in practice** |  |  |  |  |  | | 39 | Previous authorization requirements |  | fhi | 1 | 1.70 | 1.70 | | 44 | Committed against trade union officials re violation no. 43 |  | hi | 1 | 1.89 | 1.89 | | 45 | Lack of guarantee of due process and/or justice re violation no. 43 |  | hi | 1 | 1.80 | 1.80 | |  | **IIIa. Other union activities in law** |  |  |  |  |  | | 51 | Infringements of the right to freely elect representatives |  | ah | 1 | 1.80 | 1.80 | | 52 | Infringements of the right to freely organize and control financial administration |  | ahi | 1 | 1.59 | 1.59 | | 54 | Prohibition of all political activities |  | ahi | 1 | 1.73 | 1.73 | |  | **IIIb. Other union activities in practice** |  |  |  |  |  | | 58 | Infringements of the right to freely organize and control financial administration |  | fhi | 1 | 1.71 | 1.71 | | 61 | Lack of guarantee of due process and/or justice re violations nos. 56-60 |  | f | 1 | 1.79 | 1.79 | |  | **IVa. Right to collective bargaining in law** |  |  |  |  |  | | 69 | Acts of interference in collective bargaining |  | a | 1 | 1.66 | 1.66 | | 76 | Exclusion of other workers from the right to collective bargaining |  | abhi | 1 | 1.84 | 1.84 | | 80 | Acts of interference in collective bargaining |  | hi | 1 | 1.64 | 1.64 | |  | **Va. Right to strike in law** |  |  |  |  |  | | 87 | Exclusion/restriction based on the objective and/or type of the strike |  | af | 1 | 1.46 | 1.46 | | 88 | Provisions in law allowing for the suspension and/or declaration of illegality of strikes by administrative authority |  | ahi | 1 | 1.59 | 1.59 | | 94 | Imposing excessive sanctions in case of legitimate strikes |  | afhi | 1 | 1.82 | 1.82 | |  | **Vb. Right to strike in practice** |  |  |  |  |  | | 105 | Acts of interference during the course of strike action |  | hi | 1 | 1.64 | 1.64 | | 107 | Committed against trade union officials re violation no. 106 |  | h | 1 | 1.80 | 1.80 | | 108 | Lack of guarantee of due process and/or justice re violations nos. 96-107 |  | h | 1 | 1.77 | 1.77 | |  | **Sum (non-normalized score)** |  |  | 24 |  | 42.29 | |  | **Normalized score (0 = best, 10 = worst)1** |  |  |  |  | **4.45** | |  |  |  |  |  |  |  | | 1. Note that the weighted non-normalized score is capped at 95, as described in the text. | |  |  |  |  |  |   To normalize the indicators over time, weighted non-normalized scores were calculated for the roughly one-third of countries having the most coded violations of FACB rights of workers and their organizations for the years 2000, 2005, 2009 and 2012. This is based on the number of violations of FACB rights of workers and their organizations because of their greater frequency of being reported in ILO textual sources. The highest weighted non-normalized score for several countries hovered around 80. As such, 95 is assigned as the maximum weighted non-normalized score for the overall LR indicator, roughly equal to one-half the hypothetically possible maximum weighted non-normalized score. On this basis, the non-normalized score for any given country and year is normalized to range in value from 0 to 10, the best and worst possible scores respectively. In the future, if any country should receive a non-normalized score of greater than 95, this will be capped at 95, yielding a normalized score of 10.[[5]](#footnote-6)  In addition, the method applies the notion that general prohibitions in law imply general prohibitions in practice (though not vice versa). In terms of coding, this means that – both for workers and employers -the direct coding of “General prohibition of the right to establish and join organizations” in law automatically triggers the coding of “General prohibition of the development of independent organizations” in practice; the direct coding of “General prohibition of the right to collective bargaining” in law automatically triggers the coding of the “General prohibition of collective bargaining” in practice ; and, finally, for workers, the direct coding of “General prohibition of the right to strike” in law automatically triggers the coding of the “General prohibition of strikes” in practice . Given that the general prohibition of the development of independent organizations implies the general prohibition of collective bargaining (though not vice versa), similar coding rules apply.  In addition to the above normalization rules, the worst possible score of 10 is given for all-encompassing violations of FACB rights, that is, for “General prohibition of the right to establish and join organizations” in law, “General prohibition of the development of independent organizations” in practice, “General prohibition of the right to collective bargaining” in law, and “General prohibition of collective bargaining” in practice.  The reporting of SDG indicator 8.8.2 will highlight differences between ratifying and non-ratifying countries by adding two columns alongside SDG indicator 8.8.2. The first column will indicate whether a country has ratified Convention No. 87 and the second column will indicate whether a county has ratified Convention No. 98. The columns will be explained with the following text: “*SDG indicator 8.8.2 is not intended as a tool to compare compliance among ILO member States. It should specifically be noted that reporting obligations of an ILO member State to the ILO’s supervisory system and thus ILO textual sources are different for ratifying and non-ratifying ILO member States*.”  Consistent with Tables 1 and 2 above, issues of non-compliance with respect to evaluation criteria concerning the exclusion of workers and employers in EPZs from freedom of association and collective bargaining rights will not be coded separately but rather coded under evaluation criteria concerning the general exclusion of workers and employers.  An additional evaluation criterion has been added to code cases brought under Article 26 of the ILO’s Constitution before the ILO’s Commission of Inquiry and given the maximum weight of 2.0 (evaluation criteria 0 in Tables 1 and 2). This evaluation criterion will be coded first for the year when the decision is made for the establishment of the procedure and then for every subsequent year until the final report is adopted and published.  Based on the identification of violations in ILO supervisory body textual sources, violations related to the prohibition of employers’ access to their premises during industrial action will be coded under new separate evaluation criteria that specifically address such violations (evaluation criteria 48 and 55 in Table 2 for violations in law and in practice, respectively).  Regarding possible contradictions among textual sources, for the purposes of SDG indicator 8.8.2 the following coding rule will be applied: “If contradictory evidence is found within the same source or if an explicitly stated contradictory assessment is found among different sources – based solely on the comments, conclusions and recommendations of the ILO supervisory system – the information will be excluded from coding.”  The coding of national legislation will be done in close collaboration with the International Labour Office to assure that it is done in a manner consistent with the ILO’s supervisory system. In addition, countries may also make available information on national legislation when reporting on this indicator through Voluntary National Reports or national reporting platforms or any other national reports. Note that in order to avoid creating an additional supervisory mechanism, coding of national legislation for ratifying member States will not be undertaken for SDG indicator 8.8.2 as this is under the remit of the ILO’s supervisory system. |  | textual sources of ILO |  | a) MoLE,  b) MoEWOE  Administrative Data | * Sex: Female, Male, Both * Migrant Status: migrant/ Non Migrant | Triennial | Group 2 | 1st Round:  Decembe r 2020  2nd Round:  Decembe r 2023  3rd Round:  Decembe r 2026  4th Round:  Decembe r 2029  5th Round:  Decembe r 2030 | Data should be provided as per metadata by MOLE.  [No of Trade Union-8127  Num of Trade Union Members 245814  (MoLE, 2019)]  Reviewed at Dec. 2018 WebEx meeting  (classified as Tier II)  UNSC 48 refinement, Reviewed at 5th IAEG-SDG meeting: Internationally agreed methodology and standard needs to be approved (classified as TBD) |
| Target 8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products | | | | | | | | | | | | |
| 8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate | UNWTO  **Partner Agencies:**  UNEP | Tier II | **Definition:**  Tourism Direct GDP (TDGDP) is defined as the sum of the part of gross value added (at basic prices) generated by all industries in response to internal tourism consumption plus the amount of net taxes on products and imports included within the value of this expenditure at purchasers’ prices. The indicator relies on the Tourism Satellite Account: Recommended Methodological Framework 2008, an international standard adopted by the UN Statistical Commission and elaborated by UNWTO, OECD and EUROSTAT.  **Concepts:**  Tourism direct gross value added (TDGVA) is the part of gross value added generated by tourism industries and other industries of the economy that directly serve visitors in response to internal tourism consumption.  Gross Domestic Product (GDP): It is the main measure of national output, representing the total value of all final goods and services within the System of National Accounts (SNA) production boundary produced in a particular economy (that is, the dollar value of all goods and services within the SNA production boundary produced within a country’s borders in a given year). According to the SNA, “GDP is the sum of gross value added of all resident producer units plus that part (possibly the total) of taxes on products, less subsidies on products, that is not included in the valuation of output … GDP is also equal to the sum of the final uses of goods and services (all uses except intermediate consumption) measured at purchasers’ prices, less the value of imports of goods and services GDP is also equal to the sum of primary incomes distributed by resident producer units.”  **Comments and limitations:**  Given that a growing number of countries produce Tourism Satellite Account (TSA), data on the suggested indicators could become available in many more countries in the near future.  The data demands – among others - detailed input-output or supply and use tables for setting up a TSA; this means that it is often not possible to have current data or frequent updating of the TSA. Therefore, some countries produce estimates of TSA aggregates, in between reference years, to have more current data and to produce a time series.  TDGDP/GDP tends to do not show large variations from one year to the next and variations may stem from the numerator and/or denominator. This could warrant considering the indicator in different forms: absolute value, % change in constant price, and TDGDP per visitor or per employed person.  **Computation Method:**  Tourism direct GDP as a proportion of total GDP (in%):  Tourism direct GDP in growth rate  ((tdgdp t / tdgdp t-1)-1)\*100 | Survey questionnaire | National Statistics Offices and/or National Tourism Administrations. | BBS  TSA Survey | BBS  NAW/ TSA Survey | * By Region * by tourism industries (e.g. accommodation for visitors, the different kinds of passenger transportation, etc.) | Annual | Group 1 | 1st Round:  2012  2nd Round:  June 2020  3rd Round:  June 2021  4th Round:  June 2022  5th Round:  June 2023 |  |
| Target 8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all | | | | | | | | | | | | |
| 8.10.1 (a) Number of commercial bank branches per 100,000 adults and (b) number of automated teller machines (ATMs) per 100,000 adults | IMF  **Partner Agencies:**  UNCDF | Tier I | Definition:  The number of commercial bank branches per 100,000 adults  The number of automated teller machines (ATMs) per 100,000 adults  Concepts:  The number of commercial bank branches per 100,000 adults refers to the number of commercial banks branches at end-year reported by the Central Bank or the main financial regulator of the country. To make it comparable, this number is presented as a reference per 100,000 adults in the respective country.  The number of automated teller machines (ATMs) per 100,000 adults, refers to the number of ATMs in the country for all types of financial institutions such as: commercial banks, non-deposit taking microfinance institutions, deposit taking micro finance institutions, credit union and financial cooperatives, among other. This information is reported every year by the Central Bank or the main financial regulator of the country. To make it comparable, this number is presented as a reference per 100,000 adults in the respective country.  Comments and limitations:  Since 2009, the Financial Access Survey (FAS) collects information from administrative sources on an annual basis. The Central Bank or the main financial regulator reports yearly information including the two indicators that are part of the SDGs. Since its launch, 189 economies have contributed to the FAS, which now contains more than 150 series on financial inclusion covering the period 2004-2016.  Computation Method:  The indicators are calculated based on data collected directly from the Central Bank or the main financial regulator in the country. The formula to obtain these indicators are:  Where “i” indicates the country and “t” indicates the year. The source of information for the number of commercial bank branches and the number of ATMs is the FAS, while the source of information for the adult population is the World Development Indicators. | Survey | Country authorities for the financial services, mainly Central Banks, financial system regulators or statistics national authorities. | IMF  Administrative Data | a) BB, FID  Administrative Data | Year | Annual | Group 1 | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 |  |
| 8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider | World Bank  **Partner Agencies:**  UNCDF | Tier I | Definition:  The percentage of adults (ages 15+) who report having an account (by themselves or together with someone else) at a bank or another type of financial institution or personally using a mobile money service in the past 12 months.  Rationale:  Access to formal financial services such as savings, insurance, payments, credit and remittances is essential to the ability of people—regardless of income level, gender, age, education or where they live—to manage their lives, build their futures, and grow their businesses. Having access to an account is an important starting point for people to access arange of financial services.  Concepts:  Account at a financial institution includes respondents who report having an account at a bank or at another type of financial institution, such as a credit union, microfinance institution, cooperative, or the post office (if applicable), or having a debit card in their own name. In addition, it includes respondents who report receiving wages, government transfers, or payments for agricultural products into an account at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; or receiving wages or government transfers into a card in the past 12 months. Mobile money account includes respondents who report personally using GSM Association (GSMA) Mobile Money for the Unbanked (MMU) services in the past 12 months to pay bills or to send or receive money. In addition, it includes respondents who report receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months.  Comments and limitations:  World Bank’s Global Findex database is based on individual level surveys worldwide, conducted every three years. The first round of the survey was done in 2011, and the second in 2014. The third round will be done in 2017. The database covers about 140 countries.  Computation Method:  The indicator is based on data collected through individual level surveys in each country with representative samples. Appropriate sampling weights are used in calculating country-level aggregates. | Survey | N/A | Global Findex, WB | a) BB, FID  b) BBS (PHC2021/PHC/HIES/CPHS)  Administrative Data/Household Survey | * Income: High/ medium/ Low * Education Level * Geographic Location: Urban, Rural * Gender: Male, Female, Transgender   Age: 15 and Older | Annual | Group 1 | 1st Round: 2014  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 |  |
| Target 8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries | | | | | | | | | | | | |
| 8.a.1 Aid for Trade commitments and disbursements | OECD  **Partner Agencies:**  WTO-EIF | Tier I | Definition:  Aid for Trade commitments and disbursements is the gross disbursements and commitments of total Official Development Assistance (ODA) from all donors for aid for trade.  Concepts:  The DAC defines Official Development Assistance (ODA) as “those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are i) provided by official agencies, including state and local governments, or by their executive agencies; and ii) each transaction is administered with the promotion of the economic development and welfare of developing countries as its main objective; and is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent). (See http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm)  Other official flows (OOF),excluding officially supported export credits, are defined as transactions by the official sector which do not meet the conditions for eligibility as ODA, either because they are not primarily aimed at development, or because they are not sufficiently concessional. See http://www.oecd.org/dac/stats/documentupload/DCDDAC(2016)3FINAL.pdf, Para 24.  Aid for Trade is captured in the CRS through sector codes in the 331 series and the aid for trade marker. see here: http://www.oecd.org/dac/stats/purposecodessectorclassification.htm.  ‘All donors’ refers to DAC donors, non-DAC donors and multilateral organisations.  Comments and limitations:  Data in the Creditor Reporting System are available from 1973. However, the data coverage is considered complete from 1995 for commitments at an activity level and 2002 for disbursements.  Computation Method:  The sum of ODA and OOF flows from all donors to developing countries for aid for trade. | Administrative data | Data are reported on an annual calendar year basis by statistical reporters in national administrations (aid agencies, Ministries of Foreign Affairs or Finance, etc. | OECD-WTO | a) ERD b) MoC  c) WTO  Administrative Data | * Aid for Trade commitments: donor, recipient country * Aid for Trade disbursements * type of finance * type of aid * trade policy and regulations   trade related adjustment sub-sectors | Annual | Group 1 | 1st Round:  2015  2nd Round:  September 2019  3rd Round:  September 2020  4th Round:  September 2021  5th Round:  September 2022 | To be compiled by ministry of commerce |
| Target 8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization | | | | | | | | | | | | |
| 8.b.1 Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy | ILO  **Partner Agencies:**  World Bank,  OECD | Tier II | **Concepts and definitions**  The proposed methodology draws on:  a. Global policy instruments, notably:  o Resolution on The youth employment crisis: A call for action , adopted at the 101st session of the International Labour Conference (ILC) in June 2012. In calling for vigorous, collective action to address an aggravated youth employment crisis, this resolution advocates for a multi-pronged approach with policy measures that are context-specific and integrated, entailing strategies which bring together in a coherent manner a variety of instruments to increase the demand, enhance the supply and improve matching in youth labour markets.  o Recovering from the crisis: A Global Jobs Pact adopted by the ILC at its June 2009 session. Based on the ILO’s Decent Work Agenda, the Global Jobs Pact presents an integrated portfolio of policies that puts employment and social protection at the centre of crisis response, recognising the critical role of participation and social dialogue.  b. ILO databases:  o International monitoring of youth employment policies was carried out over the period 2010-2012 by the Youth Employment Network (YEN) – a partnership between the ILO, United Nations and World Bank – utilising a questionnaire sent to national authorities. This evolved into YouthPOL , an inventory of youth employment policies and programmes maintained by the ILO (65 countries covered to date).  o The ILO also maintains EmPol, a dataset of broader national employment policies (143 countries covered).  c. ILO expertise and experience:  o The Department of Statistics (STATISTICS) works to provide relevant, timely and reliable labour statistics, to develop international standards for better measurement of labour issues and enhanced international comparability, and to help member States develop and improve their labour statistics.  o The Employment Policy Department (EMPLOYMENT) is responsible for promoting full and productive employment by developing integrated employment, development and skills policies (ILO, 2012) that are inclusive, gender sensitive and sustainable. The department is mandated to coordinate ILO efforts to promote decent job opportunities for young women and men; over the years, it has supported the formulation, implementation and review of national youth employment strategies and action plans in different countries and regions (ILO, 2008; ILO, 2015). This type of targeted action and related achievements have been included in the ILO programming framework and performance system.  The ILO supports its constituents and other development stakeholders through knowledge and capacity building as well as through policy advocacy and advice. The list of references at the end of this note offers examples of recent major ILO contributions to knowledge building on youth employment and youth employment policy (ILO, 2017).  **Computation Method:**  The information and documents provided by national authorities will be analysed by the ILO by making use of the grid hereafter.  Value Description   |  |  | | --- | --- | | **Value** | **Description** | | Missing value | No information available to assess the existence of a national strategy for youth employment. | | 0 | The country has not developed any national strategy for youth employment or taken steps to develop or adopt one. | | 1 | The country is in the process of developing a national strategy for youth employment. | | 2 | The country has developed and adopted a national strategy for youth employment | | 3 | The country has operationalised a national strategy for youth employment. |     In all cases, the grid refers to a national strategy for youth employment as a distinct strategy or as part of a national employment strategy. | Survey | National entities (ministries or other government agencies) responsible for development, employment and youth policies. The ILO will maintain a roster of national actors to be involved in the monitoring process. | FD  Administrative Data | a) MoYS  b) MoLE  Administrative Data | * Not Applicable | 5-years | Group 1 | 1st Round: September 2019  2nd Round:  September 2024  3rd Round:  September 2029  4th Round:  December 2030 | Reviewed at Dec. 2018 WebEx meeting  (classified as Tier II)  UNSC 48 refinement; Reviewed at 5th IAEG-SDG meeting (classified as TBD) |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

|  |  |
| --- | --- |
| A picture containing drawing  Description automatically generated | Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier**  **Classifi-**  **cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN**  **Suggested**  **Data**  **provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local**  **Indicator**  **Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
| Target **9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all** | | | | | | | | | | | | |
| 9.1.1 Proportion of the rural population who live within 2 km of an all-season road | World Bank  **Partner Agencies:**  UNEP,  UNECE,  ADB | Tier II | Definition:  The indicator (commonly known as the Rural Access Index or RAI) measures the share of a country’s rural population that lives within 2 km of an all-season road.    Concepts:  The indicator is measured by combining three sets of geospatial data: where people live, the spatial distribution of the road network, and road quality. The use of spatial data has various advantages. It can help ensure consistency across countries. The level of spatial resolution is broadly the same regardless of the size of the country or subnational boundaries. Any given norm of connectivity (for example, 2 km distance from a road) is uniquely and unambiguously applied for all countries.  Population Distribution - Quality population distribution data are essential for correct measurement of rural access. In some countries, census data is available in a geospatially detailed, reliable format. For other countries, population distribution data sets have been developed by the international research community, interpreting subnational census data through various modelling techniques. For the RAI, the WorldPop has been found to provide the best estimate.  Rural-Urban Definition – Related to population distribution data, an important challenge facing the index is the need for a consistent and reliable urban and rural definition to exclude urban areas from the calculation. The inclusion of urban areas would create a substantial upward bias in the RAI, because most urban residents have “access to roads,” no matter how it is defined. Ideally, spatial data determining urban-rural boundaries are needed at a similar level of resolution as the population. As such data may rely on different definitions in different countries, globally produced urban extents may be used, such as the Global Urban Rural Mapping Project.  Road Network Data – Data on road locations may come from a number of sources. Ideally government data are used, as they are consistent with the road network for which road agencies are responsible and are relatively easily merged with other operational databases. In countries where the road location data may not be detailed enough or entirely missing, alternative data sources may be available, such as the open source Open Street Map.  Road Condition Data – The principle of the “all-season” road network remains central to the original concept of measuring the RAI. An “all-season road” is defined as a road that is motorable all year round by the prevailing means of rural transport (often a pick-up or a truck which does not have four-wheel-drive). Predictable interruptions of short duration during inclement weather (e.g. heavy rainfall) are accepted, particularly on low volume roads. It is important to determine whether access to facilities and services is available all year round, and hence the possibility of the road throughout the year is an essential factor in this aspect of contributing to poverty reduction. Information on the condition of the road network is frequently maintained by road agencies as part of their operational responsibilities.  The traditional road inventory survey can collect data on road condition, including the International Roughness Index (IRI), at a high level of information quality, to determine whether a road is “all-season”. For the purpose of the RAI, the road condition threshold is generally set at an IRI of less than 6 meters/km for paved roads, and an IRI of less than 13 meters/km for unpaved roads. When IRI is not available, other types of condition assessment may be used if comparable. The use of smartphones with GPS are being investigated in order to accurately map local transport services routes, and identify which rural roads are open all year and hence are all-season roads.  Comments and limitations:  The Indicator relies substantially on data collected by road agencies and national statistics offices for their operational work. As such, its update is dependent on the frequency of update of the road condition surveys and national census. When these data sets are not from the same year, the basic principle to be followed is that a more stable data set should be used with more flexibility. For instance, a national rural roads program could dramatically improve the quality of roads in a certain locality in a relatively short term, while population data are fairly stable over five years. In such a case, the road quality data would be considered as an anchor, with the closest or adjusted population data applied.  The Indicator depends heavily on the quality of the underlying spatial data. The extent of the road network data, and how well it reflects the reality on the ground, can be a particular issue. More data are always better. Efforts are required to collect detailed road data, including tertiary or feeder roads, which may not be covered in the existing spatial road network data regardless of whether government or open data sources are used. The condition of the missing roads, however, matters; if the missing tertiary and feeder are of poor quality, their exclusion would not impact the overall results.  For obvious reasons, the 2 km norm of access may not be as applicable in all areas. In Africa, for instance, a 5 km access band may make more sense given the low population density in many regions. However, for global consistency purposes and comparability across countries, the 2 km threshold has been maintained (equivalent to a 20-30 minute walk).  While the RAI provides an objective benchmark for assessing access to transport in rural areas, “universal” access should not be set as a target. Where individual households are in very remote areas, attempting to reach 100% access would lead to inefficient allocation of resources.  **Computation Method:**  The indicator is calculated by overlying three basic geospatial datasets: population distribution, road location, and road condition. The RAI is calculated as the rural population within a 2 km buffer of a good road divided by the total rural population of the country.  First, the spatial distribution of the rural population needs to be determined. This involves obtaining the population dataset for the country, either from country sources or global datasets such as WorldPop.  Next, the road network should be merged with road condition assessments, either in terms of IRI if available, or visual assessment. Those roads with a quality not meeting the threshold of the RAI (not providing “all-season” access) should be excluded. In general, the RAI adopts a road condition threshold is generally set at an IRI of less than 6 meters/km for paved roads and an IRI of less than 13 meters/km for unpaved roads. If IRI is unavailable, alternative assessments of road condition may be used, if comparable. A 2 km buffer should be generated around the road network meeting the condition threshold. Urban areas should be removed from both the road data and the population data.  Finally, the rural population living within the 2 km buffer should be calculated. The final RAI is determined by dividing this portion of the rural population from the total rural population. | Source collection by the Transport Global Practice of the World Bank in coordination with NSOs and national road agencies. | National road agencies and National Statistical Offices | LGED | a) LGD, LGED  b) (APTRCS/PHC/ CPHS), SID | * District * Upazila | Triennial | Group 1 | 1st Round:  2016  2nd Round:  December 2020  3rd Round:  December 2023  4th Round:  December 2026  5th Round:  December 2029 | Reviewed at Dec. 2018 WebEx meeting  (classified as Tier II) |
| 9.1.2 Passenger and freight volumes, by mode of transport | ICAO,  ITF-OECD  **Partner Agencies:**  UPU,  UNEP,  UNECE | Tier I | Definition:  Passenger and freight volumes is the sum of the passenger and freight volumes reported for the air carriers in terms of number of people and metric tonnes of cargo respectively.  The International Transport Forum (ITF) collects data on transport (rail and road) statistics on annual basis from all its Member countries. Data are collected from Transport Ministries, statistical offices and other institution designated as official data source. Although there are clear definitions for all the terms used in this survey, countries might have different methodologies to calculate tonne-kilometres and passenger-kilometres. Methods could be based on traffic or mobility surveys, use very different sampling methods and estimating techniques which could affect the comparability of their statistics.  • ITF (2016) Trends in the Transport Sector  Concepts:  The International Civil Aviation Organization (ICAO) through its Statistics Division have established standard methodologies and definitions to collect and report traffic (passenger and freight volume) data related to air transport. These standards and methodologies have been adopted by the 191 Member States of ICAO and also by the Industry stakeholders i,e air carriers and airports. The data of ICAO is used by States and also the World Bank for its development indicators. ICAO uses Air Transport Reporting Forms A, AS, B and C to arrive at the passenger and freight volumes for air transport.  Precise definition of all different concepts and metadata related to Air Transport Reporting Forms A, AS, B and C to arrive at the passenger and freight volumes for air transport. approved by the ICAO Statistics Division and Member States can be found at the ICAO website given below -  http://www.icao.int/sustainability/pages/eap-sta-excel.aspx/  Comments and limitations:  Coverage is for all ICAO 191 Member States  Computation Method:  The indicator is calculated through a sum of the passenger and freight volumes reported for the air carriers through ICAO Air Transport Reporting Forms and grouped by Member States of ICAO. | The indicator is calculated through a sum of the passenger and freight volumes reported for the air carriers through ICAO Air Transport Reporting Forms and grouped by Member States of ICAO. | Data provided to ICAO by ICAO Member States from its Ministry of Transport, Infrastructure or Aviation | CAAB  Administrative Data | a)RTHD, BRTA  b) MoS, BIWTC  c) MoS, BIWTA  d) MoR, BR  e) MoCAT, CAAB  Administrative Data | * Country * Country pair * City Pair * Region: Division * Segment: International, domestic * Mode of Transport: Road, Rail, Inland waterways, Pipelines | Annual | Group 1 | 1st Round:  2015  2nd Round:  December 2020  3rd Round:  December 2021  4th Round:  December 2022  5th Round:  December 2023 |  |
| Target 9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries | | | | | | | | | | | | |
| 9.2.1 Manufacturing value added as a proportion of GDP and per capita | UNIDO  **Partner Agencies:**  World Bank | Tier I | Definition:  Manufacturing value added (MVA) as a proportion of gross domestic product (GDP) is a ratio between MVA and GDP, both reported in constant 2010 USD.  MVA per capita is calculated by dividing MVA in constant 2010 USD by population of a country or area.  Concepts:  The gross value added is defined as output minus intermediate consumption and equals the sum of employee compensation, gross operating surplus of government and corporations, gross mixed income of unincorporated enterprises and taxes less subsidies on production and imports, except for net taxes on products (System of National Accounts 2008). Manufacturing refers to industries belonging to the sector C defined by International Standard Industrial Classification of All Economic Activities (ISIC) Revision 4, or D defined by ISIC Revision 3.  GDP represents the sum of gross value added from all institutional units resident in the economy. For the purpose on comparability over time and across countries MVA and GDP are estimated in terms of constant prices in USD. The current series are given at constant prices of 2010.  Comments and limitations:  Differences may appear due to different versions of System of National Accounts (SNA) or ISIC revisions used by countries.  Computation Method:  MVA proportion to GDP = MVA/GDP\*100.  MVA per capita = MVA/population | MVA proportion to The MVA and GDP country data are collected through a national accounts questionnaire (NAQ) by UNSD.  GDP = MVA/GDP\*100.  MVA per capita = MVA/population | United Nations Statistics Division (UNSD) and official publications  from national statistical offices (NSOs) | BBS  NAW | BBS  NAW/SMI | * Mode of transport: road, rail, air * Country-pair * City pair * Division * Segment: international, domestic | Annual | Group 1 | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 |  |
| 9.2.2 Manufacturing employment as a proportion of total employment | **UNIDO** | Tier I | Definition:  The indicator is represented by the share of manufacturing employment in total employment.  Concepts:  Employment comprises all persons of working age who during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit. The working-age population is usually defined as all persons aged 15 and above. Employed persons are all persons of working age who, during a specified brief period (e.g. a day or a week), were either employed in a paid capacity or self-employed. For further clarification, see: Resolution concerning statistics of work, employment and labour underutilization (2013), available from http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\_230304/lang--en/index.htm. No distinction is made between persons employed full time and those working less than full time.  Manufacturing sector is defined according to the International Standard Industrial Classification of all Economic Activities (ISIC) revision 3 (1990) or revision 4 (2008, the latest) Oor revision 3 (1990). It refers to industries belonging to sector C in revision 4 or sector D in revision 3. or sector C in revision 4.  Comments and limitations:  The characteristics of the data source impact the international comparability of the data, especially in cases where the coverage of the source is less than comprehensive (either in terms of country territory or economic activities). In the absence of a labour force survey (the preferred source of data for this indicator), some countries may use an establishment survey to derive this indicator, but these usually have a cut-off points such that small units which are not officially registered (whether in manufacturing or not) are not included in the survey and consequently, employment data may be underestimated. Discrepancies can also be caused by differences in the definition of employment or working age.  Computation Method: | variety of sources, including labour force surveys and other similar types of household surveys, establishment surveys and administrative records | ILO, UNIDO,  NSO | BBS  LFS | BBS  QLFS | * Gender: Male, Female, Transgender | Triennial | Group 1 | 1st Round:  2016  2nd Round:  December 2020  3rd Round:  December 2023  4th Round:  December 2026  5th Round:  December 2029 |  |
| Target 9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets | | | | | | | | | | | | |
| 9.3.1 Proportion of small-scale industries in total industry value added | UNIDO  **Partner Agencies:**  UNCDF | Tier II | Definition:  Small-scale industrial enterprises, in the SDG framework also called “small-scale industries”, defined here for the purpose of statistical data collection and compilation refer to statistical units, generally enterprises, engaged in production of goods and services for market below a designated size class.  Proportion of “small-scale industries” in total industry value added represents an indicator calculating the share of manufacturing value added of small-scale manufacturing enterprises in the total manufacturing value added.  Concepts:  International recommendations for industrial statistics 2008 (IRIS 2008) (United Nations, 2011) define an enterprise as the smallest legal unit that constitutes an organizational unit producing goods or services. The enterprise is the basic statistical unit at which all information relating to its production activities and transactions, including financial and balance-sheet accounts, are maintained. It is also used for institutional sector classification in the 2008 System of National Accounts.  An establishment is defined as an enterprise or part of an enterprise that is situated in a single location and in which only a single productive activity is carried out or in which the principal productive activity accounts for most of the value added. An establishment can be defined ideally as an economic unit that engages, under single ownership or control, that is, under a single legal entity, in one, or predominantly one, kind of economic activity at a single physical location. Mines, factories and workshops are examples. This ideal concept of an establishment is applicable to many of the situations encountered in industrial inquiries, particularly in manufacturing.  Although the definition of an establishment allows for the possibility that there may be one or more secondary activities carried out in it, their magnitude should be small compared with that of the principal activity. If a secondary activity within an establishment is as important, or nearly as important, as the principal activity, then the unit is more like a local unit. It should be subdivided so that the secondary activity is treated as taking place within an establishment separate from the establishment in which the principal activity takes place.  In the case of most small-sized businesses, the enterprise and the establishment will be identical. Some enterprises are large and complex with different kinds of economic activities undertaken at different locations. Such enterprises should be broken down into one or more establishments, provided that smaller and more homogeneous production units can be identified for which production data may be meaningfully compiled.  As introduced in IRIS 2008 (United Nations, 2011), an economic activity is understood as referring to a process, that is to say, to the combination of actions carried out by a certain entity that uses labor, capital, goods and services to produce specific products (goods and services). In general, industrial statistics reflect the characteristics and economic activities of units engaged in a class of industrial activities that are defined in terms of the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4) (United Nations, 2008) or International Standard Industrial Classification of All Economic Activities, Revision 3.1 (ISIC Rev. 3) (United Nations, 2002).  Total numbers of persons employed is defined as the total number of persons who work in or for the statistical unit, whether full-time or part-time, including:  Working proprietors  Active business partners  Unpaid family workers  Paid employees (for more details see United Nations, 2011).  The size of a statistical unit based on employment should be defined primarily in terms of the average number of persons employed in that unit during the reference period. If the average number of persons employed is not available, the total number of persons employed in a single period may be used as the size criterion. The size classification should consist of the following classes of the average number of persons employed: 1-9, 10-19, 20-49, 50-249, 250 and more. This should be considered a minimum division of the overall range; more detailed classifications, where required, should be developed within this framework.  Value added cannot be directly observed from the accounting records of the units. It is derived as the difference between gross output or census output and intermediate consumption or census input (United Nations, 2011). The value added at basic prices is calculated as the difference between the gross output at basic prices and the intermediate consumption at purchasers’ prices. The valuation of value added closely corresponds to the valuation of gross output. If the output is valued at basic prices, then the valuation of value added is also at basic prices (the valuation of intermediate consumption is always at purchasers’ prices).  All above mentioned terms are introduced to be in line with IRIS 2008 (United Nations, 2011).  Comments and limitations:  The main limitation of existing national data is varying size classes by country indicating that data are obtained from different target populations. Data of one country are not comparable to another.  The definition of size class in many countries is tied up with the legal and policy framework of the country. It has implications on registration procedure, taxation and different waivers aimed to promote “small-scale industries”. Therefore, countries may agree on a common size class for compilation purposes. In this context, UNIDO proposes that all countries compile the employment and value added data by a size class of “small-scale industries” as with less than 20 persons employed. From such data, an internationally comparable data on the share of “small-scale industries” in total could be derived.  Computation Method:  The proportion of “small-scale industries” in total value added is an indicator calculated as a share of value added for small-scale manufacturing enterprises in total manufacturing value added: | Industrial and enterprise Surveys | National statistical offices (NSOs) in non-OECD countries, and OECD countries by OECD |  | BBS  SMI | * Industrial Sectors * Geographical Region: Division | Triennial | Group 2 | 1st Round:  December 2019  2nd Round:  December 2022  3rd Round:  December 2025  4th Round:  December 2028  5th Round:  December 2030 | SMI is being conducted in May, 2019  Reviewed at 6th IAEG-SDG meeting (classified as Tier II)  Fast Track; Reviewed at 5th IAEG-SDG meeting: Request additional work on the definition of small-scale industries (classified as TBD) |
| 9.3.2 Proportion of small-scale industries with a loan or line of credit | UNIDO,  World Bank  **Partner Agencies:**  UNCDF | Tier I | Definition:  Small-scale industrial enterprises, in the SDG framework also called “small-scale industries”, defined here for the purpose of statistical data collection and compilation refer to statistical units, generally enterprises, engaged in production of goods and services for market below a designated size class.  This indicator shows the number of “small-scale industries” with an active line of credit or a loan from a financial institution in the reference year in percentage to the total number of such enterprises.  Concepts:  International recommendations for industrial statistics 2008 (IRIS 2008) (United Nations, 2011) define an enterprise as the smallest legal unit that constitutes an organizational unit producing goods or services. The enterprise is the basic statistical unit at which all information relating to its production activities and transactions, including financial and balance-sheet accounts, are maintained. It is also used for institutional sector classification in the 2008 System of National Accounts.  An establishment is defined as an enterprise or part of an enterprise that is situated in a single location and in which only a single productive activity is carried out or in which the principal productive activity accounts for most of the value added. An establishment can be defined ideally as an economic unit that engages, under single ownership or control, that is, under a single legal entity, in one, or predominantly one, kind of economic activity at a single physical location. Mines, factories and workshops are examples. This ideal concept of an establishment is applicable to many of the situations encountered in industrial inquiries, particularly in manufacturing.  Although the definition of an establishment allows for the possibility that there may be one or more secondary activities carried out in it, their magnitude should be small compared with that of the principal activity. If a secondary activity within an establishment is as important, or nearly as important, as the principal activity, then the unit is more like a local unit. It should be subdivided so that the secondary activity is treated as taking place within an establishment separate from the establishment in which the principal activity takes place.  In the case of most small-sized businesses, the enterprise and the establishment will be identical. Some enterprises are large and complex with different kinds of economic activities undertaken at different locations. Such enterprises should be broken down into one or more establishments, provided that smaller and more homogeneous production units can be identified for which production data may be meaningfully compiled.  As introduced in IRIS 2008 (United Nations, 2011), an economic activity is understood as referring to a process, that is to say, to the combination of actions carried out by a certain entity that uses labor, capital, goods and services to produce specific products (goods and services). In general, industrial statistics reflect the characteristics and economic activities of units engaged in a class of industrial activities that are defined in terms of the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4) (United Nations, 2008) or International Standard Industrial Classification of All Economic Activities, Revision 3.1 (ISIC Rev. 3) (United Nations, 2002).  Total numbers of persons employed is defined as the total number of persons who work in or for the statistical unit, whether full-time or part-time, including:  Working proprietors  Active business partners  Unpaid family workers  Paid employees (for more details see United Nations, 2011).  The size of a statistical unit based on employment should be defined primarily in terms of the average number of persons employed in that unit during the reference period. If the average number of persons employed is not available, the total number of persons employed in a single period may be used as the size criterion. The size classification should consist of the following classes of the average number of persons employed: 1-9, 10-19, 20-49, 50-249, 250 and more. This should be considered a minimum division of the overall range; more detailed classifications, where required, should be developed within this framework.  A loan is a financial instrument that is created when a creditor lends funds directly to a debtor and receives a nonnegotiable document as evidence of the asset. This category includes overdrafts, mortgage loans, loans to finance trade credit and advances, repurchase agreements, financial assets and liabilities created by financial leases, and claims on or liabilities to the International Monetary Fund (IMF) in the form of loans. Trade credit and advances and similar accounts payable/receivable are not loans. Loans that have become marketable in secondary markets should be reclassified under debt securities. However, if only traded occasionally, the loan is not reclassified under debt securities (IMF, 2011).  Lines of credit and loan commitments provide a guarantee that undrawn funds will be available in the future, but no financial liability/asset exists until such funds are actually provided. Undrawn lines of credit and undisbursed loan commitments are contingent liabilities of the issuing institutions— generally, banks (IMF, 2011). A loan or line of credit refers to regulated financial institutions only.  Comments and limitations:  The main limitation of existing national data is varying size classes by country indicating that data are obtained from different target populations. Data of one country are not comparable to another.  The definition of size class in many countries is tied up with the legal and policy framework of the country. It has implications on registration procedure, taxation and different waivers aimed to promote “small-scale industries”. Therefore, countries may agree on a common size class for compilation purposes. In this context, UNIDO proposes that all countries compile the data by a size class of “small-scale industries” as with less than 20 persons employed. From such data, an internationally comparable data on the share of “small-scale industries” in total could be derived.  Computation Method:  The proportion of “small-scale industries” with a loan or line of credit is calculated as the number of “small-scale industries” with an active line of credit or a loan from a financial institution in the reference year in percentage to the total number of such enterprises: | World Bank Enterprise Surveys | World Bank |  | BBS  SMI | Not Applicable | Triennial | Group 2 | 1st Round:  December 2019  2nd Round:  December 2022  3rd Round:  December 2025  4th Round:  December 2028  5th Round:  December 2030 | SMI is being conducted in May, 2019  Data availability reviewed in Oct. 2019  (classified as Tier I)  Reviewed at 6th IAEG-SDG meeting (classified as Tier II)  Fast Track; Reviewed at 5th IAEG-SDG meeting: Request additional work on the definition of small-scale industries (classified as TBD) |
| Target 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities | | | | | | | | | | | | |
| 9.4.1 CO2 emission per unit of value added | UNIDO,  IEA  **Partner Agencies:**  UNEP | Tier I | Definition:  Carbon dioxide (here after, CO2) emissions per unit value added is an indicator computed as ratio between CO2 emissions from fuel combustion and the value added of associated economic activities. The indicator can be computed for the whole economy (total CO2 emissions/GDP) or for specific sectors, notably the manufacturing sector (CO2 emissions from manufacturing industries per manufacturing value added (MVA).  CO2 emissions per unit of GDP are expressed in kilogrammes of CO2 per USD constant 2010 PPP GDP. CO2 emissions from manufacturing industries per unit of MVA are measured in kilogrammes of CO2 equivalent per unit of MVA in constant 2010 USD.  Concepts:  Total CO2 emissions for an economy are estimated based on energy consumption data for all sectors.  CO2 emissions from manufacturing are based on energy data collected across the following subsectors (energy used for transport by industry is not included here but reported under transport):  Iron and steel industry [ISIC Group 241 and Class 2431];  Chemical and petrochemical industry [ISIC Divisions 20 and 21] excluding petrochemical feedstocks;  Non-ferrous metals basic industries [ISIC Group 242 and Class 2432];  Non-metallic minerals such as glass, ceramic, cement, etc. [ISIC Division 23];  Transport equipment [ISIC Divisions 29 and 30];  Machinery comprises fabricated metal products, machinery and equipment other than transport equipment [ISIC Divisions 25 to 28];  Food and tobacco [ISIC Divisions 10 to 12];  Paper, pulp and printing [ISIC Divisions 17 and 18];  Wood and wood products (other than pulp and paper) [ISIC Division 16];  Textile and leather [ISIC Divisions 13 to 15];  Non-specified (any manufacturing industry not included above) [ISIC Divisions 22, 31 and 32].  Energy data are collected at a country level, based on internationally agreed standards (UN International Recommendations on Energy Statistics). CO2 emissions need to be estimated based on energy data and on internationally agreed methodologies (IPCC Guidelines for GHG inventories).  The IEA collects national energy data, according to internationally agreed energy statistics definitions and estimates CO2 emissions based on the IPCC Guidelines for GHG inventories Tier 1 methodology, producing internationally comparable CO2 emissions data for over 150 countries and regions.  The gross value added is defined as output minus intermediate consumption and equals the sum of employee compensation, gross operating surplus of government and corporations, gross mixed income of unincorporated enterprises and taxes less subsidies on production and imports, except for net taxes on products (System of National Accounts 2008). Manufacturing refers to industries belonging to the sector C defined by ISIC Revision 4, or D defined by ISIC Revision 3.  Comments and limitations:  Estimation of CO2 emission data is not systematized in many countries, although is performed internationally based on harmonised energy data collected at national level. Energy data collection is generally well established, although in some cases national methodologies may differ from internationally agreed methodologies. National data sources include statistical offices, Energy Ministries, Environment agencies, among others. Energy consumption data and value added data are coming from different data sources which may raise some consistency issues.  Computation Method:  CO2 emissions from fuel combustion are estimated based on energy consumption and on the IPCC Guidelines.  The total intensity of the economy is defined as the ratio of total CO2 emissions from fuel combustion and GDP.  The sectoral intensity is defined as CO2 emission from manufacturing (in physical measurement unit such as tonnes) divided by manufacturing value added (MVA) in constant 2010 USD. | MVA proportion to The MVA and GDP country data are collected through a national accounts questionnaire (NAQ) by UNSD.  GDP = MVA/GDP\*100.  MVA per capita = MVA/population | NSOs and national energy data collecting agencies |  | DoE  Administrative Data  MoEFCC | * national totals * economic sector: manufacturing, industrial | 5-Year | Group 2 | 1st Round:  July 2019  2nd Round:  July 2024  3rd Round:  4th Round:  July 2029  5th Round:  July 2030 | CO2 emission data should be provided by DOE. |
| Target 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending | | | | | | | | | | | | |
| 9.5.1 Research and development expenditure as a proportion of GDP | UNESCO-UIS | Tier I | Definition:  Research and development (R&D) expenditure as a proportion of Gross Domestic Product (GDP) is the amount of R&D expenditure divided by the total output of the economy.  Concepts:  The OECD Frascati Manual (OECD, 2015) provides the relevant definitions for research and experimental development, gross domestic expenditure on R&D and researchers. Although an OECD manual, the application is global. During the 6th revision of the Frascati Manual, developing country issues were mainstreamed in the core of the Manual. The 7th edition was released in October 2015.  The following definitions, taken from the 2015 edition of the Frascati Manual are relevant for computing the indicator.  Research and experimental development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge.  Expenditures on intramural R&D represent the amount of money spent on R&D that is performed within a reporting unit.  Comments and limitations:  Research and development (R&D) data need to be collected through surveys, which are expensive, and are not done on a regular basis in many developing countries. Furthermore, (developing) countries do not always cover all sectors of performance. In particular the business sector is not always covered.  Computation Method:  Computation of the indicator Research and development (R&D) expenditure as a proportion of Gross Domestic Product (GDP) is self-explanatory, using readily available GDP data as denominator. | National Research and development (R&D) surveys | National statistical office or line ministry (such as the Ministry for Science and Technology). | BBS  NAW | BBS  NAW | * sector of performance * source of funds * field of science * type of research * type of cost | Annual | Group 1 | 1st Round:  2015  2nd Round:  June 2020  3rd Round:  June 2021  4th Round:  June 2022  5th Round:  June 2023 | New survey on research sector should be conducted |
| 9.5.2 Researchers (in full-time equivalent) per million inhabitants | UNESCO-  UIS | Tier I | Definition:  The researchers (in full-time equivalent) per million inhabitants is a direct measure of the number of research and development workers per 1 million people.  Concepts:  The OECD Frascati Manual (OECD, 2015) provides the relevant definitions for research and experimental development, gross domestic expenditure on R&D and researchers. Although an OECD manual, the application is global. During the 6th revision of the Frascati Manual, developing country issues were mainstreamed in the core of the Manual. The 7th edition was released in October 2015.  The following definitions, taken from the 2015 edition of the Frascati Manual are relevant for computing the indicator.  Research and experimental development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge.  Researchers are professionals engaged in the conception or creation of new knowledge. They conduct research and improve or develop concepts, theories, models, techniques instrumentation, software or operational methods.  The Full-time equivalent (FTE) of R&D personnel is defined as the ratio of working hours actually spent on R&D during a specific reference period (usually a calendar year) divided by the total number of hours conventionally worked in the same period by an individual or by a group.  Comments and limitations:  R&D data need to be collected through surveys, which are expensive, and are not done on a regular basis in many developing countries. Furthermore, (developing) countries do not always cover all sectors of performance. In particular the business sector is not always covered.  Computation Method:  Computation of the indicator Researchers (in full-time equivalent) per million inhabitants uses available population data as denominator. | National Research and development (R&D) surveys | National statistical office or line ministry (such as the Ministry for Science and Technology). | Population and Household Census,  BBS | a) MoST  b) MoA  c) UGC  d) BIDS  e) BBS  Administrative Data | * sector of employment * field of science * Sex: Male, Female, Transgender * Age: 15-24 yrs, 25-64 yrs, 64+ yrs | Triennial | Group 1 | 1st Round:  2015  2nd Round:  June 2020  3rd Round:  June 2023  4th Round:  June 2026  5th Round:  June 2029 | Will be incorporated in PC-2021 |
| Target 9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States | | | | | | | | | | | | |
| 9.a.1 Total official international support (official development assistance plus other official flows) to infrastructure | OECD  **Partner Agencies:** | Tier I | Definition:  Gross disbursements of total ODA and other official flows from all donors in support of infrastructure.  Concepts:  ODA: The DAC defines ODA as “those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are  i) provided by official agencies, including state and local governments, or by their executive agencies; and  ii) each transaction is administered with the promotion of the economic development and welfare of developing countries as its main objective; and  is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent).  (See http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm)  Other official flows (OOF): Other official flows (excluding officially supported export credits) are defined as transactions by the official sector which do not meet the conditions for eligibility as ODA, either because they are not primarily aimed at development, or because they are not sufficiently concessional.  (See http://www.oecd.org/dac/stats/documentupload/DCDDAC(2016)3FINAL.pdf, Para 24).  Support to infrastructure includes all CRS sector codes in the 200 series (see here: http://www.oecd.org/dac/stats/purposecodessectorclassification.htm)  Comments and limitations:  Data in the Creditor Reporting System are available from 1973. However, the data coverage is considered complete since 1995 for commitments at an activity level and 2002 for disbursements.  Computation Method:  The sum of ODA and OOF flows from all donors to developing countries for infrastructure. | The sum of ODA and OOF flows from all donors to developing countries for infrastructure. | National administrations (aid agencies, Ministries of Foreign Affairs or Finance, etc. | ERD  Administrative Data | ERD  Administrative Data | * type of official flow * type of flow: ODA, OOF * donor country * recipient country * type of finance * type of aid * sub-sector | Annual | Group 1 | 1st Round:  2015  2nd Round:  December, 2020  3rd Round:  December, 2021  4th Round:  December, 2022  5th Round:  December, 2023 |  |
| Target 9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities | | | | | | | | | | | | |
| 9.b.1 Proportion of medium and high-tech industry value added in total value added | UNIDO  **Partner Agencies:**  OECD | Tier I | Definition:  The proportion of medium and high-tech industry (MHT hereafter) value added in total value added of manufacturing (MVA hereafter) is a ratio value between the value added of MHT industry and MVA.  Concepts:  The value added of an industry (industry value added) is a survey concept that refers to the given industry’s net output derived from the difference of gross output and intermediate consumption. Manufacturing sector is defined according to the International Standard Industrial Classification of all Economic Activities (ISIC) revision 3 (1990) or revision 4 (2008). It refers to industries belonging to sector D in revision 3 or sector C in revision 4.  Technology classification is based on research and development (R&D) expenditure relative to value added otherwise referred as R&D intensity. Data for R&D intensity are presented in a report (Galindo-Rueda and Verger, 2016) published by the OECD in 2016, which also proposes a taxonomy for industry groups with different ranges of R&D expenditure relative to their gross value added. MHT industries have traditionally been defined exclusively to manufacturing industries. However, there have been recent efforts (Galindo-Rueda and Verger, 2016) to extend the definition to non-manufacturing industries as well. Nevertheless, medium-high and high technology sectors also in new paper are primarily represented by manufacturing industries.   |  |  |  |  | | --- | --- | --- | --- | | ISIC Rev.4 | Description | ISIC Rev.3 | Description | | 20 | Manufacture of chemicals and chemical products | 24 | Manufacture of chemicals and chemical products | | 21 | Manufacture of basic pharmaceutical products and pharmaceutical preparations | 29 | Manufacture of machinery and equipment n.e.c. | | 252 | Manufacture of weapons and ammunition | 30 | Manufacture of office, accounting and computing machinery | | 26 | Manufacture of computer, electronic and optical products | 31 | Manufacture of electrical machinery and apparatus n.e.c. | | 27 | Manufacture of electrical equipment | 32 | Manufacture of radio, television and communication equipment and apparatus | | 28 | Manufacture of machinery and equipment n.e.c. | 33 | Manufacture of medical, precision and optical instruments, watches and clocks | | 29 | Manufacture of motor vehicles, trailers and semi-trailers | 34 | Manufacture of motor vehicles, trailers and semi-trailers | | 30\* | Manufacture of other transport equipment | 35\*\* | Manufacture of other transport equipment | | 325 | Manufacture of medical and dental instruments and supplies |  |  |     \* Excluding 301 (Building of ships and boats)  \*\* Excluding 351 (Building and repairing of ships and boats)  MVA is the value added of manufacturing industry, which is Section C of ISIC Rev.4, and Section D of ISIC Rev.3.  Comments and limitations:  Value added by economic activity should be reported at least at 3-digit ISIC for compiling MHT values.  Computation Method:  The indicator is calculated as the share of the sum of the value added from MHT economic activities to MVA. | The indicator is calculated as the share of the sum of the value added of MHT sectors to the total value added of manufacturing. | National statistical offices (NSOs) in non-OECD countries, and OECD countries by OECD | BBS  NAW | BBS  NAW | Not Applicable | Annual | Group 1 | 1st Round:  December, 2019  2nd Round:  December, 2020  3rd Round:  December, 2021  4th Round:  December, 2022  5th Round:  December, 2023 | Data availability reviewed in Nov. 2017 (classified as Tier I) |
| Target 9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020 | | | | | | | | | | | | |
| 9.c.1 Proportion of population covered by a mobile network, by technology | ITU | Tier I | Definition:  Proportion of population covered by a mobile network, broken down by technology, refers to the percentage of inhabitants living within range of a mobile-cellular signal, irrespective of whether or not they are mobile phone subscribers or users. This is calculated by dividing the number of inhabitants within range of a mobile-cellular signal by the total population and multiplying by 100.  Concepts:  "The indicator is based on where the population lives, and not where they work or go to school, etc. When there are multiple operators offering the service, the maximum population number covered should be reported. Coverage should refer to LTE, broadband (3G) and narrowband (2G) mobile-cellular technologies and include:  - 2G mobile population coverage: Mobile networks with access to data communications (e.g. Internet) at downstream speeds below 256 Kbit/s. This includes mobile-cellular technologies such as GPRS, CDMA2000 1x and most EDGE implementations. The indicator refers to the theoretical ability of subscribers to use non-broadband speed mobile data services, rather than the number of active users of such services.  - 3G population coverage: refers to the percentage of inhabitants that are within range of at least a 3G mobile-cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants that are covered by at least a 3G mobile-cellular signal by the total population and multiplying by 100. It excludes people covered only by GPRS, EDGE or CDMA 1xRTT.  - LTE population coverage: Refers to the percentage of inhabitants that live within range of LTE/LTE-Advanced, mobile WiMAX/WirelessMAN or other more advanced mobile-cellular networks, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants that are covered by the previously mentioned mobile-cellular technologies by the total population and multiplying by 100. It excludes people covered only by HSPA, UMTS, EV-DO and previous 3G technologies, and also excludes fixed WiMAX coverage.  As technologies evolve and as more and more countries will deploy and commercialize more advanced mobile-broadband networks (5G etc.), the indicator will include further breakdowns."  Comments and limitations:  Some countries have difficulty calculating overall mobile-cellular population coverage. In some cases, data refer only to the operator with the largest coverage, and this may understate the true coverage.  Computation Method:  The indicator percentage of the population covered by a mobile network, broken down by technology, refers to the percentage of inhabitants living within range of a mobile-cellular signal, irrespective of whether or not they are mobile phone subscribers or users. This is calculated by dividing the number of inhabitants within range of a mobile-cellular signal by the total population and multiplying by 100. | The indicator percentage of the population covered by a mobile network, broken down by technology, refers to the percentage of inhabitants living within range of a mobile-cellular signal, irrespective of whether or not they are mobile phone subscribers or users. This is calculated by dividing the number of inhabitants within range of a mobile-cellular signal by the total population and multiplying by 100. | Telecommunication/ICT regulatory authority, or Ministry of ICTs.  service providers. | BTRC  Administrative Data | BTRC, PTD  Administrative Data | * technology: at least 2G/3G/4G mobile network * geographical location: urban, rural |  | Group 1 | 1st Round:  2015  2nd Round:  June 2020  3rd Round:  June 2021  4th Round:  June 2022  5th Round:  June 2023 |  |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

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| --- | --- |
|  | Reduce inequality within and among countries |

| **Targets and Indicators** | **Custodian**  **Agency (ies)** | **Tier**  **Classifi-**  **cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local**  **Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
|  | Target **10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average** | | | | | | | | | | | |
| 10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population | World Bank | Tier II | **Definition:**  The growth rate in the welfare aggregate of bottom 40% is computed as the annualized average growth rate in per capita real consumption or income of the bottom 40% of the income distribution in a country from household surveys over a roughly 5-year period. The national average growth rate in the welfare aggregate is computed as the annualized average growth rate in per capita real consumption or income of the total population in a country from household surveys over a roughly 5-year period.  **Concepts:**  Promoting shared prosperity is defined as fostering income growth of the bottom 40 percent of the welfare distribution in every country and is measured by calculating the annualized growth of mean per capita real income or consumption of the bottom 40 percent. The choice of the bottom 40 percent as the target population is one of practical compromise. The bottom 40 percent differs across countries depending on the welfare distribution, and it can change over time within a country. Because boosting shared prosperity is a country-specific goal, there is no numerical target defined globally.  **Comments and limitations:**  There are mainly two limitations of shared prosperity indicators: data availability and data quality.  Data availability  Lack of household survey data is even more problematic for monitoring shared prosperity than for monitoring poverty. To monitor shared prosperity, two surveys of a country have to be conducted within five years or so during a chosen period, namely circa 2007-12. They have to be reasonably comparable to each other in terms of both the survey design and the construction of the welfare aggregates. Thus, not every survey that can generate poverty estimates can generate shared prosperity estimates.  The second consideration is the coverage of countries, with data that are as recent as possible. Since shared prosperity must be estimated and used at the country level, there are good reasons for obtaining a wide coverage of countries, regardless of the size of their population. Moreover, for policy purposes it is important to have indicators for the most recent period possible for each country. The selection of survey years and countries needs to be made consistently and transparently, achieving a balance between matching the time period as closely as possible across all countries, including the most recent data, and ensuring the widest possible coverage of countries, across regions and income levels. In practice, this means that time periods will not match perfectly across countries. This is a compromise: while it introduces a degree of incomparability, it also creates a database that includes a larger set of countries than would be otherwise possible  Data quality  Like for poverty rates, estimates of annualized growth of mean per capita real income or consumption are based on income or consumption data collected in household surveys. The same quality issues applying to poverty rates apply here. Specifically, measuring household living standards has its own complications. Surveys ask detailed questions on sources of income and how it was spent, which must be carefully recorded by trained personnel. Income is difficult to measure accurately, and consumption comes closer to the notion of living standards. Moreover, income can vary over time even if living standards do not. But consumption data are not always available: the latest estimates reported here use consumption for about two-thirds of countries.  Similar surveys may not be strictly comparable because of differences in timing, sampling frames, or the quality and training of enumerators. Comparisons of countries at different levels of development also pose problems because of differences in the relative importance of the consumption of nonmarket goods. The local market value of all consumption in kind (including own production, particularly important in underdeveloped rural economies) should be included in total consumption expenditure, but in practice are often not. Most survey data now include valuations for consumption or income from own production, but valuation methods vary.  The statistics reported here are based on consumption data or, when unavailable, on income data. Analysis of some 20 countries for which both consumption and income data were available from the same surveys found income to yield a higher mean than consumption but also higher inequality. When poverty measures based on consumption and income were compared, the two effects roughly cancelled each other out: there was no significant statistical difference.  Invariably some sampled households do not participate in surveys because they refuse to do so or because nobody is at home during the interview visit. This is referred to as “unit nonresponse” and is distinct from “item nonresponse,” which occurs when some of the sampled respondents participate but refuse to answer certain questions, such as those pertaining to income or consumption. To the extent that survey nonresponse is random, there is no concern regarding biases in survey-based inferences; the sample will still be representative of the population. However, households with different incomes may not be equally likely to respond. Richer households may be less likely to participate because of the high opportunity cost of their time or because of privacy concerns. It is conceivable that the poorest can likewise be underrepresented; some are homeless or nomadic and hard to reach in standard household survey designs, and some may be physically or socially isolated and thus less likely to be interviewed. This can bias both poverty and inequality measurement if not corrected for.  **Computation Method:**  Growth rates are calculated as annualized average growth rates over a roughly five-year period. Since many countries do not conduct surveys on a precise five-year schedule, the following rules guide selection of the survey years used to calculate the growth rates in the 2015 update: the final year of the growth period (T1) is the most recent year of a survey but no earlier than 2010, and the initial year (T0) is as close to T1 – 5 as possible, within a two-year band. Thus the gap between initial and final survey years ranges from three to seven years. If two surveys are equidistant from T1 – 5, other things being equal, the more recent survey year is selected as T0. The comparability of welfare aggregates (income or consumption) for the years chosen for T0 and T1 is assessed for every country. If comparability across the two surveys is a major concern, the selection criteria are re-applied to select the next best survey year.  Once two surveys are selected for a country, the annualized growth of mean per capita real income or consumption is computed by first estimating the mean per capita real income or consumption of the bottom 40 percent of the welfare distribution in years T0 and T1 and then computing the annual average growth rate between those years using a compound growth formula, (Mean in T\_1)/(Mean in T\_0 )?^(1/( T\_1- T\_0 ))-1. Growth of mean per capita real income or consumption of the total population is computed in the same way using data for the total population. | HIES,  Population Census | BBS | BBS  HIES | BBS  HIES | * Income: Growth Rate of Income for Bottom 40% And Total | Triennial | Group 1 | 1st Round: 2016  2nd Round: July, 2020  3rd Round: July,2023  4th Round: July, 2026  5th Round: July, 2029 | Estimates have been recalculated.  Data availability reviewed in Nov. 2017 (classified as Tier II) |
|  | Target 10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status | | | | | | | | | | | |
| 10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities | World Bank | Tier II | Definition:  The proportion of people living below 50 percent of median income (or consumption) is the share (%) of a country’s population living on less than half of the consumption/income level of the median of the national income/consumption distribution.  Concepts:  The indicator is measured using per capita welfare measure of consumption or income. The indicator is calculated by estimating the share of the population in a country living on less than 50% of median of the national distribution of income or consumption, as estimated from survey data.  Per capita income or consumption is estimated using total household income or consumption divided by the total household size. Total disposable income or total consumption from both market and non-market sources is the desired welfare vector used.  The estimation relies on on the same harmonized welfare vectors (distributions) that are used for 10.1.1 and 1.1.1. Using the same data and closely related methodologies ensures internal consistency across these closely related indicators. The data is available through PovcalNet, the World Bank’s online tool for reporting global poverty and inequality numbers. For details on concepts and standards, refer to documentation available on the PovcalNet website.  The methodology entails measuring the share of people living below 50% of national median. A threshold set at 50% of the median of the income or consumption is used to derive a headcount rate, similar to how monetary poverty is typically measured. The national median is readily available from the distributional data in PovcalNet. The measurement follows a two-step process of first estimating half of the national median income (or consumption) and then the share of people living below this relative threshold.  The indicator uses the same data on household income and consumption that is used for monitoring SDG indicators 1.1.1 and 10.1.1, which have been classified as Tier 1 indicators. The methodology and data are similar to that used in measuring international poverty, which has been tested and vetted over many years, including for the purpose of monitoring MDG 1. It is also closely related to a large literature of relative poverty measurement.  Comments and limitations:  Like for poverty rates (SDG 1.1.1) and growth in household incomes across the distribution (SDG 10.1.1), estimates are based on income or consumption data collected in household surveys, led by NSOs. Many of the same data quality issues applying to those indicators apply here, some of which are summarized below:  Data is collected with great heterogeneity and ex-post harmonization will always face limitations. Similar surveys may not be strictly comparable because of differences in timing, sampling frames, or the quality and training of enumerators. Comparisons of countries at different levels of development also pose problems because of differences in the relative importance of the consumption of nonmarket goods. The local market value of all consumption in kind (including own production, particularly important in underdeveloped rural economies) should be included in total consumption expenditure, but in practice are often not. Most survey data now include valuations for consumption or income from own production, but valuation methods vary.  Estimating the share of people living below 50% of the national median is less sensitive to comparability limitations than estimates of international poverty. The relative nature of the threshold (a function of the distribution median) means that it is not sensitive price differences across time and countries. Appropriately adjusting for price differences is a major challenger in absolute poverty measurement.  Computation Method:  The indicator is measured using the national distribution per capita measure of consumption or income, as derived from surveys. The indicator is calculated by estimating the share (in percent) of the population living on less than 50% of median of the national distribution of income or consumption. The median is estimate from the same distribution as the indicator is estimated from, thus the 50% of median threshold will vary over time.  Per capita income or consumption is estimated using total household income or consumption divided by the total household size. | survey | National Statistical Offices (NSOs) | BBS  HIES | BBS  HIES | * Sex: male/female * Age 0-15, 15-24, 25-64, 64+ * Disabilities: Disable/ Non Disable | Triennial | Group 1 | 1st Round: 2016  2nd Round: July, 2019  3rd Round: July, 2022  4th Round: July, 2025  5th Round: July, 2028 | Reviewed at 8th IAEG-SDG meeting (classified as Tier II) |
| Target 10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard | | | | | | | | | | | | |
| 10.3.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law | **OHCHR** | Tier II | **Definition:**  This indicator is defined as the proportion of the population (adults) who self-report that they personally experienced discrimination or harassment during the last 12 months based on ground(s) prohibited by international human rights law. International human rights law refers to the body of international legal instruments aiming to promote and protect human rights, including the Universal Declaration of Human Rights and subsequent international human rights treaties adopted by the United Nations.  **Concepts:**  Discrimination is any distinction, exclusion, restriction or preference or other differential treatment that is directly or indirectly based on prohibited grounds of discrimination, and which has the intention or effect of nullifying or impairing the recognition, enjoyment or exercise, on an equal footing, of human rights and fundamental freedoms in the political, economic, social, cultural or any other field of public life.[[6]](#footnote-7) Harassment is a form of discrimination when it is also based on prohibited grounds of discrimination. Harassment may take the form of words, gestures or actions, which tend to annoy, alarm, abuse, demean, intimidate, belittle, humiliate or embarrass another or which create an intimidating, hostile or offensive environment. While generally involving a pattern of behaviours, harassment can take the form of a single incident.[[7]](#footnote-8)  International human rights law provides lists of the prohibited grounds of discrimination. The inclusion of “other status” in these lists indicate that they are not exhaustive and that other grounds may be recognized by international human rights mechanisms. A review of the international human rights normative framework helps identify a list of grounds that includes race, colour, sex, language, religion, political or other opinion, national origin, social origin, property, birth status, disability, age, nationality, marital and family status, sexual orientation, gender identity, health status, place of residence, economic and social situation, pregnancy, indigenous status, afro-descent and other status.[[8]](#footnote-9) In practice, it will be difficult to include all potentially relevant grounds of discrimination in household survey questions. For this reason, it is recommended that data collectors identify contextually relevant and feasible lists of grounds, drawing on the illustrative list and formulation of prohibited grounds of discrimination outlined in the methodology section below, and add an “other” category to reflect other grounds that may not have been listed explicitly.  **Comments and limitations:**  The indicator measures an overall population prevalence of discrimination and harassment in the total population at the national level. The indicator will not necessarily inform on the prevalence of discrimination within specific population groups. This will depend on sample frames. For example, if disability is included within the selected grounds, the resulting data for discrimination on the ground of disability will represent only the proportion of the total population who feel that they had personally experienced discrimination against on the ground of disability. Unless the sample design provides adequate coverage of people with disability to allow disaggregation on this characteristic, the data cannot be understood as an indication of the prevalence of discrimination (on the ground of disability) within the population of people with a disability.  The indicator is not measuring a general perception of respondents on the overall prevalence of discrimination in a country. It is based on personal experience self-reported by individual respondents. The indicator does not provide a legal determination of any alleged or proven cases of discrimination. The indicator will also not capture the cases of discrimination or harassment the respondents are not personally aware off or willing to disclose to data collectors. The indicator should be a starting point for further efforts to understand patterns of discrimination and harassment (e.g. location/context of incidents, relationship of the respondent to the person or entity responsible for discrimination or harassment, and frequency and severity of incidents). More survey questions will be needed for examining policy and legislative impact and responses.  OHCHR advises that data collectors engage in participatory processes to identify contextually relevant grounds and formulations. The process should be guided by the principles outlined in OHCHR’s [Human Rights-Based Approaches to Data](https://www.ohchr.org/HRBAD) (HRBAD), which stems from internationally agreed human rights and statistics standards. National Institutions with mandates related to human rights or non-discrimination and equality are ideal partners for these activities. Data collectors are also strongly encouraged to work with civil society organisations that are the representatives of or have better access to groups more are risk of being discriminated or left behind.  Methodology  **Computation Method:**  Number of survey respondents who felt that they personally experienced discrimination or harassment on one or more prohibited grounds of discrimination during the last 12 months, divided by the total number of survey respondents, multiplied by 100.  To minimize the effect of *forward telescoping[[9]](#footnote-10)*, the module asks two questions: a first question about the respondent’s experience over the last 5 years, and a second question about the last 12 months:   * Question 1: In [COUNTRY], do you feel that you personally experienced any form of discrimination or harassment during the last 5 years, namely since [YEAR OF INTERVIEW MINUS 5] (or since you have been in the country), on the following grounds? * Question 2: In [COUNTRY], do you feel that you personally experienced any form of discrimination or harassment during the past 12 months, namely since [MONTH OF INTERVIEW] [YEAR OF INTERVIEW MINUS 1], on any of these grounds?   The proposed survey module recommends that interviewer reads or the data collection mechanism provides a short definition of discrimination/harassment to the respondent before asking the questions. Providing respondents with a basic introduction to these notions helps improve their comprehension and recall of incidents. Following consultations with experts and complementary cognitive testing, the following introductory text is recommended:  *Discrimination happens when you are treated less favourably compared to others or harassed because of the way you look, where you come from, what you believe or for other reasons. You may be refused equal access to work, housing, healthcare, education, marriage or family life, the police or justice system, shops, restaurants, or any other services or opportunities. You may also encounter comments, gestures or other behaviours that make you feel offended, threatened or insulted, or have to stay away from places or activities to avoid such behaviours.*  The proposed survey module also recommends that a list of grounds is provided to respondents to facilitate comprehension and recall of incidents. As a starting point, OHCHR recommends the use of the following list of grounds prohibited by international human rights law and adding an “any other ground” category to capture grounds that are not explicitly listed. The module recommends that the following illustrative list is reviewed and contextualised at national level through a participatory process (see HRBAD and accompanying guidance) to reflect specific population groups and data collection/disaggregation needs:  1. SEX: such as being a woman or a man  2. AGE: such as being perceived to be too young or too old  3. DISABILITY OR HEALTH STATUS: such as having difficulty in seeing, hearing, walking or moving, concentrating or communicating, having a disease or other health conditions and no reasonable accommodation provided for it  4. ETHNICITY, COLOUR OR LANGUAGE: such as skin colour or physical appearance, ethnic origin or way of dressing, culture, traditions, native language, indigenous status, or being of African descent  5. MIGRATION STATUS: such as nationality or national origin, country of birth, refugees, asylum seekers, migrant status, undocumented migrants or stateless persons  6. SOCIO-ECONOMIC STATUS: such as wealth or education level, being perceived to be from a lower or different social or economic group or class, land or home ownership or not  7. GEOGRAPHIC LOCATION OR PLACE OF RESIDENCE: such as living in urban or rural areas, formal or informal settlements  8. RELIGION: such as having or not a religion or religious beliefs  9. MARITAL AND FAMILY STATUS: such as being single, married, divorced, widowed, pregnant, with or without children, orphan or born from unmarried parents  10. SEXUAL ORIENTATION OR GENDER IDENTITY: such as being attracted to person of the same sex, self-identifying differently from sex assigned at birth or as being either sexually, bodily and/or gender diverse  11. POLITICAL OPINION: such as expressing political views, defending the rights of others, being a member or not of a political party or trade union  12. OTHER GROUNDS | Household surveys, such as MICS,  victimisation surveys and  other social surveys, | National Statistical Offices (NSOs) | BBS  CPHS | BBS  CPHS | * SEX: woman, man * 2. AGE: too young, too old * 3. DISABILITY OR HEALTH STATUS: having difficulty in seeing, hearing, walking or moving, concentrating or communicating, having a disease or other health conditions and no reasonable accommodation provided for it * ETHNICITY: ethnic origin or way of dressing, culture, traditions, indigenous status * MIGRATION STATUS: nationality or national origin, country of birth, refugees, asylum seekers, migrant status, undocumented migrants or stateless persons * SOCIO-ECONOMIC STATUS: wealth or education level, being perceived to be from a lower or different social or economic group or class, land or home ownership or not * GEOGRAPHIC LOCATION OR PLACE OF RESIDENCE: urban or rural areas, formal or informal settlements * RELIGION: religious beliefs * MARITAL AND FAMILY STATUS: such as being single, married, divorced, widowed, pregnant, with or without children, orphan or born from unmarried parents * POLITICAL OPINION: such as expressing political views, defending the rights of others, being a member or not of a political party or trade union | Triennial | Group 1 | 1st Round:  2018  2nd Round:  December 2020  3rd Round:  December 2023  4th Round:  December 2026  5th Round:  December 2029 | Reviewed at 9th IAEG-SDG meeting (classified as Tier II)  Repeated 16.b.1 |
| Target 10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality | | | | | | | | | | | | |
| 10.4.1 Labour share of GDP, comprising wages and social protection transfers | ILO  **Partner Agencies: IMF** | Tier II | Definition:  Labour share of Gross Domestic Product (GDP) is the total compensation of employees given as a percent of GDP, which is a measure of total output. It provides information about the relative share of output which is paid as compensation to employees as compared with the share paid to capital in the production process for a given reference period.  Concepts:  Compensation of employees is the total in-cash or in-kind remuneration payable to the employee by the enterprise for the work performed by the employee during the accounting period. Compensation of employees includes: (i) wages and salaries (in cash or in kind) and (ii) social insurance contributions payable by employers. This concept views compensation of employees as a cost to employer, thus compensation equals zero for unpaid work undertaken voluntarily. Moreover, it does not include taxes payable by employers on the wage and salary bill, such as payroll tax.  The indicator should be produced using data that cover all employees and all economic activities.  Gross domestic product (GDP) represents the market value of all final goods and services produced during a specific time period (for the purposes of this indicator, an year) in a country's territory.  Employees are all those workers who hold the type of job defined as paid employment jobs, that is, jobs where the incumbents hold explicit or implicit employment contracts giving them a basic remuneration not directly dependent on the revenue of the unit for which they work. Total employment is made up by employees and the self-employed.  Comments and limitations:  In general, labour share in GDP will underestimate the proportion of GDP accrued to total employment, as it covers only the compensation of employees and does not include the labour income of the self-employed. Thus the indicator may be less relevant in countries where a large proportion of employment is in self-employment. However, an adjusted labour share may be estimated to take into account the labour income of self-employed workers.  GDP may exclude or underreport activities that are difficult to measure, such as transactions in the informal sector or in illegal markets, etc. thus understating the GDP. Moreover, GDP does not account for the social and environmental costs of production, and is therefore is not a good measure of the level of over-all wellbeing.  Computation Method:  Labour share of Gross Domestic Product = Total compensation of employees / Gross Domestic Product \* 100 | Compilation of NA,  LFS | NAW/LFS, BBS |  | BBS  NAW | Not Applicable | Triennial | Group 2 | 1st Round:  June 2021  2nd Round:  June 2024  3rd Round:  June 2027  4th Round:  Jun e 2030 | Data availability reviewed in Nov. 2017 (classified as Tier II) |
| 10.4.2 Redistributive impact of fiscal policy |  | TBD | Definition:    The Redistributive Impact of Fiscal Policy indicator is defined as the Gini coefficient of prefiscal per capita (or equivalized) income less the Gini coefficient of postfiscal per capita (or equivalized) income.    Concepts:    -Redistributive Impact of Fiscal Policy: defined as the Gini coefficient of prefiscal per capita (or equivalized) income less the Gini coefficient of postfiscal per capita (or equivalized) income. The recommendation is to calculate the Redistributive Impact of Fiscal Policy indicator as the Gini coefficient of prefiscal per capita (or equivalized) income less the Gini coefficient of Consumable per capita (or equivalized) income.    There are two definitions of prefiscal income depending on assumptions regarding the nature of the public, contributory old-age pension system: 1) pensions as deferred income or 2) pensions as government transfers. Details are given below.    -Gini coefficient: a commonly used measure of inequality capturing the statistical dispersion in the distribution of income or wealth over a population. A Gini coefficient of zero expresses perfect equality: that is, every individual in the population has the same income. A Gini coefficient of 1 expresses maximum inequality: that is, all income accrues to a single individual, and all other individuals have zero income.    References: Gini, Corrado. (1936). "On the Measure of Concentration with Special Reference to Income and Statistics", Colorado College Publication, General Series No. 208, 73–79. Duclos, Jean-Yves and Abdelkrim Araar. (2006). Poverty and Equity. New York: Springer. Part II.    -Per capita income: household income divided by the number of household members.    -Equivalized income: household income divided by the square root of the number of household members. If a different definition is used, it should be noted in the reporting document.    -Prefiscal income: the cumulative income accruing to an individual (or a household) from market and private sources only. The Redistributive Impact of Fiscal Policy indicator can be estimated with reference to two different prefiscal income concepts depending on assumptions regarding the nature of the public, contributory old-age pension system:    1) Prefiscal income under the “pensions as deferred income” scenario: When incomes from public contributory old-age pension-system are counted as deferred market income and old-age pension-system contributions are counted as savings from current income (that is, the old-age pension system is treated as the equivalent of a mandatory savings program), prefiscal income is defined as an individual’s earned and unearned incomes from market and other private sources: wages, interest and dividend income; imputed income from owner-occupied housing and from consumption of own production; remittances; private transfers; old-age pension income from the public contributory pension system; and, less any contributions to the public old-age contributory pension system. In this case, the prefiscal income concept is called Market income plus pensions.    2) Prefiscal income under the “pensions as government transfer” scenario: When incomes from current pension-system are counted as a government transfer and old age pension-system contributions are counted as a tax on current income, prefiscal income is defined as: wages, interest and dividend income; imputed income from owner-occupied housing and from consumption of own production; remittances; and private transfers only. In this case, the prefiscal income concept is called Market income.    Reference: Lustig, Nora (ed). 2018. CEQ Handbook: Estimating the Impact of Fiscal Policy on Inequality and Poverty, CEQ Institute at Tulane University and Brookings Institution Press, Chapters 1 and 6. (This publication is open source and can be downloaded free of charge).    -Postfiscal income: prefiscal income minus direct and indirect taxes plus transfers and indirect subsidies. The Redistributive Impact of Fiscal Policy indicator can be estimated with reference to two different postfiscal income concepts, Disposable Income and Consumable Income:    1) Postfiscal incomes under the “pensions as deferred income” scenario:  Disposable Income: prefiscal income less direct taxes paid and less social insurance contributions made to the public fiscal authority plus the monetary value of benefits received from public expenditures on direct cash or near-cash transfers.  Consumable Income: prefiscal income less direct and indirect taxes paid and less social insurance contributions other than for old-age pensions made to the public fiscal authority plus the monetary value of benefits received from public expenditures on direct cash or nearcash transfers and subsidies.    2) Postfiscal incomes under the “pensions as government transfer” scenario:  Disposable Income: prefiscal income less direct taxes paid and less social insurance contributions and less contributory old-age pension contributions made to the public fiscal authority plus the monetary value of benefits received from public expenditures on direct cash or near-cash transfers including contributory pension system transfers.  Consumable Income: prefiscal income less direct and indirect taxes paid and less social insurance contributions and less contributory old-age pension contributions made to the public fiscal authority plus the monetary value of benefits received from public expenditures on direct cash or near-cash transfers including contributory old-age pension system transfers and subsidies.    Reference: Lustig, Nora (ed). 2018. CEQ Handbook: Estimating the Impact of Fiscal Policy on Inequality and Poverty, CEQ Institute at Tulane University and Brookings Institution Press, Chapters 1 and 6. (This publication is open source and can be downloaded free of charge).    Comments and limitations:    Reporting on assumptions: The choice of whether to report the Redistributive Impact of Fiscal Policy indicator under the pensions as deferred income or pensions as transfers scenario will be left to the country authority in charge of submitting this indicator, but the choice must be clearly indicated in the reporting document. For countries for which the data exist, prefiscal and postfiscal inequality should be calculated for both pension scenarios. Some authorities may choose to use equivalized income instead of per capita income as the welfare indicator. This too should be clearly indicated in the reporting document. Once this decision is taken it should be maintained in subsequent years in order to assure comparability.    Feasibility: The Redistributive Impact of Fiscal Policy indicator can be estimated for any country with a micro-data set detailing incomes or expenditures (or both) at the household or individual level and with a set of fiscal, administrative, or budgetary records detailing public expenditures at the program level and revenue collections at the revenue-collection instrument level.    Suitability/Relevance: The Redistributive Impact of Fiscal Policy indicator provides a direct estimate of the current impact of fiscal policy on redistribution (of incomes). It therefore provides a direct estimate of progress on SDG Target 10.4: “Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.”    Limitations: The Redistributive Impact of Fiscal Policy indicator does not address wage policy. It does not include the benefits of public provision of in-kind benefits, such as health, education, sanitation and housing services, which may have both present-day and longer-term impacts on present-day and future inequality.    Computation Method:    Prefiscal income can be derived from a nationally-representative micro-data set (an Income and Expenditure Survey, for example). Postfiscal income is estimated via the allocation of the tax burdens and the expenditure-based benefits that stem from fiscal policy (direct and indirect taxes, social contributions, direct cash and near-cash transfers, subsidies, et cetera). Procedures for constructing prefiscal and postfiscal income concepts and estimating their distribution from an underlying microdata set are detailed comprehensively in the CEQ Handbook, Lustig, op. cit.    The Gini coefficient is calculated according to standard formulas for a (generalized) Gini coefficient (see, for example, Donaldson and Weymark (1980, 1983) or Yitzhaki (1983)):      where X is a random variable of interest with mean μ(X), F(X) is its cumulative distribution function, υ is a parameter tuning the degree of ‘aversion to inequality’. The standard Gini corresponds to υ = 2. Cov is a Covariance estimate. | Source data collection follows the update cycle for country-specific micro-data sets as well as the audit cycle for fiscal year revenues and expenditures. | National Statistics offices |  | a) FD  b) BBS  (HIES), SID  Administr  ative Data | * Income: High/Medium/Low * By gender: Male,female, both * Age group: 0-15 yrs, 15-24 yrs, 25-64 yrs, 64+yrs * Ethinicity: Ethnic/Non Ethnic * Geographic location Urban/Rural * Disability status: Disable/ Non Disable * Household size: 1-2, 3-5, 5+ * Household dependency ratio |  |  | 1st Round:  June 2021  2nd Round:  June 2022  3rd Round:  June 2023  4th Round:  June 2024  5th Round:  June 2025 | UNSC 51 addition included in the 2020 comprehensive review  The Gini Coefficient will be reported as a second series in the database, as it is a component of this indicator. |
|  | Target 10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations | | | | | | | | | | | |
| 10.5.1 Financial Soundness Indicators | **IMF** | Tier I | Definition:  Seven FSIs are included as SDG indicators for 10.5.1 and expressed as percent.  1 - Regulatory Tier 1 capital to assets  2 - Regulatory Tier 1 capital to risk- weighted assets  3 - Nonperforming loans net of provisions to capital  4 - Nonperforming loans to total gross loans  5 - Return on assets  6 - Liquid assets to short-term liabilities  7 - Net open position in foreign exchange to capital  Regulatory Tier 1 capital to assets: This is the ratio of the core capital (Tier 1) to total (balance sheet) assets.    Regulatory Tier 1 capital to risk- weighted assets: It is calculated using total regulatory Tier 1 capital as the numerator and risk-weighted assets as the denominator. The data for this FSI are compiled in accordance with the guidelines of either Basel I, Basel II, or Basel III.    Nonperforming loans net of provisions to capital: This FSI is calculated by taking the value of nonperforming loans (NPLs) less the value of specific loan loss provisions as the numerator and capital as the denominator. Capital is measured as total regulatory capital.    Nonperforming loans to total gross loans: This FSI is calculated by using the value of NPLs as the numerator and the total value of the loan portfolio (including NPLs, and before the deduction of specific loan- loss provisions) as the denominator.    Return on assets: This FSI is calculated by dividing annualized net income before extraordinary items and taxes (as recommended in the FSI Guide) by the average value of total assets (financial and nonfinancial) over the same period.    Liquid assets to short-term liabilities: This FSI is calculated by using the core measure of liquid assets as the numerator and short-term liabilities as the denominator. The ratio can also be calculated by taking the broad measure of liquid assets as the numerator. For jurisdictions that have implemented Basel III, this indicator could be supplemented with the liquidity coverage ratio.    Net open position in foreign exchange to capital: The net open position in foreign exchange should be calculated based on the recommendation of the Basel Committee for Banking Supervision (BCBS). Capital should be total regulatory capital as net open position in foreign exchange is a supervisory concept.  Concepts:  Regulatory Tier 1 capital to assets: Regulatory Tier 1 capital is calculated based on Basel I, II, or III depending on countries’ supervisory practices. Denominator is total balance sheet (non-risk weighted) assets.    Regulatory Tier 1 capital to risk- weighted assets: Regulatory Tier 1 capital is calculated based on Basel I, II, or III depending on countries’ supervisory practices. Denominator is risk-weighted assets also calculated based on Basel standards.    Nonperforming loans (NPLs) net of provisions to capital: A loan is classified as NPL when payment of principal or interest is past due by 90 days or more, or evidence exists that a full or partial amount of a loan is not going to be recovered. Only specific loan loss provisions are used in this calculation and they refer charges against the value of specific loans. Data exclude accrued interest in NPLs. Capital is measured as total regulatory capital calculated based on Basel I, II, or III depending on countries’ supervisory practices.    Nonperforming loans to total gross loans: A loan is classified as NPL when payment of principal or interest is past due by 90 days or more, or evidence exists that a full or partial amount of a loan is not going to be recovered. The denominator is the total value of the loan portfolio (including NPLs, and before the deduction of specific loan- loss provisions).    Return on assets: The numerator is annualized net income before extraordinary items and taxes. The denominator is the average value of total assets (financial and nonfinancial) over the same period.    Liquid assets to short-term liabilities: Core measure of liquid assets includes currency and deposits and other financial assets available on demand or within three months. Broad measures equal core measure plus securities traded in liquid markets that can be converted into cash with minimal change in value. The denominator is short-term elements of debt liabilities plus net (short-term) market value of financial derivatives position. The latter is calculated as financial derivatives liability position minus financial derivative asset position. Short-term refers to three months and should be defined on a remaining maturity basis. If remaining maturity is not available, original maturity can be used as an alternative.    Net open position in foreign exchange to capital: The net open position in foreign exchange equals the foreign-currency and foreign-currency linked element of balance sheet assets and off-balance sheet exposures minus the foreign-currency and foreign-currency linked element of balance sheet liabilities and off-balance sheet exposures. Foreign-currency-linked instruments refer to accounts denominated in national currency, but their payments are linked to exchange rates, thus subject to foreign exchange risk. The denominator is total regulatory capital as defined above.    Comments and limitations:  Data for most countries are reported on a monthly or quarterly basis; a few countries report data on a semi-annual basis and with a lag of more than a quarter. As of end-December 2018, there were 138 FSI reporters. Some countries’ compilation practices deviate from the FSI Guide methodology in certain areas and are documented in the FSI metadata also posted on the IMF’s FSI website. Reporting countries provide all or most core FSIs and some encouraged FSIs that can be used to support the interpretation of these seven SDG indicators. FSI data and metadata reported by countries are available at http://data.imf.org/FSI.  Computation Method:  The calculation of the seven FSIs is detailed in section on “Definition” above. The common source data are data reported by banks to supervisory authorities, which are usually the FSI compilers. | The national central banks or supervisory agencies collect these data for supervisory purposes, and these data are used for FSI compilation. | The national central banks or bank supervisory agencies. | BB  Administrative Data | BB, FID  Administrative Data | Not Applicable | Annual | Group 1 | 1st Round:  2015  2nd Round:  July, 2019  3rd Round:  July, 2020  4th Round:  July, 2021  5th Round:  July, 2022 | Data availability reviewed in Dec. 2018 (classified as Tier I)  Fast Track; Reviewed at 8th IAEG-SDG meeting (classified as Tier II)  Fast Track; Reviewed at 5th IAEG-SDG meeting: Request additional work on aggregation method at regional and global levels (classified as TBD) |
| Target 10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions | | | | | | | | | | | | |
| 10.6.1 Proportion of members and voting rights of developing countries in international organizations | DESA/FFDO | Tier I | Definition:  The proportion of members and voting rights of developing countries in international organizations has two components, the developing country proportion of voting rights and the developing country proportion of membership in international organisations. In some institutions these two components are identical.  Concepts:  The indicator is calculated independently for eleven different international institutions: The United Nations General Assembly, the United Nations Security Council, the United Nations Economic and Social Council, the International Monetary Fund, the International Bank for Reconstruction and Development, the International Finance Corporation, the African Development Bank, the Asian Development Bank, the Inter-American Development Bank, the World Trade Organisation, and the Financial Stability Board.  There is no established convention for the designation of "developed" and "developing" countries or areas in the United Nations system. In common practice, Japan in Asia, Canada and the United States in northern America, Australia and New Zealand in Oceania, and Europe are considered "developed" regions or areas. The aggregation across all institutions is currently done according to the United Nations M.49 statistical standard which includes designation of “developed regions” and “developing regions”, while an ongoing review seeks to reach agreement on how to define these terms for the purposes of SDG monitoring. The designations "developed" and developing" are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process.  Comments and limitations:  Cross institutional comparisons needs to pay attention to the different membership of the institutions. Voting rights and membership in their institutions are agreed by the Member States themselves. As a structural indicator, there will be only small changes over time to reflect agreement on new States joining as Members, suspension of voting rights, membership withdrawal and negotiated voting rights changes.  Computation Method:  The computation uses each institutions’ own published membership and voting rights data from their respective annual reports. The proportion of voting rights is computed as the number of voting rights allocated to developing countries, divided by the total number of voting rights. The proportion of membership is calculated by taking the number of developing country members, divided by the total number of members. | Collects Annual reports. | UNGA, UNSC, ECOSOC, IMF, IBRD, IFC, AfDB, ADB, IADB, WTO, FSB | a) ERD  Administrative Data | a) ERD  b) MoFA  Administrative Data | International Organizations | a) Annually (Tri-Annually)  b) Annually  c) Annually  d) (As per IDA-18) Tri-Annually  f) 02 years | Group 1 | 1st Round:  2018  2nd Round:  September, 2019  3rd Round:  September, 2020  4th Round:  September, 2021  5th Round:  September, 2022 | Repeated 16.8.1 |
| Target 10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies | | | | | | | | | | | | |
| 10.7.1 Recruitment cost borne by employee as a proportion of monthly income earned in country of destination | ILO,  World Bank | Tier II | Definitions:  SDG indicator 10.7.1 is defined as: “Recruitment cost borne by employee as a proportion of monthly income earned in country of destination”, i.e. a ratio between a cost measure and an income measure. The statistics used for the numerators and denominators for indicator 10.7.1 should be based on costs and earnings observed for the same individual international migrant worker.  Concepts:  Target population (international migrant, international migrant workers): the term ‘international migrant worker’ is to be understood to mean someone who leaves his/her country of usual residence with the documented intention to work in another country, as a wage/salary earner. Thus, the term’s concept does not include those who leave their area of usual residence to work in another area in the same country, nor those who can commute for work across an international border, on a daily or weekly basis without changing the country of usual residence. These draft Guidelines exclude consideration of other migrant workers whose usual residence may be hard to confirm, such as seafarers who work on a vessel registered to a country different from their country of origin. The concept should cover all international migrant workers who have changed their country of usual residence with the documented intention to work in another country, whether they are engaged through formal or through ‘informal’ recruitment processes.  Reference period: the statistics/estimates on costs and earnings used to calculate 10.7.1 should refer to the first job obtained in the country of destination and the first year of employment abroad of the international migrant worker.  Costs: Recruitment costs refer to any fees or costs incurred in the recruitment process in order for workers to secure employment or placement, regardless of the manner, timing or location of their imposition or collection. These are equal to the total amount that migrant workers and/or their families paid to find, qualify for, and secure a concrete job offer from a foreign employer and to reach the place of employment for the first job abroad. Recommended costs items are indicated in Paragraphs 22 to 24 of the draft Guidelines on statistics for SDG indicator 10.7.1.  Earnings: statistics on earnings of migrant workers abroad should cover the actual income received for the last month in the first job in the destination country, including bonuses and other earnings (e.g. for over-time work). Adjustments should be made for any deductions for destination country taxes and social security contributions, as well as for any deductions in wages made to recover any recruitment costs initially paid by the employer.  Comments and limitations:  The proposed Guidelines have recommended using one month of earnings as the denominator, and to express the indicator as the proportion of monthly earnings paid by the migrant worker to obtain the job abroad. The Guidelines recommend using earnings of the last month of the first job abroad. However monthly earnings of migrant workers may vary considerably for each month worked, particularly if migrant workers often change their job during their first 12 months abroad. Accordingly, the Guidelines recommend using the first job abroad.  Recall may be an issue if the first job abroad was undertaken many years ago. The Guidelines suggests that when developing the data collection system, the focus should be on migrant workers whose first job abroad happened less than a given period, such as Triennial prior or less.  Computation Method:  RCI = Proportion of recruitment costs in the monthly employment earnings, is a ratio  Calculation:      Where  f may take on various functions’ forms, such as: mean, median and 4th quintile  Ck = is the recruitment costs paid by individual migrant worker k;  Ek = is the monthly earnings of the same migrant worker k. | Survey | National Statistical Offices (NSOs). |  | CMS, BBS  Cost of Migration Survey | * Sex: Male, Female * Age Group: 15-24 yrs, 25-64 yrs, etc. * Education Groups: General, Technical & Vocational, Professional, etc. * Major Destination Countries: KSA, Malaysia, Kuet, Katar, * Type of migration process: documented, undocumented migrant workers. * Occupation/skill: high skilled/low skilled * Major occupational groups: High skilled occupations, low skilled occupations. * Major industry: agriculture, construction, retail, and domestic work | Triennial | Group 2 | 1st Round:  2016  2nd Round:  July, 2020  3rd Round:  July, 2023  4th Round:  July, 2026  5th Round:  July, 2029 | Data should be provided as per metadata  UNSC 50 refinement; Reviewed at 8th IAEG-SDG meeting (classified as Tier II) |
| 10.7.2 Number of countries with migration policies that facilitate orderly, safe, regular and responsible migration and mobility of people | DESA Population Division,  IOM  **Partner Agencies:**  World Bank,  Global Migration Group,  UNHCR,  UNODC,  OECD | Tier II | Definition:  SDG Indicator 10.7.2 aims to describe the state of national migration policies and how such policies change over time. The information collected seeks to identify both progress made and gaps, thus contributing to the evidence base for actionable recommendations for the implementation of SDG target 10.7. The indicator will also serve for the future thematic reviews at the High-level Political Forum on Sustainable Development (HLPF).  The conceptual framework for indicator 10.7.2 is IOM´s Migration Governance Framework (MiGOF), which was welcomed by 157 countries (IOM Council Resolution C/106/RES/1310). The MiGOF has three principles and three objectives (figure 1).  Figure 1. Principles and objectives of the Migration Governance Framework  The three principles propose the necessary conditions for migration to be well-managed by creating a more effective environment for maximized results for migration to be beneficial to all. These represent the means through which a State will ensure that the systemic requirements for good migration governance are in place.  The three objectives are specific and do not require any further conventions, laws or practices than the ones that are already existing. Taken together, these objectives ensure that migration is governed in an integrated and holistic way, responding to the need to consider mobile categories of people and address their needs for assistance in the event of an emergency, building resilience of individuals and communities, as well as ensuring opportunities for the economic and social health of the State.  In line with the MiGOF, the proposed methodology for SDG indicator 10.7.2 is comprised of six policy domains, with one proxy measure for each domain (table 1).  Table 1. Domains and proxy measures for SDG indicator 10.7.2   |  |  |  | | --- | --- | --- | |  | **Domain** | **Proxy measure** | | 1. | Migrant rights | Degree to which migrants have equity in access to services, including health care, education, decent work, social security and welfare benefits | | 2. | Whole-of-government/ Evidence-based policies | Dedicated institutions, legal frameworks and policies or strategies to govern migration | | 3. | Cooperation and partnerships | Government measures to foster cooperation and encourage stakeholder inclusion and participation in migration policy | | 4. | Socioeconomic well-being | Government measures to maximize the positive development impact of migration and the socioeconomic well-being of migrants | | 5. | Mobility dimensions of crises | Government measures to deliver comprehensive responses to refugees and other forcibly displaced persons | | 6. | Safe, orderly and regular migration | Government measures to address regular or irregular immigration |   For each of the domains and corresponding proxy measures, one question was specified, each one of them informed by five subcategories or responses (table 2), to capture key aspects of the range of migration policies at the national level, while allowing the indicator to detect relevant variations across countries and over time.  **Table 2. Questions and subcategories for SDG indicator 10.7.2**   |  | **Question** | **Subcategories** | | --- | --- | --- | | **Domain 1:** | Does the Government provide non-nationals equal access to the following services, welfare benefits and rights? | a. Essential and/or emergency health care  b. Public education  c. Equal pay for equal work  d. Social security  e. Access to justice | | **Domain 2:** | Does the Government have any of the following institutions, policies or strategies to govern immigration or emigration? | a. A dedicated Government agency to implement national migration policy  b. A national policy or strategy for regular migration pathways, including labour migration  c. A national policy or strategy to promote the inclusion or integration of immigrants  d. Formal mechanisms to ensure that the migration policy is gender responsive  e. A mechanism to ensure that migration policy is informed by data, appropriately disaggregated | | **Domain 3:** | Does the Government take any of the following measures to foster cooperation among countries and encourage stakeholder inclusion and participation in migration policy? | a. An inter-ministerial coordination mechanism on migration  b. Bilateral agreements on migration, including labour migration  c. Regional agreements promoting mobility  d. Agreements for cooperation with other countries on return and readmission  e. Formal mechanisms to engage civil society and the private sector in the formulation and implementation of migration policy | | **Domain 4:** | Does the Government take any of the following measures to maximize the positive development impact of migration and the socioeconomic well-being of migrants? | a. Align, through periodic assessments, labour migration policies with actual and projected labour market needs  b. Facilitate the portability of social security benefits  c. Facilitate the recognition of skills and qualifications acquired abroad  d. Facilitate or promote the flow of remittances  e. Promote fair and ethical recruitment of migrant workers | | **Domain 5:** | Does the Government take any of the following measures to respond to refugees and other persons forcibly displaced across international borders? | a. System for receiving, processing and identifying those forced to flee across international borders  b. Contingency planning for displaced populations in terms of basic needs such as food, sanitation, education and medical care  c. Specific measures to provide assistance to citizens residing abroad in countries in crisis or post-crisis situations  d. A national disaster risk reduction strategy with specific provisions for addressing the displacement impacts of disasters  e. Grant permission for temporary stay or temporary protection for those forcibly displaced across international borders and those unable to return | | **Domain 6:** | Does the Government address regular or irregular immigration through any of the following measures? | a. System to monitor visa overstays  b. Pre-arrival authorization controls  c. Provisions for unaccompanied minors or separated children  d. Migration information and awareness-raising campaigns  e. Formal strategies to address trafficking in persons and migrant smuggling |   Concepts:  SDG target 10.7 is broad in scope and many, but not all, of the terms are well defined. The IOM Glossary on Migration provides a definition of key concepts such as orderly and regular migration, but not others such as safe and responsible migration. According to the Glossary, orderly migration refers to “the movement of a person from his/her usual place of residence, in keeping with the laws and regulations governing exit of the country of origin and travel, transit and entry into the host country”. Regular is defined as “migration that occurs through recognized, legal channels”.  While the concept of “well-managed migration policies” is not explicitly defined, according to the IOM Glossary, it is included in references to migration management, migration governance and facilitated migration. Migration management refers to the planned approach to the development of policy, and legislative and administrative responses to key migration issues. Migration governance is defined as a system of institutions, legal frameworks, mechanisms and practices aimed at regulating migration and protecting migrants. Facilitated migration refers to fostering or encouraging regular migration, for example through streamlined visa application process.  Comments and limitations:  Developing a synthetic, robust indicator with the breadth and scope of target 10.7 as formulated in the 2030 Agenda for Sustainable Development is challenging. As co-custodians of indicator 10.7.2, UN DESA and IOM recognize that the indicator is neither expected nor designed to be comprehensive (figure 2); hence the importance of other, complementary tools such as IOM’s Migration Governance Indicators (MGI) Project.1  Computation Method:  The indicator includes a total of 30 subcategories, under 6 questions/domains. All subcategories, except for those under domain 1, have dichotomous “Yes/No” answers, coded “1” for “Yes” and “0” for “No”. For the subcategories under domain 1, there are three possible answers: “Yes, regardless of immigration status”, coded “1”; “Yes, only for those with legal immigration status”, coded “0.5”; and “No” coded “0”.  For each domain, the computational methodology is the unweighted average of the subcategories under each domain:  100  Where r refers to domain i; \_ji refers to the sum of the subcategories j under domain i; and n refers to the total number of subcategories in each domain. Results are reported as percentages. For each domain, values range from a minimum of 0 to a maximum of 100 per cent.  The overall synthetic indicator 10.7.2 is obtained by computing the unweighted average of the values of the 30 subcategories under the six domains, with values ranging between 0 and 100 per cent.  For ease of interpretation and to summarize results, the resulting averages are then recategorized as follows: values of less than 40 per cent are coded as “Requires further progress”; values of 40 per cent to less than 80 per cent are coded as “Partially meets”, and values of 80 per cent or more are coded as “Meets or fully meets”. | UN Inquiry among Governments on Population and Development | Governments of 193 Member States, 2 observer States, and 2 non-member States. |  |  | Six policy domains:  (i) migrant rights;  (ii) whole-of-government/evidence-based policies;  (iii) cooperation and partnerships;  (iv) socioeconomic well-being;  (v) mobility dimensions of crises; and  (vi) safe, orderly and regular migration. | 5-yearly | Group 2 | 1st Round:  June 2020  2nd Round:  June 2025  3rd Round:  June 2030 | Data should be provided as per metadata  UNSC 50 refinement; Reviewed at 8th IAEG-SDG meeting (classified as Tier II) |
| 10.7.3 Number of people who died or disappeared in the process of migration towards an international destination | ?? | TBD | Definition:  The MMP data include migrants (regardless of legal status) who have died at the external borders of States or in the process of migration towards an international destination. This selection of data is based on the currently available sources and can provide some insight into the safety or otherwise of routes. Not included in the data collection is information about migrants who die, or go missing, in countries of destination or residence. Deaths in refugee housing, immigration detention centres or camps are excluded. The MMP data also exclude deaths that occur during deportation or after forced return to a migrant’s homeland or third country, as well as deaths more loosely connected with migrants’ precarious or irregular status, such as those resulting from labour exploitation or resulting from lack of access to health care.  Rationale:  The research behind the MMP began with the October 2013 tragedies, when at least 368 individuals died in two shipwrecks near the Italian island of Lampedusa. The MMP data aims to bear witness to the global phenomenon of migrant deaths, and is the only global database on this topic. It is hoped that by counting and accounting for these deaths, almost all of which are linked to irregular migration, policymakers, academics, and the general public will be better informed about the risks linked to unsafe migration.  Given that there are few official sources of data on deaths during migration, these data are best understood as a minimum estimate of the true number of migrant deaths worldwide. The MMP collects data from a variety of sources, which change over time given the large geography covered and the politicization of irregular migration – notably the criminalization of search and rescue actors in the Mediterranean and USMexico border – which affect access to relevant information. With this in mind, these data are best understood as indicative of the global nature of migrant fatalities, and should not be used to identify trends over time outside of the US-Mexico border, where official data is more frequently available compared to other areas of the world.  Concepts:  Migrant - An umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons. The term includes a number of well-defined legal categories of people, such as migrant workers; persons whose particular types of movements are legally-defined, such as smuggled migrants; as well as those whose status or means of movement are not specifically defined under international law, such as international students.  Irregular migration - Movement of persons that takes place outside the laws, regulations, or international agreements governing the entry into or exit from the State of origin, transit or destination.  Comments and limitations:  The MMP database provides a global overview of data on migrant fatalities, but it is primarily dependent on secondary sources of information. Information is gathered from diverse sources such as official records – including from coast guards and medical examiners – and other sources such as media reports, non-governmental organizations (NGOs), and surveys and interviews of migrants. The reliability and completeness of data vary greatly from region to region, from country to country and over time. Table 1, in the methodology section below, illustrates the wide variety of sources used in the MMP database, and gives some insight into the various advantages and disadvantages of each. For example, some of the data are collected directly from migrants, either from survivors or through an increasing number of surveys of migrants. However, data from surveys and/or eyewitness testimonies may not be representative, and there may be a risk of double-counting if migrants report the same incident when asked whether they are aware of a migrant death or disappearance.  Computation Method:  MMP is an incident-based database, meaning that each entry in the database represents a single occurrence in which an individual or group of individuals die during migration or at international borders in one particular place and time. This approach is used instead of a body-based database due to the fact that many migrant bodies are never recovered, particularly in overseas routes such as the Mediterranean Sea, or remote terrains such as the Sahara Desert.  The MMP database provides a global overview of data on migrant fatalities, but it is primarily dependent on secondary sources of information. Information is gathered from diverse sources such as official records – including from coast guards and medical examiners – and other sources such as media reports, nongovernmental organizations (NGOs), and surveys and interviews of migrants. The reliability and completeness of data vary greatly from region to region, from country to country and over time. Table 1, below, gives an overview of the data sources used and their various pros and cons. The MMP dataset cites the data source for each entry in its downloadable database, available from mmp.iom.int/downloads,  Table 1: Missing Migrants Project data sources and their strengths and weaknesses   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | Data source | Data format | Where is this information available? | **Strengths** | | **Weaknesses** | | | | Government: Data on repatriations | Database (bodies) | Mexico, Honduras,  Bangladesh,  Guatemala, El Salvador | • Credible information, covers  many cases (not just individual incidents) | | * Available for very few countries * Can be outdated * Includes only information on the recovered bodies and not on missing persons | | | | Government: Press releases, official  statements | Incident reports | Some countries in  Europe, South America | • Credible information about individual events | | * Available for few, isolated events * Often need to request more detailed information * Usually includes only information on bodies recovered and not missing persons * Media may only report most sensational cases * Different media may report same incident with risk of double counting | | | | Government: Record of border deaths | Database (bodies) | US counties bordering Mexico | • (Can) provide credible information | | • Coverage is unknown, as many deaths are unidentified as migrants or not reported to consulates | | | | Forensic data (i.e. from medical examiners/ coroners) | Database (bodies) or summary  figures | US counties on United  States‒Mexico border,  European countries  (see e.g. Vrije  Universiteit’s Deaths at the Borders Database) | • Credible and  detailed information about  individual incidents | | * Data disaggregated by migrant deaths are rarely available (only one example: Pima Country, Arizona) * Includes only information on bodies recovered and not missing persons * Extremely labour-intensive to request information and parse records; consequently often outdated | | | | Coast guards/ police/ border patrol/ nongovernmental organizations  (NGOs) | Incident reports | Greece, Italy, Spain,  Turkey, Libya, United  States–Mexico border | • Credible  information for individual cases | | * Completeness of coverage is unknown * Often includes only information on bodies recovered and not missing persons (e.g. Spanish coast guard reports) | | | | Testimonies of shipwreck survivors | Incident reports | Mediterranean (IOM,  United Nations High  Commissioner for  Refugees (UNHCR)),  Bay of  Bengal/Andaman Sea  (UNHCR) | Indicative data where little other information exists  Useful to estimate number of missing persons at sea | | • Impossible to verify reports, survivors may provide range of estimates of missing persons (MMP always uses lowest estimate) | | | | Testimonies of migrants: Survey programmes | Summary figures. Incidentbased database often available on request | Mediterranean (IOM), North Africa (MHub and Mixed Migration Centre), sub-Saharan Africa  (Mixed Migration  Centre),  Asia (Mixed Migration  Centre) | • | Indicative data where no other data sources exist, interviewees may speak more honestly with interviewers who speak their native language and/or are also migrants | •  •  • | Impossible to verify reports for veracity or doublecounting, sample size is generally small and unrepresentative  Breaks between funding can inhibit comparison Dates of deaths are often imprecise | | | NGO reports | Summary  figures, incidentbased database often available upon request | South-East Asia (Office of the United Nations High Commissioner for  Human Rights),  Middle East (several  NGOs),  Western  Mediterranean  (Asociación Pro  Derechos Humanos de  Andalucía ) | • | (Can) provide credible information from local contexts, sometimes with specialized knowledge from NGO staff. Though usually these are summary figures released annually, NGOs are  generally willing to provide underlying data if asked | •  •  • | Cover only regional or  localized areas  Often release data annually as summary figure, which are impossible to check for veracity and double counting Definition of “migrant death” may vary | | | Media:  Traditional media reporting | Incident reports | Coverage in Central  America, United States  –Mexico border, Europe; to a lesser degree in Asia and  Africa | •  • | Provides current information on events that may not be reported otherwise Contextual information may be included that doesn’t come across in data sets | •  •  • | Quality varies significantly, and information can be incomplete or inaccurate Generally no follow-up reporting (e.g. the aftermath of a car crash)  “Big” news is more likely to receive pickup – i.e. smaller incidents not part of a “crisis” may not be reported | | |  |  |  |  |  | • | Requires frequent data mining/searching of sources | | | Media: Social media | Incident reports | Middle East, Central  America,  Mediterranean | • | (Can) provide the most current information about incidents, can foster connections between data sources (e.g. IOM with local NGOs), information about cases not reported in news (e.g. European Asylum Support Office weekly social media monitoring reports) | •  •  •  • | Little information is provided that can be incomplete or inaccurate  It can be difficult/unfeasible to follow-up to get more information and/or verify False information can travel  quickly  Requires frequent data mining/searching of sources | | |  | | | |  | |  |  | | Data is collected by IOM staff based at IOM’s Global Migration Data Analysis Centre and in its Regional  Offices | Coast guards/ police/ border patrol/ nongovernmental organizations  (NGOs)  Testimonies of shipwreck survivors | (MMP, IOM) | MMP, IOM  Administrative Data | By Destination  Country  By Division |  |  | 1st Round:  2019  2nd Round:  December,2020  3rd Round:  December,2021  4th Round:  December,2022  5th Round:  December,2023 | Refinement of the indicator name approved by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) on 13 March and 2 April 2020. Final approval pending the 52nd session of the Statistical Commission in March 2021  UNSC 51 addition included in the 2020 comprehensive review |
| 10.7.4 Proportion of the population who are refugees, by country of origin |  | TBD | **Definition:**  The indicator is defined as the total count of population who have been recognized as refugees divided by the total population of their country of origin, expressed per 100,000 population.  Refugees refers to persons recognized by the Government and/or UNHCR, or those in a refugee-like situation.  Population refers to total resident population in a given country in a given year.  **Concepts:**  Refugees recognized by the Government and/or UNHCR include:  persons recognized as refugees by Governments having ratified the 1951 *United Nations Convention*  *Relating to the Status of Refugees*, and/or its *1967 Protocol;*  persons recognized as refugees under the *1969 Organization of African Unity (OAU) Convention*  *Governing the Specific Aspects of Refugee Problems in Africa;*  those recognized in accordance with the principles enshrined in the *Cartagena Declaration;*  persons recognized by UNHCR as refugees in accordance with its Statute (otherwise referred to as “mandate” refugees);  those who have been granted a complementary form of protection (i.e. non-Convention);  persons who have been granted temporary protection on a group basis;  Persons in a *refugee-like situation* refer to those outside their territory of origin who face protection risks similar to those of refugees, but who, for practical or other reasons, have not been formally recognized or issued documentation to that effect.    **Comments and limitations:**  The estimates of the refugee population by country of origin are collected on an annual basis by UNHCR during its annual statistical review. Data is therefore already available and would not impose an additional burden on national statistical systems    **Computation Method:**  [Number of refugees by country of origin at end-year/(End-year population in country of origin+ number of refugees by country of origin at end-year)]\*100,000    The indicator will be presented as the number of refugees per 100,000 population in country of origin. | Biannual Population Statistic Review (PSR) data collection | national institutions responsible for data production in the area of refugee and asylum (National Statistical Offices, Ministry of Interior, Ministry of Justice, and Administrative Tribunals). | RRRC | a. RRRC, MoDMR  b) UNHCR  Administrative Data | By Origin:  yanmar/Other Country |  |  | 1st Round:  2019  2nd Round:  December, 2020  3rd Round:  December, 2021  4th Round:  December, 2022  5th Round:  December, 2023 | UNSC 51 addition included in the 2020 comprehensive review |
| Target 10.a Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements | | | | | | | | | | | | |
| 10.a.1 Proportion of tariff lines applied to imports from least developed countries and developing countries with zero-tariff | ITC,  UNCTAD,  WTO | Tier I | Definition:  Proportion of total number of tariff lines (in per cent) applied to products imported from least developed countries and developing countries corresponding to a 0% tariff rate in HS chapter 01-97.  Concepts:  Tariff line or National Tariff lines (NTL): National Tariff Line codes refer to the classification codes, applied to merchandise goods by individual countries, that are longer than the HS six digit level. Countries are free to introduce national distinctions for tariffs and many other purposes. The national tariff line codes are based on the HS system but are longer than six digits. For example, the six digit HS code 010120 refers to Asses, mules and hinnies, live, whereas the US National Tariff line code 010120.10 refers to live purebred breeding asses, 010120.20 refers to live asses other than purebred breeding asses and 010120.30 refers to mules and hinnies imported for immediate slaughter.  Tariffs: Tariffs are customs duties on merchandise imports, levied either on an ad valorem basis (percentage of value) or on a specific basis (e.g. $7 per 100 kg). Tariffs can be used to create a price advantage for similar locally-produced goods and for raising government revenues. Trade remedy measures and taxes are not considered to be tariffs.  Comments and limitations:  "The following caveats should be taken in consideration while reviewing this indicator:  Accurate estimates on special and differential treatment for developing countries do not exist, thus the calculations are limited to tariffs only. These are only part of the trade limitation factors, especially when looking at exports of developing or least developed countries under non-reciprocal preferential treatment that set criteria for eligibility.  A full coverage of preferential schemes of developed countries are used for the computation, but preferential treatment may not be fully used by developing countries' exporters for different reasons such as the inability of certain exporters to meet eligibility criteria (i.e., complying with rules of origin). As there is no accurate statistical information on the extent of the actual utilisation of each of these preferences, it is assumed that they are fully utilised.  Duty free treatment is an indicator of market access, but is not always synonymous with preferential treatment for beneficiary countries, because a number of MFN tariffs are already at, or close to, zero, especially for fuels and minerals. International agreements on IT products also offer duty-free treatment for components and equipment used for production purpose"  Computation Method:  The indicator is calculated as the average share of national tariff lines that are free of duty | Retrieved by contacting directly National statistical offices, permanent country missions to the UN, regional organizations or focal points within the customs, ministries in charge of customs revenues (Ministry of economy/finance and related revenue authorities) or, alternatively, the Ministry of trade | NA | UNSC  Administrative Data | a) WTO Cell, MoC  b) UNSC  Administrative Data | * product sector: agriculture, textile, environmental * geographical regions | Annual | Group 1 | 1st Round:  2015  2nd Round:  January, 2019  3rd Round:  January, 2020  4th Round:  January, 2021  5th Round:  January, 2022 |  |
| Target 10.b Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes | | | | | | | | | | | | |
| 10.b.1 Total resource flows for development, by recipient and donor countries and type of flow (e.g. official development assistance, foreign direct investment and other flows) | OECD | Tier I (ODA)/Tier II (FDI) | Definition:  Total resource flows for development, by recipient and donor countries and type of flow comprises of Official Development Assistance (ODA), other official flows (OOF) and private flows.  Concepts:  Official and private flows, both concessional and non-concessional to developing countries. For official flows the major distinction is between official development assistance (ODA) and other official flows  OOF, while private flows are broken down into flows at market terms and charitable grants. Flows include contributions to multilateral development agencies, which are themselves official bodies.  See http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm)  Computation Method:  The sum of official and private flows from all donors to developing countries. | A statistical reporter is responsible for the collection of DAC statistics in each providing country/agency.. | Data are reported on an annual calendar year basis by statistical reporters in national administrations (aid agencies, Ministries of Foreign Affairs or Finance, etc. | a) BB  b) ERD  Administrative Data | a) ERD b) BIDA, PMO  c)BB, FID  Administrative Data | * recipient country * donor country * type of flow: ODA, OOF, private * type of finance * type of aid | Annual | Group 1 | 1st Round:  2015  2nd Round:  September 2019  3rd Round:  September 2020  4th Round:  September 2021  5th Round:  September 2022 |  |
| Target 10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent | | | | | | | | | | | | |
| 10.c.1 Remittance costs as a proportion of the amount remitted | World Bank | Tier I | Definition:  The target includes two components. The first component is that transaction costs for migrant remittances should be 3% or less by 2030. This transaction cost should be intended as “Global average total cost of sending $200 (or equivalent in local sending currency) and expressed as % of amount sent”. This indicator is readily available and published on a quarterly basis by the World Bank in the Remittance Prices Worldwide database, which covers 365 country corridors, from 48 sending to 105 receiving countries. The second component is to eliminate corridor where cost is 5% or higher. This should be intended in the sense that it should be possible for remittance senders to send money to the beneficiary for an average cost of 5% or less of the amount sent. For this purpose, it should suffice that in each corridor there are at least 3 services, meeting a defined set of service requirements (including service quality, reach etc.), for which the average is 5% or less.  Concepts:  International remittance transfer. A cross-border person-to-person payment of relatively low value. The transfers are typically recurrent payments by migrant workers (who send money to their families in their home country every month). In the report, the term “remittance transfer” is used for simplicity (ie it is assumed the transfer is international).  Remittance service. A service that enables end users to send and/or receive remittance transfers.  Remittance service provider (RSP). An entity, operating as a business, that provides a remittance service for a price to end users, either directly or through agents. These include both banks and money transfer operators, as defined below.  Money transfer operator (MTO). A non-deposit taking payment service provider where the service involves payment per transfer (or possibly payment for a set or series of transfers) by the sender to the payment service provider (for example, by cash or bank transfer) – i.e. as opposed to a situation where the payment service provider debits an account held by the sender at the payment service provider. MTOs may include both traditional players focusing on delivering funds in cash and innovative players which may adopt a variety of different business models for the delivery of the transactions.  Price. The total cost to the end users of sending a remittance transfer (including the fees charged to the sender and the margin by which the exchange rate charged to the end users is above the current interbank exchange rate).  Comments and limitations:  NA  Computation Method:  Data is collected through a mystery shopping exercise of remittance service providers (RSPs). A sample of RSPs including at least 80% of the market share in each corridor are included in the mystery shopping exercise. The average cost is calculated as the simple average of total costs (including both fee and exchange rate margin) quoted by each RSP operating in a corridor.  In 2016, introduced the Smart Remitter Target (SmarRT) to monitor remittance transactions at a more granular level. It aims to reflect the cost that a savvy consumer with access to sufficiently complete information would pay to transfer remittances in each corridor. SmaRT is calculated as the simple average as the three cheapest services for sending the equivalent of $200 in each corridor and is expressed in terms of the percentage of the total amount sent. In addition to transparency, services must meet additional criteria to be included in SmaRT, including transaction speed (5 days or less) and accessibility (determined by geographic proximity of branches for services that require physical presence, or access to any technology or device necessary to use the service, such as a bank account, mobile phone or the internet.  For additional information on the methodology of SmaRT, please see: https://remittanceprices.worldbank.org/sites/default/files/smart\_methodology.pdf  Target 10.c.1 includes two components, which require two separate calculations:  1. Global average of remittance costs to be reduced to less than 3 percent: this is calculated as the simple average of the total cost for all services included in the RPW database  2. Enabling remittance senders in all corridors to send money to their receivers at a cost of 5 percent or less: this is calculated as the average cost of the three cheapest available services in each corridor which meet a defined set of minimum requirements, as described in the World Bank SmaRT methodology. The target is that the SmaRT average for all corridors should be 5 percent or lower. | Mystery shopping conducted quarterly. | Data are collected by mystery shopping from remittance service providers. | BB  Administrative Data | BB, FID  Administrative Data | * type of remittance service provider: commercial banks, money transfer operators, post offices, mobile operators * type of instrument to fund the transaction: cash, bank account, debit/credit card, mobile money * type of instrument to disburse the funds: cash, bank account (same bank), bank account (different bank), mobile money | Bi-annual | Group 1 | 1st Round: 2015  2nd Round:  August, 2019  3rd Round:  August, 2021  4th Round:  August, 2023  5th Round:  August, 2025 | Data availability reviewed in Oct. 2019  (classified as Tier I)  Reviewed at 6th IAEG-SDG meeting (classified as Tier II) |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

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| --- | --- |
| A picture containing drawing  Description automatically generated | Make cities and human settlements inclusive, safe, resilient and sustainable |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier Classifi-cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
| Target **11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums** | | | | | | | | | | | | |
| 11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing | UN-Habitat  **Partner Agencies:**  UNEP | Tier I | Definition and concept:  As per the 2030 Agenda, to guide the development of the appropriate policies and programmes for ensuring access for all to adequate housing and the upgrading of slums, it is necessary to identify and quantify the proportion of the population that live in **slums**, **informal settlements** and those living in **inadequate housing**.    **a. Slums** – An expert group meeting was convened in 2002 by UN-Habitat, the United Nations Statistics Division and the Cities Alliance to agree on an operational definition for slums to be used for measuring the indicator of MDG 7 Target 7.D. The agreed definition classified a *‘slum household’* as one in which the inhabitants suffer one or more of the following *‘household deprivations’*:  Lack of access to improved water source,  Lack of access to improved sanitation facilities,  Lack of sufficient living area,  Lack of housing durability and,  Lack of security of tenure. By extension, the term *‘slum dweller’* refers to a person living in a household that lacks any of the above attributes.[[10]](#footnote-11)  These five components –all derived from the adequate housing’s definition have been used ever since for reporting and tracking of the MDGs, as the primary or secondary data measured to determine the number of slum dwellers living in developing countries. They were also the basis to establish the successful achievement of MDG Target 7.D. For each component, the experts agreed with the following sub-definitions:[[11]](#footnote-12)  1) Access to improved water – A household is considered to have access to improved drinking water if it has sufficient amount of water (20 litres/person/day) for family use, at an affordable price (less than 10% of the total household income) and available to household members without being subject to extreme effort (less than one hour a day for the minimum sufficient quantity), especially to women and children. An improved drinking water source is a facility that is protected from outside contamination, in particular from faecal matters’ contamination. Improved drinking water sources include: piped water into dwelling, plot or yard; public tap/stand pipe serving no more than 5 households; protected spring; rainwater collection; bottled water (if secondary source is also improved); bore hole/tube well; and, protected dug well.  2) Access to improved sanitation – A household is considered to have access to improved sanitation if an excreta disposal system, either in the form of a private toilet or a public toilet shared with a reasonable number of people, is available to household members. Such improved sanitation facilities, therefore, hygienically separates human waste from human contact. Improved facilities include: flush/pour-flush toilets or latrines connected to a sewer, septic tank or pit; ventilated improved pit latrine; pit latrine with a slab or platform, which covers the pit entirely; and, composting toilets/latrines.  3) Sufficient living area /overcrowding– A dwelling unit provides sufficient living area for the household members if not more than three people share the same habitable room.[[12]](#footnote-13) Additional indicators of overcrowding have been proposed: area-level indicators such as average in-house living area per person or the number of households per area. Additionally, housing-unit level indicators such as the number of persons per bed or the number of children under five per room may also be viable. However, the number of persons per room has been shown to correlate with adverse health risks and is more commonly collected through household survey.[[13]](#footnote-14). UN-Habitat believes that the definition as it stands does not reflect the practical experience of overcrowding and as noted below, is proposing an alternative.  D:\08.SDGs\Metadata\Diagrams\IND11.1 Diagram Overcrowding.jpg  Figure 1- Example of Overcrowding  4) Structural quality/durability of dwellings – A house is considered as ‘durable’ if it is built on a non-hazardous location and has a permanent and adequate structure able to protect its inhabitants from the extremes of climatic conditions such as rain, heat, cold, and humidity. The following criteria are used to determine the structural quality/durability of dwellings: permanency of structure (permanent building material for the walls, roof and floor; compliance with building codes; the dwelling is not in a dilapidated state; the dwelling is not in need of major repair); and location of house (hazardous location; the dwelling is not located on or near toxic waste; the dwelling is not located in a flood plain; the dwelling is not located on a steep slope; the dwelling is not located in a dangerous right of way: rail, highway, airport, power lines).  5) Security of tenure – Secure tenure is the right of all individuals and groups to effective protection by the State against forced evictions. Security of tenure is understood as a set of relationships with respect to housing and land, established through statutory or customary law or informal or hybrid arrangements, that enables one to live in one’s home with security, peace and dignity (A/HRC/25/54). Regardless of the type of tenure, all persons with security of tenure have a legal status against arbitrary unlawful eviction, harassment and other threats. People have secure tenure when: there is evidence of documentation that can be used as proof of secure tenure status; and, there is either de facto or perceived protection from forced evictions. Important progress has been made to integrate the measurement of this component into the computation of the people living in slums.  Informal Settlements  **b. Informal Settlements** – Informal settlements are usually seen as synonymous of slums, with a particular focus on the formal status of land, structure and services. They are defined by three main criteria, according to Habitat III Issue Paper #22[[14]](#footnote-15), which are already covered in the definition of slums. These are:  Inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing,  The neighbourhoods usually lack, or are cut off from, formal basic services and city infrastructure, and  The housing may not comply with current planning and building regulations, is often situated in geographically and environmentally hazardous areas, and may lack a municipal permit.  Informal settlements can be occupied by all income levels of urban residents, affluent and poor.  Inadequate Housing  c. Inadequate Housing – Article 25 of the Universal Declaration of Human Rights includes housing as one of the components of the right to adequate standards of living for all. The United Nations Committee on Economic, Social and Cultural Rights’ general comments No.4 (1991) on the right to adequate housing and No.7 (1997) on forced evictions have underlined that the right to adequate housing should be seen as the right to live somewhere in security, peace and dignity. For housing to be adequate, it must provide more than four walls and a roof, and at a minimum, meet the following criteria:  1. Legal security of tenure, which guarantees legal protection against forced evictions, harassment and other threats;  2. Availability of services, materials, facilities and infrastructure, including safe drinking water, adequate sanitation, energy for cooking, heating, lighting, food storage or refuse disposal;  3. Affordability, as housing is not adequate if its cost threatens or compromises the occupants’ enjoyment of other human rights;  4. Habitability, as housing is not adequate if it does not guarantee physical safety or provide adequate space, as well as protection against the cold, damp, heat, rain, wind, other threats to health and structural hazards;  5. Accessibility, as housing is not adequate if the specific needs of disadvantaged and marginalized groups are not taken into account (such as the poor, people facing discrimination; persons with disabilities, victims of natural disasters);  6. Location, as housing is not adequate if it is cut off from employment opportunities, health-care services, schools, childcare centres and other social facilities, or if located in dangerous or polluted sites or in immediate proximity to pollution sources; and  7. Cultural adequacy, as housing is not adequate if it does not respect and take into account the expression of cultural identity and ways of life.   |  |  |  |  | | --- | --- | --- | --- | | Table 1. Criteria defining slums, informal settlements and inadequate housing | | | | |  | Slums | Informal Settlements | Inadequate Housing | | access to water | X | X | X | | access to sanitation | X | X | X | | sufficient living area, overcrowding | X |  | X | | structural quality, durability and location | X | X | X | | security of tenure | X | X | X | | affordability |  |  | X | | accessibility |  |  | X | | cultural adequacy |  |  | X |   Comments and limitations:  As with all indicators, there are a number of potential challenges and limitations. Some of these are outlined below.  Difficulties to agree universally on some definitions and characteristics when referring to deteriorated housing conditions, often due to political or economic considerations.  Lack of appropriate tools at national and city levels to measure all components required by Indicator 11.1.1, sometimes resulting in the underestimation of deteriorated housing units.  The complicated relation between security of tenure with land and property makes it a difficult, but vital, aspect to include in the different surveys, and thus, to measure and monitor.  Indicator 11.1.1 does not capture homelessness.  Many countries still have limited capacities for data collection, management and analysis, their update and monitoring. These are key to ensure national and global data consistency.  Computation Method:  The indicator considers two components to be computed as follows:   1. Slum/Informal Settlements households (SISH):      1. Inadequate housing households (IHH):   The unit of measurements for all these indicators will be %. Currently, the data for this indicator is already being reported in nearly all developing countries on what refers to slums and informal settlements, and in some countries for what refers to expenditure on housing. The SDG indicator 11.1.1 will therefore contribute to report on a broader spectrum of inadequate housing conditions affecting households in all countries. | Data for the slum and informal settlement components of the indicator can be computed from Census and  national household surveys, including DHS and MICS | UN- Habitat, UNEP, Cities  Alliance, Slum dwellers  International, and World Bank | BBS | a) BBS  b) UN-Habitat  Population and Housing Census/  Census of Slum Areas and Floating Population | * income group: High/Medium/Low * Sex: Male, Female, Transgender * race * ethnicity * religion: Islam, Hindu/ Christian/ Others * migration status (head of household): Migrant/Non Migrant * age (household members) * disability (household members): Disable/Non Disable | 5-years | Group 1 | 1st Round:  2014  2nd Round:  June, 2022  3rd Round:  June, 2027  4th Round:  June, 2030 |  |
| **Target 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons** | | | | | | | | | | | | |
| 11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities | UN-Habitat  **Partner Agencies:**  UNEP,  UNECE | Tier II | Definition:  This indicator will be monitored by the proportion of the population that has convenient access to public transport. The access to public transport is considered convenient when an officially recognized stop is accessible within a distance of 0.5 km from a reference point such as a home, school, work place, market, etc. Additional criteria for defining public transport that is convenient include:  a. Public transport accessible to all special-needs customers, including those who are physically, visually, and/or hearing-impaired, as well as those with temporary disabilities, the elderly, children and other people in vulnerable situations.  b. Public transport with frequent service during peak travel times  c. Stops present a safe and comfortable station environment  Concepts:  This indicator will be monitored by the proportion of the population that has convenient access to public transport. Because most public transport users walk from their trip origins to public transport stops and from public transport stops to their trip destination, local spatial availability and accessibility is sometimes evaluated in terms of pedestrian (walk) access, as opposed to park and ride or transfers.  Hence, the access to public transport is considered convenient when an officially recognized stop is accessible within a distance of 0.5 km from a reference point such as a home, school, work place, market, etc. Additional criteria for defining public transport that is convenient include:  a. Public transport accessible to all special-needs customers, including those who are physically, visually, and/or hearing-impaired, as well as those with temporary disabilities, the elderly, children and other people in vulnerable situations.  b. Public transport with frequent service during peak travel times  c. Stops present a safe and comfortable station environment  Public transport is defined as a shared passenger transport service that is available to the general public. It includes cars, buses, trolleys, trams, trains, subways, and ferries that are shared by strangers without prior arrangement. However, it excludes taxis, car pools, and hired buses, which are not shared by strangers without prior arrangement. It also excludes informal, unregulated modes of transport (para-transit), motorcycle taxis, three-wheelers, etc.  Public transport refers to a public service that is considered as a public good that has well designed ‘stops’ for passengers to embark and disembark in a safe manner and demarcated ‘routes’ that are both officially and/or formally recognized.  Additional methodological comments:  The method to estimate the proportion of the population that has convenient access to public transport is based on four steps:  a) Spatial analysis to delimit the built-up area of the urban agglomeration:  Delimit the built-up area of the urban agglomeration and calculate the total area (square kilometres). Area of delimitation should be aligned with census enumeration areas to match with demographic data.  b) Inventory of the public transport stops in the city or the service area:  Information can be obtained from city administration or service providers. In some cases where this information is lacking, incomplete or outdated, open sources and community-based maps, which are increasingly recognized as a valid source of information, can be a viable alternative.  When information is available, characteristics of the quality, universal accessibility for people with disabilities, safety, and frequency of the service can be ‘assigned‘ to the public transport stops’ inventory for detailed analysis and further disaggregation according to the statistical capacities of countries and cities.  c) Estimation of urban area with access to public transport:  To calculate the indicator it is necessary to use a map with the inventory of officially-recognized public transport stops and create a buffer area of 500m radius for each stop. Merge and clip with boundary of the boundary built-up area of the urban agglomeration.  d) Estimation of the proportion of the population with convenient access out of the total population of the city:  Overlay GIS demographic data on the number of dwellings within the area with access to public transport stop. Calculate the population within those dwellings. Estimate the proportion of population out of the total population of the city.  Complementary to the above, other parameters of tracking the transport target include the following:  a) Accessibility related to urban planning: this parameter can be measured using density (people/sq.km) from census surveys, Percentage of street space in cities and Number of Intersections / Sq.Km from analysis of earth observations and/or city maps. Density is an important determinant for the efficiency of public transport systems. The adequacy of streets and crossings determine urban accessibility to a great extent.  b) Accessibility related to transport planning: this parameter can be measured using Percentage of population within 500m of mass transit stop from City maps and sample survey data.  c) Affordability: this can be obtained from Percentage of household income of lowest quintile of population spent on transport from Sample surveys and WTP surveys. Poorest quintile should not spend more than 5% (TBD) on transport.  d) Quality: this parameter can be measured using travel time, universal access, safety, security, comfort and user information from sample surveys.  e) Modal shift to sustainable transport: this is also expressed in Modal share (cars, NMT, PT), Passenger KM travelled on EV as percentage of total passenger KM travelled in urban areas from City mobility surveys. This parameter is also important due to transport’s contribution to carbon emissions and air quality issues in cities.  Comments and limitations:  As the Outcome Document 2nd Meeting of the Urban SDGs Campaign in Bangalore (12-14 February 2015) recognizes that no internationally agreed methodology exists for measuring convenience and service quality of public transport. Harmonized global/local data on urban transport systems do not exist, nor are they comparable at the world level.  It is recognized that convenience measured as distance does not categorize the quality of the public transport which will vary from country to country. Nevertheless, the proposed indicator is a comparable and objective measurement that can be assessed in cities across regions.  Other factors of this indicator such as affordability, safety, and universal accessibility may influence the usage of public means of mobility beyond proximity to the transport stop. Yet, the provision of widely accessible public transport is a precondition for its usage.  Finally, high capacity public transport, such as trains allows for a larger capture area, beyond the 0.5km of the proposed indicator.  It is also recognized that there are various forms of public transport in the member countries that are not fully defined or captured in this methodology. In particular, many developing countries have access to public transport that is available anywhere on the streets and not necessarily at designated public transport stops. The creation of designated stops is a precondition of measurement in these countries.  Computation Method:  Method of Computation  This indicator is computed based on the following criteria:  The identification of service areas is typically achieved using the buffering operation (using GIS) by constructing lines of equal proximity around each public transport stop or each public transport route. The buffering operation clearly involves at least two decisions. The first decision is whether routes or stops should be used as the reference of measurement. The two approaches may lead to very different values of spatial availability. But generally, public transport stops offer a more appropriate basis than routes for estimating service area coverage because stops are the actual locations where public transport users access the system. The other decision involved in the buffering operation is the buffer size. A common practice in public transport planning is to assume that people are served by public transport if they are within 0.5km (or 500m) of either a public transport route or stop. Once a distance threshold is defined, buffers are created around the public transport features. Some studies measure the distance based on air, or Euclidean, distance, while others use network distance (that is, the walk distance computed using the street network to reach a public transport feature. Since the network distance between two locations in space is greater than, or equal to, the corresponding air distance, the size of a coverage area defined by the network distance will be smaller than, or equal to, that defined by air distance. Network distance measures are likely to be more realistic because they reflect the configuration of the street network and recognize the presence of any man-made barriers preventing direct access to public transport features. In addition to using the above mentioned distance measures, others have suggested the use of travel time to public transport features as a measure of proximity. Using travel time is preferable to distance as a measure of proximity because travel time measures account for such pedestrian-unfriendly factors such as steep terrains. However, because of the additional data requirements and the amount of processing effort involved, travel time measures are rarely used in practice. For this indicator the public transport stop will be used as the point of service.  The identification of the population served  Once a service buffer is constructed, the next step is to overlay the buffer onto other polygons, such as census tracts, for which socio-demographic data (such as population figures, disabled persons, type of residence area, etc. is available. These polygons are referred to as the analysis zones. Typically, a service buffer (denoted as i) intersects, either fully or partially, with more than one analysis zone j ( j=1…..J). The population served by the public transport service in buffer i, Pi, is thus equal to the sum of the population in each of the intersecting areas, Pij . Hence  Pi=?\_(j=1)^J¦Pij  Where, Pij is estimated based on the amount of interaction between service buffer i and analysis zone j.  In estimating Pij it is assumed that the population is uniformly distributed within the analysis zones.  Integrating local temporal availability.  The methodology described above covers public transport service solely based on spatial access to stops or routes and does not address the temporal dimension associated with the availability of public transport. We note that temporal aspect of public transport availability is important because a service within walking distance is not necessarily considered as available if waiting times go beyond a certain threshold level that is required. This wait time for public transport is related to the frequency of the service as well as the threshold for tolerable waits for potential public transport users. We will leave out completely the temporal measurement for global comparison, but countries that can additionally capture this component are encouraged to collect and report this information as part of the disaggregation.  Finally, the population with access to public transport out of the entire city population will be computed as;  Percentage with access to Public transport =100x (population with convenient access to Public transport)/(City Population) | At the Global level, all this data will be assembled and compiled for international consumption and comparison by the UN-Habitat and other partners | National Focal points as designated by respective Governments underpins the governance framework for monitoring the Transport Target. |  | a) BBS  ARPTS//PHC/  Big Data | * Age: 0-14 yrs, 15-24 yrs, 25-59 yrs, 60+ yrs * Sex: Male/Female * Disability: Disable/Non Disable | Triennial | Group 2 | -  1st Round:  December, 2020  2nd Round:  December, 2023  3rd Round:  December, 2026  4th Round:  December, 2029  5th Round:  December, 2030 |  |
| Target 11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries | | | | | | | | | | | | |
| 11.3.1 Ratio of land consumption rate to population growth rate | UN-Habitat  **Partner Agencies:**  UNEP | Tier II | Definition:  The indicator is defined as the ratio of land consumption rate to population growth rate.  This indicator requires defining the two components of population growth and land consumption rate. Computing the population growth rate is more straightforward and more readily available, while land consumption rate is slightly challenging, and requires the use of new techniques. In estimating the land consumption rate, one needs to define what constitutes “consumption” of land since this may cover aspects of “consumed” or “preserved” or available for “development” for cases such as land occupied by wetlands. Secondly, there is not one unequivocal measure of whether land that is being developed is truly “newly-developed” (or vacant) land, or if it is at least partially “redeveloped”. As a result, the percentage of current total urban land that was newly developed (consumed) will be used as a measure of the land consumption rate. The fully developed area is also sometimes referred to as built up area.  Concepts:  Population growth rate (PGR) is the increase of a population in a country during a period, usually one year, expressed as a percentage of the population at the start of that period. It reflects the number of births and deaths during a period and the number of people migrating to and from a country.  Land consumption includes: (a) The expansion of built-up area which can be directly measured; (b) the absolute extent of land that is subject to exploitation by agriculture, forestry or other economic activities; and (c) the over-intensive exploitation of land that is used for agriculture and forestry.  Comments and limitations:  In some cases, it is difficult to measure the urban expansion by conurbations of two or more urban areas that are in close proximity; to whom to attribute the urban growth and how to include it as one metric usually becomes a challenge. At the same time, data would not always coincide to administrative levels, boundaries and built-up areas. However, the European Commission highlights some possible drawbacks of this indicator that can be technically addressed. Efforts to use the area of reference at the level of the built-up area of the urban agglomeration should be taken into consideration. The delimitation of city boundaries may be another methodological problem that a clear agreed definition can solve.  The indicator may experience difficulties in capturing cities with negative or zero population growth; or cities that due to severe disaster have lost part of their territories. To face this challenge, the baseline/benchmark of population density and its change over time must be taken into consideration. Reducing densities below sustainable levels have impacts on the cities’ sustainability.  In the absence of the GIS layers, this indicator may not be computed as defined. As a result more alternative measures for land that is developed or consumed per year can be adequately used. Alternatively, one can monitor the efficient use of urban land by measuring how well we are achieving the densities in residential zones that any city plans or international guidance call for. Comparing achieved to planned densities is very useful at the city level. However, planned densities vary greatly from country to country, and at times from city to city. At the sub-regional or city levels, it is more appropriate to compare average densities achieved currently to those achieved in the recent past. While building more densely does use land more efficiently, high density neighborhoods, especially in and around urban centers, have a number of other advantages. They support more frequent public transportation, and more local stores and shops; they encourage pedestrian activity to and from local establishments; and they create lively (and sometimes safer) street life.  Computation Method:  The formula to estimate the land use efficiency will be provided with two stages.  Stage 1: Estimate the population growth rate.  Population Growth rate i.e. PGR=LN(Popt\_(t+n)/?Popt\_t )/((y))  Where  Popt Total population within the city in the past/initial year  Popt+n Total population within the city in the current/final year  y The number of years between the two measurement periods  Stage 2: Estimating the land consumption rate  This rate gives us a measure of compactness which indicates a progressive spatial expansion of a city.  Land consumption rate i.e LCR=LN(Urb\_(t+n)/Urb\_t )/((y))  Where  Urb\_t Total areal extent of the urban agglomeration in km2 for past/initial year  Urb\_(t+n) Total areal extent of the urban agglomeration in km2 for current year  y The number of years between the two measurement periods  The formula to estimate the ratio of land consumption rate to population growth rate (LCRPGR) is provided as follows:  LCRPGR= (+ ( Land Consumption rate)/(Annual Population growth rate)¦)  And the overall formula can be summarized as:  LCRPGR=(((LN(Urb\_(t+n)/Urb\_t ))/y))/((LN(Pop\_(t+n)/Pop\_t )/y) )  The periods for both- urban expansion and population growth rates should be at comparable scale. | Data for this indicator is available for all cities and countries (UN DESA population data) and satellite images from open sources. Several sources of information are required for this computation | UN-Habitat and other partners such as the Global Human Settlement Layer (GHSL) team and ESRI will support various components for reporting on this indicator. |  | a) Development Authorities, i.e. RAJUK, CDA, KDA, etc., MoHPW  b) UDD, MoHPW  c) UN-Habitat  Big Data | * Location (intra-urban) * Income level: Upper/Middle/Lower * Urban typology: City Corporation/Paurashava/ Upazilla headquarters | Triennial | Group 2 | -  1st Round: December, 2019  2nd Round: December, 2022  3rd Round:  December, 2025  4th Round:  December, 2028  5th Round:  December, 2030 |  |
| 11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically | UN-Habitat | Tier II | Definition:  Civil society organizations (CSOs) make a difference in international development. They provide development services and humanitarian relief, innovate in service delivery, build local capacity and advocate with and for the poor. Acting alone, however, their impact is limited in scope, scale and sustainability. CSOs need to engage in government policy processes more effectively. The development of sustainable human settlements calls for the active engagement of all key stakeholders with particular attention to project/programme beneficiaries and vulnerable groups. Therefore local and national governments should strive to: a) facilitate and protect people’s participation and civic engagement through independent civil society organizations that can be from diverse backgrounds - local, national, and international; b) promote civic and human rights education and training programmes to make urban residents aware of their rights and the changing roles of diverse women, men, and young women and men in urban settings; c) remove the barriers that block participation of socially marginalized groups and promote non-discrimination and the full and equal participation of women, young men and women and marginalized groups. To monitor this indicator fully, it is important to define cities as unique entities and define what constitutes direct participation structures of civil society. Urban planning and management are more clear concepts that UN-Habitat has worked on developing for the last few decades and these are well articulated in the urban agenda documents. Experts who have worked on the methodological developments of this indicator have there put forth the below definitions to help guide the work on this indicator.  Concepts:  Many urban related SDGs require global monitoring with the ‘city’ as the unit of analysis. In order to monitor the urban SDGs in particular, it is necessary to agree on a global/common definition of what constitutes a ‘city’. A standard city definition will assist in the monitoring of the SDGs by ensuring that the study areas for the spatial urban SDGs are standardized and easily reproducible, and will add clarity to the methodologies and approaches to the collection of data to support the land and rural related indicators. UN-Habitat in collaboration with New York University and European Commission’s Joint Research Centre has adopted two definitions of cities.  City as defined by its Urban extent (built-up and urbanized open space) - New York University  Urban extent is defined as the total area occupied by the built-up area and the urbanized open space. The built-up area is defined as the contiguous area occupied by buildings and other impervious surfaces, but excluding urbanized open space, both public and private, as well as vacant lands.  Landsat imagery[[15]](#footnote-16) is used to identify and classify the built-up pixels into 3 types depending on the share of built-up density (urbanness) in a 1-km2 circle of a given building:  Urban built-up area: built-up pixels where the walking distance circle has a built-up density greater than 50%.  Suburban built-up area: built-up pixels where the walking distance circle has a built-up density between 25%-50%. It also includes subdivided land, whether it is wholly unbuilt or not.  Rural built-up area: built-up pixels where walking distance circle has a built-up density of less than 25% and that are not on subdivided land.  The urbanized open space (mainly refers to unbuilt areas including open countryside, forests, crop fields, parks, unbuilt urban areas, cleared land) is classified into 3 types:  Fringe open space consists of all open space pixels within 100 meters of urban or suburban pixels;  Captured open space consists of all open space clusters that are fully surrounded by urban and suburban built-up pixels and the fringe open space pixels around them, and that are less than 200 hectares in area; and  Rural open space consists of all open spaces that are not fringe or captured open spaces.  The fringe open space and captured open space together, make up the urbanized open space in a given study area. In other words, the urban extent consists of all the buildings and the small open space areas (<200 ha) that are surrounded by buildings and the open space fringe that is within 100 meters of urban and suburban areas.  City as defined by its Degree of Urbanisation (DEGURBA) - European Commission  The Degree of urbanisation (DEGURBA) is a classification that indicates the character of an area. Based on the share of the local population living in 3 different types of clusters, local administrative units (LAUs) are classified into three types of area: thinly populated area (rural area); intermediate density area (towns and suburbs/small urban area), and densely populated area (cities/large urban area) following a 2-step procedure.  In a first step, grid cells of 1 km2 are classified into one of the three following clusters, according to their population size and density:  High-density cluster/urban centre: contiguous grid cells of 1 km2 with a density of at least 1 500 inhabitants per km2 and a minimum population of 50 000;  Urban cluster: cluster of contiguous grid cells of 1 km2 with a density of at least 300 inhabitants per km2 and a minimum population of 5 000;  Rural grid cell: grid cell outside high-density clusters and urban clusters.  In a second step, local administrative units are then classified into one of three types of areas:  Densely populated area (alternative names: cities or large urban area): at least 50 % live in high-density clusters; in addition, each high-density cluster should have at least 75 % of its population in densely-populated LAUs; this also ensures that all high-density clusters are represented by at least one densely-populated LAU, even when this cluster represents less than 50 % of the population of that LAU;  Intermediate density area (alternative name: towns and suburbs or small urban area): less than 50 % of the population lives in rural grid cells and less than 50 % live in high-density clusters;Thinly populated area (alternative name: rural area): more than 50 % of the population lives in rural grid cells.  Other concepts  Democratic participation: Structures allow and encourage participation of civil society representing a cross-section of society that allows for equal representation of all members of the community with equal rights for participation and voting.  Direct participation: Structures allow and encourage civil society accessing and actively engaging in decision-making, without intermediaries, at every stage of the urban planning and management process.  Regular participation: Structures allow and encourage civil society participation in urban planning and management processes at every stage, and at least every six months.  Marginalized groups: Groups of people that are not traditionally given equal voice in governance processes. These include, but are not limited to, women, young men and women, low-income communities, ethnic minorities, religious minorities, people with disabilities, the elderly, and sexual and gender identity minorities and migrants.  Structures: Any formal structure that allows for participation of civil society. This can include, but is not limited to national or local legislation, policy, town council meetings, websites, elections, suggestion boxes, appeals processes, notice period for planning proposals etc.  Civil Society: The combination of non-governmental organizations, community groups, community-based organizations, regional representative groups, unions, research institutes, think tanks, professional bodies, non-profit sports and cultural groups, and any other groups that represent the interests and wills of the members and wider community.  Urban Management: The officials, including elected officials and public servants, that are responsible for city-management, across all sectors, such as roads, water, sanitation, energy, public space, land title etc.  Urban Budget decision making: The process by which money is allocated to various sectors of urban management, including roads, roads, water, sanitation, energy, public space, land title etc.  Urban Planning, including Design and Agreements: The technical and political process that concerns the development and use of land, how the natural environment is used etc. Design includes over-arching and specific design of public space, as well as zoning and land use definitions. Agreements refer to specific contract/arrangements made with various groups in regard to their land, e.g. Indigenous groups, protected natural environments etc.  Comments and limitations:  The indicator measures the availability of structures for civil society participation in urban planning and management, which is a reflection of structures for citizen voices/participation. The fact that informed evaluators conduct the evaluation can introduce biases. These biases and discrepancies have been examined in the pilot phases and so far the experiences is that the marginal differences are not as large as we were expecting. Overall, the evaluators’ assessments sometimes do not reflect a full analysis of the effectiveness or accessibility of these structures in its totality, but gives a local idea of how these evaluators view the inclusiveness and openness on these structures to accommodate the participation of citizens and civil society. Changes in data will be examined for intra-city differences and within country differences over time to understand more sources for variations and internal consistencies.  Within the civic society landscape, there are many types of players including civil societies led by individuals, community groups, advocates, corporations and foundations. Similarly, there are many different views about the relevance and importance of civil society participation particularly, perhaps, among different groups as listed above and for these different structures at the urban level maybe available for involvement or not.  Finally, civic society engagement in urban planning and management involves overlapping pathways, and goals as well as a mix of planned and unpredicted elements. Advancing toward a measurement frame is intended to help sort out theories and pathways – not to set hard boundary lines, but rather to help both urban managers and communities better understand what they are trying to achieve, and how they are getting there.  Computation Method:  To measure existence of direct participation structures of civil society in urban planning and management at the city level, a scorecard approach will be used to evaluate the available structures for civil society participation in urban planning and management, as evaluated by five (5) local experts from government, academia, civil society and international organizations. The identifications and selection of these 5 local evaluators/experts will be guided by local urban observatories teams that are available in many cities. In the pilot exercises, these urban observatories as local custodians of urban data at the city level are able to coordinate the assessments, and check for consistencies and relevant local references that guide the decisions and scores of the evaluators.  A questionnaire with a 4-point Likert scale (strongly disagree, disagree, agree, and strongly agree) will be used to measure and test the existence of structures for civil society participation in urban governance and management. As experts, we agreed that these structures are examined through four core elements and these were assessed in the completed pilot exercises as follows:  Are there structures for civil society participation in urban planning, including design and agreements, that are direct, regular and democratic?  Are there structures for civil society participation in local urban budget decision-making, that are direct, regular and democratic?  Are there structures for civil society evaluation and feedback on the performance of urban management, that are direct, regular and democratic?  Do these structures promote the participation of women, young men and women, and/or other marginalized groups?  The evaluators score each of the questions on the Likert Scale, as below:  1 - Strongly disagree, 2 - Disagree, 3 - Agree, 4 - Strongly agree   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Questions | Strongly Disagree  (1) | Disagree  (2) | Agree  (3) | Strongly Agree  (4) | | Are there structures for civil society participation in urban planning, including design and agreements that are direct, regular and democratic? |  |  |  |  | | Are there structures for civil society participation in urban budget decision making that are direct, regular and democratic? |  |  |  |  | | Are there structures for civil society evaluation and feedback on the performance of urban management, which are direct, regular and democratic? |  |  |  |  | | Do the structures promote the participation of women, young men and women, and/or other marginalized groups? |  |  |  |  |   The Likert Scale use the following guidance for grading:  **Strongly Disagree:** There are no structures in place or available structures do not allow civil society participation that is direct, regular or democratic.  **Disagree:** Structures exist that allow civil society participation, but they are only partially direct, regular and democratic; or they are only one of direct, regular or democratic.  **Agree:** Structures exist that allow and encourage civil society participation that is direct and/or regular and/or democratic, but not all three.  **Strongly Agree**: Structures exist that allow and encourage civil society participation that is fully direct, regular and democratic.  Once each of the five (5) categories is evaluated as shown in the table above by a single evaluator, the total average score of the single evaluator is computed. The various scores of the evaluators are then **averaged** to compute the final score for every city.  To determine the proportion of cities with a direct participation structure of civil society in urban planning and management that operates regularly and democratically, a midpoint on the Likert scale of 2.5 will be used. The value of the indicator is the proportion of cities with overall score that is greater than the mid-point.  As a result, if we have N cities selected for the evaluation in a given country, and n is the number of cities with scores that are higher than the mid-point, the value of the indicator will be calculated as:  (to be expressed in percentage)  To note, the number of cities in which the evaluation will be conducted may be determined using the National Sample of Cities approach. The approach will help draw a sample of cities using sound statistical and scientific methodologies based on several relevant city-specific criteria/characteristics that capture the specific contexts of countries, ensuring that the sample is representative of a given country’s territory, geography, size, history, etc. | Evaluators will examine structures at the city level, with data aggregated from city levels for national averages through local national statistical systems constituted and chaired by the national Statistical agencies. | National statistical organisations. |  | LGD  Administrative Data | * by city characteristics: Metro/Urban * By regularity of participation * By nature, and typology of existing structures | Bi-annual | Group 2 | 1st Round:  June 2020  2nd Round:  June 2022  3rd Round:  June 2024  4th Round:  June 2026  5th Round:  June 2028 | Reviewed at 8th IAEG-SDG meeting (classified as Tier II)  Reviewed at Webex meeting in Nov. 2017 following 6th IAEG-SDG meeting: Request additional work on definition of cities and methodology as well as additional pilot studies  Fast Track; Reviewed at 5th IAEG-SDG meeting: Request finalized metadata and results of pilot studies (classified as TBD) |
| Target 11.4 Strengthen efforts to protect and safeguard the world’s cultural and natural heritage | | | | | | | | | | | | |
| 11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designation), level of government (national, regional and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector and sponsorship) | UNESCO-UIS  **Partner Agencies:**  IUCN | Tier II | **Definition**: Total funding from government (central, regional, local), private sources (household, corporate & sponsorship and international sources) in the preservation, protection and conservation of cultural and/or natural heritage for a given year per capita. The results should be express in Purchasing Power Parities (PPP) in constant $.  **Rationale (purpose):** This indicator measures the per capita expenditure (public and private) in the preservation, protection and conservation of cultural and/or natural heritage over time. To monitor change over time of national efforts for the protection and safeguard of cultural and/or natural heritage.  This indicator illustrates how financial efforts/actions made by public authorities, both at the local, national and international levels, alone or in partnership with civil society organizations (CSO) and the private sector, to protect and safeguard the world’s cultural and natural heritage has a direct impact in making cities and human settlements more sustainable. This means that cultural resources and assets are safeguarded to keep attracting/to attract people (inhabitants, workers, tourists, etc.) and financial investments, to ultimately enhance the total amount of expenditure. This indicator is a proxy to measure the target.  This indicator would allow insight into whether or not countries are strengthening their efforts into safeguarding their cultural and natural heritage. It will help to identify areas that require more attention for policy purposes.  Expressing the indicator in PPP$ allows for comparison between countries and using constant values when looking at time-series is necessary to evaluate how real (eliminating the effects of inflation) resources are evolving over time.  **Concepts**  **Cultural heritage:** includes artefacts, monuments, a group of buildings and sites, museums that have a diversity of values including symbolic, historic, artistic, aesthetic, ethnological or anthropological, scientific and social significance. It includes tangible heritage (movable, immobile and underwater), intangible heritage (ICH) embedded into cultural, and natural heritage artefacts, sites or monuments. The definition excludes ICH related to other cultural domains such as festivals, celebration etc. It covers industrial heritage and cave paintings.  **Natural heritage**: refers to natural features, geological and physiographical formations and delineated areas that constitute the habitat of threatened species of animals and plants and natural sites of value from the point of view of science, conservation or natural beauty. It includes private and publically protected natural areas, zoos, aquaria and botanical gardens, natural habitat, marine ecosystems, sanctuaries, reservoirs etc.  **World Heritage Centre designation** refers to properties on the UNESCO World Heritage List. It encompasses the sites or properties inscribed in the list of UNESCO world heritage sites recognizing the universal values of these sites. <http://whc.unesco.org/en/list/>  **Mixed heritage:** sites contain elements of both natural and cultural significance.  **Conservation** **of cultural heritage** refers to the measures taken to extend the life of cultural heritage while strengthening transmission of its significant heritage messages and values. In the domain of cultural property, the aim of conservation is to maintain the physical and cultural characteristics of the object to ensure that its value is not diminished and that it will outlive our limited time span.  **Conservation of natural heritage** refers to the protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence.  The aim of **Preservation** is to obviate damage liable to be caused by environmental or accidental factors, which pose a threat in the immediate surroundings of the object to be conserved. Accordingly, preventive methods and measures are not usually applied directly but are designed to control the microclimatic conditions of the environment with the aim of eradicating harmful agents or elements, which may have a temporary or permanent influence on the deterioration of the object.  **Protection**: is the act or process of applying measures designed to affect the physical condition of a property by defending or guarding it from deterioration, loss or attack, or to cover or shield the property from danger or injury. In the case of buildings and structures, such treatment is generally of a temporary nature and anticipates future historic preservation treatment; in the case of archaeological sites, the protective measure may be temporary or permanent.  **Public expenditure** refers to spending on heritage incurred by public funds. Public funds are state, regional and local government bodies (Adapted from OECD glossary). Expenditure that is not directly related to cultural and natural heritage is, in principle, not included. Public expenditure in the preservation, protection and conservation of national cultural and/or natural heritage covers direct expenditure (including subsides), transfers and indirect public expenditures including tax incentives.  **Direct public expenditure** includes subsidies, grants and awards. Direct expenditure comprises generally spent on personnel, goods and services, capital investment and other heritage activities. Direct public expenditure can be in the form of operating expenditure and capital expenditure. See section below for definition.  **A Transfer** is a transaction in which one institutional unit provides a good, service, or asset to another unit without receiving from the latter any good, service, or asset in return as a direct counterpart (IMF, 2014).  **Net Intergovernmental transfers** are net transfers of funds designated for heritage activities from one level of government to another.  **Indirect public expenditures** include tax incentives– reduction of taxable income that arises due to several of heritage expenses incurred by a taxpayer**.**  **National/Federal level** consists of the institutional units of central government and non-market institutions controlled by central government. Central government expends their authority over the entire territory of country. It is responsible for providing heritage services for the benefit of the community as a whole, but also it may make transfers to other institutional units, as well levels of government.  **Regional/State/Provincial level** is a subdivision of government, which shares political, fiscal and economic power with central government. In federal government, regional level is represented by state government. In unitary states, regional government is known as a provincial government. This level of government consists of institutional units, which have some of the functions of government at a level below of that of central government and above the local level. A regional government usually has the fiscal authority to raise taxes within its territory and has the ability to spend at least some of its income according to its own policies, and appoint or elect its own officers.  If a regional unit is fully dependent on funds from the central government and a central government determines those funds, expenditures on regional level should be treated as a part of central government for statistical purposes.  **Local/municipal level** is a public administration that exists at the lowest administration level within government state such as municipality of district. Local level refers to local government units, which consist of local government institutional units and nonmarket institutions controlled by local level. A local government often has the fiscal authority to raise taxes within its territory and should have the ability to spend at least some of its income according to its own policies, and appoint or elect its own officers.  **Total Public expenditure on heritage** is consolidated expenditure on heritage made by national/federal, regional/States/Provincial and local governments.  **Private heritage expenditure** refers to privately funded preservation, protection and conservation of national cultural and/or natural heritage and includes, but is not limited to: donations in kind, private non-profit sector and sponsorship. Private funding includes donations by individual and legal entities, donations by bilateral and multilateral funds such as Official Development Aid (ODA), income from admissions/selling services and goods to individual and legal entities and corporate sponsorship.  **Donation** refers to cash and gifts-in-kind given by a physical or legal entity. Donations can be in the form of cash and in kind donations. Cash donations refer to the gift in money, payment checks or other monetary equivalents. Gifts-in-kind donations refer to donations in goods, services or other things such as supplies. Donations can be conditional or unconditional. Conditional donations are limited by the conditions imposed by the donor. Unconditional donations refer to the gift, which has no concrete purpose, given to organization/institution in order to help them in realization of their mission.  **Donations by individuals** refer to cash and in kind donation given by individual or physical person.  **Donations by legal entity** (corporation, enterprises) refer to any cash or in kind contributions given as a gift by legal entity – corporation, enterprises etc. This kind of donation is also known as a corporate philanthropy charitable giving to any organization/institution.  **Corporate sponsorships** refer to financial or in kind contribution by business sector in exchange for benefits in the form of advertising, reputation, promotion etc. Corporate sponsorships represent some kind of marketing in which corporation pays to programme/project/event in exchange for some marketing benefits.  **Income from admissions/membership fees/ selling services and goods** refers to amount of money received by entree sales to households / membership fees or selling services and goods to households or legal entities.  **Official Development Aid:** Flows of official financing administered with the promotion of the economic development and welfare of developing countries as the main objective, and which are concessional in character with a grant element of at least 25 percent (using a fixed 10 percent rate of discount). By convention, ODA flows comprise contributions of donor government agencies, at all levels, to developing countries (“bilateral ODA”) and to multilateral institutions. ODA receipts comprise disbursements by bilateral donors and multilateral institutions. Lending by export credit agencies—with the pure purpose of export promotion is excluded. (OECD).  **Donations by bilateral and multilateral** sources refer to any cash and in kind contribution given to another organization as a gift by bilateral party (foreign states) or multilateral party (international body, organization, etc.). It can be in the form of development assistance or official development assistance or private international/foreign donation. Private bilateral/multilateral donation is financial aid given by private foundation from one foreign country or private foundations from several foreign countries.  **Total heritage expenditure** refers to private and public spending on conservation, protection and preservation of heritage. Total expenditure comprises public and private expenditure for natural and cultural heritage. Using the ISIC Rev. 4 classification, total heritage expenditure covers expenditures (public and private) for library and archives activities, museum activities and operation of historical sites and buildings as well resources invested in botanical and zoological gardens and nature reserve activities.  **Operating expenditure** refers to expenditure incurred in realization of day-to-day activities. Operating expenditure includes following expenditures: salaries, wages and benefits (gross amount), professional and business services fees, subcontract expenses, cost of goods sold, office supplies, rental and leasing, repair and maintenance, travel expenses, insurance, advertising, marketing and promotion, insurance, utilities and telecommunication expenses, property and business taxes, royalties, postage and courier services, financial services fees and other business expenses. Operating expenses exclude write-offs, capital losses, extraordinary losses, interest on borrowing, amortization and other non-recurring items. Operating expenses can be calculated indirectly as a total current expenditure of heritage institutions minus write-offs, capital losses, extraordinary losses, interest on borrowing, and other non-recurring items.  **Capital expenditure** measures the value of purchases of fixed assets, i.e. those assets that are used repeatedly in production processes for more than a year. The value is at full cost price (OECD, 2004). It refers to the investment of money in physical assets such us property, building and equipment. Capital expenditure can be in the form of gross capital investment and net capital investment. Gross capital investment refers to net investment at the end of year + depreciation at the end of year. Net capital investment refers to net money invested in physical assets at end of year.  **Comments and limitations**  1) In general, the availability of public expenditure data for heritage varies between countries.  2) In general, the availability of private expenditure data for heritage is significantly lower so that it will take several years, capacity building, and financial investment in order to increase coverage to an acceptable level.  This indicator comprises public and private monetary investments in heritage. It does not measure non-monetary factors such as national regulations or national/local policies for the preservation, protection and conservation of national cultural and/or natural heritage including World Heritage. These policies could take the form of fiscal incentives such as tax benefits for donations or sponsorships.  International definitions and concepts that will support the harmonization of the data and indicators for cultural and natural heritage will be defined according to the 2009 UNESCO Framework for cultural statistics.  The use of existing international classifications such as the Classification of the Function of the Government (COFOG) could be used.  Methodology    **Computation method**  The indicator is calculated by dividing total public funding in heritage (i.e. including transfers paid but excluding transfers received) from government (central, regional, local) and the total of private funding from households, other private sources such as donations, sponsorships or international sources in a given year by the number of inhabitants and by the PPP$ conversion factor.  HCExp per capita  HCExp per capita = Expenditure per inhabitant in heritage in constant PPP$  HC Exp = Expenditure on Preservation, Protection and Conservation of all cultural and/or natural heritage  *Exppu*= Sum of public expenditure by all levels of government on the preservation, protection and conservation of cultural and/or natural heritage  *Exppr* = Sum of all types of private expenditure on the preservation, protection and conservation of cultural and/or natural heritage  PPPf: Purchase Power Parity= PPP Constant $ conversion factor | Global data collection has not taken place yet. The first global data collection will be launched in May 2019 and thereafter on an annual basis. | National Statistical Offices: Focal point | MoCA  Administrative Data | a) FD  b) MoCA  c) MoEFCC  Administrative Data | * Type of Heritage * Level of Government * Type of Expenditure * Type of Private Funding | Annual | Group 1 | 1st Round:  2016  2nd Round:  December 2020  3rd Round:  December 2021  4th Round:  December 2022  5th Round:  December 2023 | Reviewed at Nov./Dec. 2019 WebEx meeting (classified as Tier II) |
| Target 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations | | | | | | | | | | | | |
| 11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population | UNDRR  **Partner Agencies:**  UN-Habitat,  UNEP | Tier II | Definition:  This indicator measures the number of people who died, went missing or were directly affected by disasters per 100,000 population.  Concepts:  Death: The number of people who died during the disaster, or directly after, as a direct result of the hazardous event.  **Missing:** The number of people whose whereabouts is unknown since the hazardous event. Itincludes people who are presumed dead, for whom there is no physical evidence such as a body, and for which an official/legal report has been filed with competent authorities.  **Directly affected:** The number of people who have suffered injury, illness or other health effects; who were evacuated, displaced, relocated or have suffered direct damage to their livelihoods, economic, physical, social, cultural and environmental assets. Indirectly affected are people who have suffered consequences, other than or in addition to direct effects, over time, due to disruption or changes in economy, critical infrastructure, basic services, commerce or work, or social, health and psychological consequences.  **Computation Method:**  This indicator, *X*, is calculated as a simple summation of related indicators (death, missing people, and affected people) from national disaster loss databases divided by the global population data (from national censuses, World Bank or UN Statistical Commission information).  Where:  A2  Number of deaths attributed to disasters;  A3 Number of missing persons attributed to disasters; and  B1 Number of directly affected people attributed to disasters.  \* Detailed methodologies can be found in the Technical Guidance (see below the Reference section)  **Comments and limitations:**  The Sendai Framework Monitoring System has been developed to measure the progress in the implementation of the Sendai Framework by UNGA endorsed indicators. Member States will be able to report through the System from March 2018. The data for SDG indicators will be compiled and reported by UNISDR. | Data provider at national level is appointed Sendai Framework Focal Points.  The Sendai Framework Focal Points in each country are responsible of data reporting through the Sendai Framework Monitoring System. | National disaster management agencies, civil protection agencies, and meteorological agencies. | BDRHS  Administrative Record | BBS, BDRHS, SID  DDM, MoDMR  Administrative Record | * Income: High/Medium/Low * Event (as occurred) * Hazard Type * Hazard Family: Climatological, Hydrological, Meteorological, Geophysical, Biological, Extra-Terrestrial * Disaster-Related Victims: Dead, Missed, Directly Affected * Location Of Residence * Age: * Sex: Male/Female | 5-Yearly  Annual | Group 1 | 1st Round:  2014  2nd Round:  December 2020  3rd Round:  December 2025  4th Round:  December 2030 | Survey will be conducted in 2020  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as Tier II)  1.5.1/13.1.1 are repeated |
| 11.5.2 Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters | UNDRR  **Partner Agencies:**  UNEP | Tier II | Definition:  Direct economic loss: the monetary value of total or partial destruction of physical assets existing in the affected area. Direct economic loss is nearly equivalent to physical damage.  [a] An open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction established by the General Assembly (resolution 69/284) is developing a set of indicators to measure global progress in the implementation of the Sendai Framework. These indicators will eventually reflect the agreements on the Sendai Framework indicators.  Comments and limitations:  Not every country has a comparable national disaster loss database that is consistent with these guidelines (although current coverage exceeds 89 countries). Therefore, by 2020, it is expected that all countries will build/adjust national disaster loss databases according to the recommendations and guidelines by the OEIWG.  Computation Method:  Note: Computation methodology for several indicators is very comprehensive, very long (about 180 pages) and probably out of the scope of this Metadata. UNISDR prefers to refer to the outcome of the Open Ended Intergovernmental Working Group, which provides a full detailed methodology for each indicator and sub-indicator.  The latest version of these methodologies can be obtained at:  http://www.preventionweb.net/documents/oiewg/Technical%20Collection%20of%20Concept%20Notes%20on%20Indicators.pdf  A short summary:  The original national disaster loss databases usually register physical damage value (housing unit loss, infrastructure loss etc.), which needs conversion to monetary value according to the UNISDR methodology\*. The converted global value is divided by global GDP (inflation adjusted, constant USD) calculated from the World Bank Development Indicators. | The official counterpart(s) at the country level will build/adjust national disaster loss databases according to the recommendations and guidelines by the OEIWG. | In most countries national disaster loss databases are established and managed by special purpose agencies including national disaster management agencies, civil protection agencies, and meteorological agencies, and disaster data collected by line ministries. Some exceptions include Academic institutions conducting long term research programs, NGO's engaged in DRR and DRM, and insurance databases or data sources when market penetration is very high. | BBS  BDRHS | a.BBS  BDRHS  b.DDM, MoDMR | * Event (as occurred) * hazard type: climatological, hydrological, meteorological, geophysical, biological, extra-terrestrial * asset loss category: health, education, road * transportation mode * service sector | 5-yearly | Group 1 | 1st Round:  2015  2nd Round:  December 2020  3rd Round:  December 2025  4th Round:  December 2030 | Data availability reviewed in Nov. 2018 (classified as Tier II)  Data availability reviewed in Nov. 2017 (classified as Tier I)  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as Tier II) |
| Target 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management | | | | | | | | | | | | |
| 11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities | UN-Habitat,  UNSD  **Partner Agencies:**  UNEP | Tier II | Definition:  Proportion of municipal solid waste regularly collected and with adequate treatment and disposal out of total municipal solid waste generated.    The goal of this indicator aims to generate the proportion of municipal solid waste regularly collected and that is adequately treated and disposed out of all the total municipal waste generated by the city.  Concepts:  It will be necessary to define the following components to compute the proportion of municipal solid waste regularly collected with adequate treatment and disposal out of all the total municipal solid waste generated by the city.  Municipal Solid Waste is waste generated by households, and waste of a similar nature generated by commercial and business establishments, industrial and agricultural premises, institutions such as schools and hospitals, public spaces such as parks and streets and construction sites. Generally, it is non-hazardous wastes composed of food waste, garden waste, paper and cardboard, wood, textiles, nappies (disposable diapers), rubber and leather, plastics, metal, glass, and refuse such as ash, dirt and dust. Sewage sludge and faecal sludge is also included in the category of municipal solid waste but it excludes wastewater. This will be the monitoring scope of the indicator.  Regularly Collected Municipal Solid Waste refers to municipal solid waste that is routinely collected from specific addresses or designated collection points. Waste collection is conducted directly by municipal authorities or private contractors licensed/commissioned by municipal authorities with a regular schedule of the day of the week and time of collection. In some cases, private waste collection companies have contracts with clients individually and provide collection services.  Uncollected Municipal Solid Waste refers to waste generated in a city but uncollected due to the lack of collection services. In many cities informal settlements areas do not have access to this basic service. The amount of uncollected waste can be estimated by waste generation per capita in the city multiplied by the population who does not have access to the solid waste collection service.  Total Municipal Solid Waste Generated by the City is sum of municipal solid waste, or the sum of regularly collected municipal solid waste and uncollected municipal solid waste.  Municipal Solid Waste with Adequate Final Treatment and Disposal refers to the total municipal solid waste destined for treatment or disposal facilities that at least reached an intermediate level of control. The level of adequacy for a particular facility can be assessed using the qualitative criteria including 1) degree of control over waste reception and general site management; 2) degree of control over waste treatment and disposal and 3) degree of monitoring and verification of environmental control. A score of at least 10 on each criterion is the threshold required to be considered as ‘adequate final treatment and disposal’.  Comments and limitations:  Collection of data for the indicator is not infeasible but it will require training and capacity development. The data on total municipal solid waste generation is globally available although the precision of data is disputable. In general, developed countries have solid waste data collection systems but most of the middle and low income countries do not have data. In these countries and cities, household survey and other complimentary surveys can be conducted for the estimation of municipal waste generation per capita. However, one of the key challenges of data precision in the middle to low income countries is the lack of accurate population data in their jurisdiction, particularly regarding slums, where usually no waste collection service is taking place. Also the collection of the data, such as the amount of waste adequately treated and disposed, will be a challenge for many of national and local governments. The judgement on the adequacy of treatment and disposal of all the waste management facilities, including composting, recycling, incineration facilities in a city, requires high level of technical capacity and large investment in human resources.  Considering the various situations on waste data availability in different countries, it would be better to have different methods to collect data from countries. For OECD or developed countries that already have data, distributing and collecting questionnaire to national officials from responsible ministries such as ministry of environment or urban development would be sufficient to collect legitimate data. For middle to low income countries without legitimate data, baseline survey by waste management professionals together with monitoring capacity development will be necessary.  Computation Method:  The numerator of this indicator is ‘municipal solid waste regularly collected with adequate final treatment and disposal’ and the denominator is ‘total municipal solid waste generated by the city’.  Multiplication of the municipal solid waste generation per capita and population of the city can estimate total municipal solid waste generated by the city. When the municipal solid waste generation per capita is not available, household survey for a daily waste generation in household and other premises (e.g. restaurants, hotels, hospitals, schools, etc.) should be conducted. Since the waste generation can differ according to the seasons, the survey should be conducted at least two times a year to estimate the municipal solid waste generation per capita.  Municipal solid waste regularly collected with adequate final treatment and disposal is estimated through qualitative judgement of the degree of environmental control of facilities where the city’s municipal waste is collected and transported. The judgement of environmental control can be conducted in line with the criteria below. Another important thing is to deduct residue amount from treatment facilities to avoid double count.   |  |  |  |  | | --- | --- | --- | --- | | (1) Degree of control over waste reception and handling at each site. This criterion should be applied to all treatment and disposal sites, whatever the specific process being used. | Factors affecting the assessment include:  Vehicular access to the site (high level of control: hard surfaced access roads of adequate width and load-bearing capacity, kept clean and free of mud)  Traffic management (high level of control: any queues for site access kept short in time and contained within the site; little impact of traffic on neighbours).  Site security (high level of control: site fenced; no unauthorised site access; gates locked when site closed).  Waste reception and record keeping (high level of control: reception office; staffed during all opening hours; all vehicles logged and loads checked; weighbridge installed and all weights logged). Note that the procedures for monitoring the records thus collected are assessed under (3).  Waste unloading (high level of control: waste directed to a designated area; unloading supervised by site staff).  Control over nuisance (high level of control: successful control of windblown litter, flies, vermin, birds and of ‘mud’ leaving the site on vehicle tyres)  Control of fires (high level of control: no routine burning of wastes; no ‘wild’ fires; active fire prevention and emergency response systems in place in case of accidental fire) | | | | a. No control  b. Low level of control  c. Medium level of control  d. Medium/High level of control  e. High level of control | | 0 is scored  5  10  15  20 | | (2) Degree of control over both the waste treatment and disposal process in use at each site and over any potential emissions.  This criterion covers both the presence of the necessary technologies, and the operating procedures for their proper use. | The nature of controls required will depend on both the process employed and on the potential emissions. As an example, the table below provides guidance on how the general principles can be applied to land disposal and thermal treatment (using the specific example of mass-burn incineration).  For biological treatment, the detail will vary with the type of process (e.g. windrow composting, in-vessel composting, anaerobic digestion). However, in all cases a ‘high level’ of control would imply a high degree of control over: the incoming waste (to avoid hazardous waste or contrary materials); processing temperature to ensure pathogen destruction; retention time in the process; mixing in the process (including turning of windrows); atmospheric emissions including odours and bio aerosols; and leachate collection and treatment.  Similar principles can be applied to other facilities, including mechanical-biological treatment (MBT) plants, advanced thermal treatment and new technologies for valorisation of organic waste in developing countries. In each case, the user may use the following scoring tables as a ‘best judgment’ guideline for scoring.  Where a fuel is being made from waste to be burnt elsewhere, then the assessment should include the process and emission controls at the user facilities. | | | | (3) Degree of monitoring and verification of environmental controls (Includes the existence and regular implementation of: robust environmental permitting/ licensing procedures; regular record keeping, monitoring and verification carried out by the facility itself; AND monitoring, inspection and verification by an independent regulatory body) | The environmental monitoring programme and process control record keeping required will be specific to the type of facility.  All sites must comply with the federal/national/local environmental legislation, have conducted an Environmental Impact Assessment (EIA) where necessary, have obtained the most recent permit/license and kept it up-to-date.  Permitting processes should be supportive of initiatives that improve environmental performance of the system. A lower score should be assigned if permitting processes for improved facilities have been unduly long and complex, while existing facilities continued to operate with much lower levels of (or no) environmental control.  For all sites it should include incoming waste volumes, weights and categories; at least occasional monitoring of waste composition and relevant properties; control of ‘nuisance’ (including windblown litter, flies, vermin, birds and ‘mud’ leaving the site on vehicle tyres); and control of odour, site fires, and emission of potential greenhouse gases (particularly methane and nitrous oxides, as well as carbon dioxide).  For all land disposal: ground and surface water.  For engineered and sanitary landfills: leachate and landfill gas management.  For thermal treatment: moisture content and calorific value of incoming wastes; temperature, residence time, emissions to air (including those of nitrogen oxides (NO), sulphur dioxide (SO2), hydrogen chloride (HCl), heavy metals and dioxins), effluent treatment and disposal, and the quantities and management methods of both fly ash and bottom ash.  For biological treatment: input waste controls (to protect both the process and the product quality); process control (temperature, residence time, mixing); product quality control; emissions controls; and greenhouse gas controls (particularly methane and nitrous oxides). | | | | No compliance  Low compliance  Medium Compliance  Medium/High compliance  High compliance | 0 is scored  5  10  15  20 | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | **Level of Control** | **Score** | **Land disposal** | **Thermal treatment** | | a. | None | 0 | Uncontrolled dumping–no controls | Uncontrolled burning lacking most ‘control’ functions | | b. | Low (Semi-controlled facility) | 5 | Site staffed; waste placed in designated area; some site equipment | Site staffed; some containment and management of combustion process; basic operating procedures to control nuisance | | c. | Medium (Controlled facility) | 10 | Waste compacted using site equipment; waste covered (at least irregularly) | Emission controls to capture particulates; trained staff follow set operating procedures; equipment properly maintained; ash properly managed | | d. | Medium/high (Engineered facility) | 15 | Engineered landfill site: use daily cover material; some level of leachate containment and treatment; collection of landfill gas | High levels of engineering and process control over residence time, turbulence and temperature; emission controls to capture acid gases and capture dioxins; active management of fly ash. | | e. | High (State-of-the-art facility) | 20 | Fully functional sanitary landfill site: properly sited and designed; leachate containment (naturally consolidated clay on the site or constructed liner); leachate & gas collection; gas flaring and/or utilization; final cover; post closure plan | Built to and operating in compliance with international best practice including e.g. EU or other similarly stringent stack and GHG emission criteria Fly ash managed as a hazardous waste using best appropriate technology. |   All the treatment and disposal facilities that receive municipal solid waste of the city are checked against the criteria above and scored. Facilities that are scored above 10 for all the criteria are accounted as facilities that can deliver ‘adequate treatment and disposal’. Therefore, the amount of municipal solid waste received by the facilities that has capacity of delivering ‘adequate treatment and disposal’ is accounted as the amount of Municipal solid waste regularly collected with adequate final treatment and disposal. | National level estimates and reporting will be done by the national governments/statistical agencies. UN-Habitat and other partners will lead the reporting at the regional and global levels. | UN-Habitat |  | LGD (City Corporations/Municipalities)  Administrative Data | * type of final treatment and disposal * source of waste generation: residential, industrial, office * location: cities, towns (intra-urban) | Annual | Group 1 | 1st Round:  January 2019  2nd Round:  Dcember 2020  3rd Round:  Dcember 2021  4th Round:  Dcember 2022  5th Round:  Dcember 2023 | UNSC 51 revision included in the 2020 comprehensive review |
| 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted) | WHO  **Partner Agencies:**  UN-Habitat,  UNEP,  OECD | Tier I | Definition:  The mean annual concentration of fine suspended particles of less than 2.5 microns in diameters (PM2.5) is a common measure of air pollution. The mean is a population-weighted average for urban population in a country, and is expressed in micrograms per cubic meter [g/m3].  Comments and limitations:  Urban/rural data: while the data quality available for urban/rural population is generally good for high-income countries, it can be relatively poor for some low- and middle income areas. Furthermore, the definition of urban/rural may greatly vary by country.  Computation Method:  The annual urban mean concentration of PM2.5 is estimated with improved modelling using data integration from satellite remote sensing, population estimates, topography and ground measurements (WHO, 2016a; Shaddick et al, 2016) | Sources of data include ground measurements from monitoring networks, collected for 3,000 cities and localities (WHO 2016) around the world, satellite remote sensing, population estimates, topography, information on local monitoring networks and measures of specific contributors of air pollution (WHO, 2016b) | Ministry of Health, Ministry of the Environment | WHO | a.DoE, MoEFCC  b. WHO  Administrative Data/Survey | * grid size: 0.1° x 0.1° * level of fine particulate matter: PM2.5 | Annual | Group 1 | 1st Round:  2016  2nd Round:  June, 2020  3rd Round:  June, 2021  4th Round:  June, 2022  5th Round:  June, 2023 |  |
|  | Target 11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities | | | | | | | | | |  | |
| 11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities | UN-Habitat | Tier II | **Definition and concepts:**  Indicator 11.7.1 has several interesting concepts that required global consultations and consensus. These include; built-up area, cities, open spaces for public use, etc. As a custodian agency, UN-Habitat has worked on these concepts along with several other partners.  City: A range of accepted definitions of the “city” exist, from those based on population data and extent of the built-up area to those that are based solely on administrative boundaries. These definitions vary within and between nations, complicating the task of international reporting for the SDGs. As partners, UN-Habitat organized global consultations and discussions to narrow down the set of meaningful definitions that would be helpful for the global monitoring and reporting process. The global consultations narrowed down to two city definitions, both emanating from joint work conducted by teams from New York University and European Commission-Joint Research Centre. These are available elsewhere with full documentation of the pros and cons for each. For this indicator, partners resolved to work with the City as defined by its Urban extent (built-up and urbanized open space).  City as defined by its Urban extent (built-up and urbanized open space)  The definition of urban extent described in this note was developed to facilitate the study of a global sample of 200 cities in the production of the Atlas of Urban Expansion: 2016 Edition. It relies on the analysis of satellite imagery to define the boundary of the city morphologically – based on the density of structures, not on the density of population, which we know to be highly variable in different contexts. It supposes that non-residential zones should be thought of as part of the city, along with open spaces such as parks and small amounts of undeveloped land, in addition to residential areas that report populations for the census.  Urban extent is defined as the total area occupied by the built-up area and the urbanized open space. The built-up area is defined as the contiguous area occupied by buildings and other impervious surfaces.  Landsat imagery[[16]](#footnote-17) is used to identify and classify the built-up pixels into 3 types depending on the share of built-up density (urban-ness) in a 1-km2 circle of a given building (walking distance radius of about 564 meters around a given building):  Urban built-up area: pixels where the walking distance circle has a built-up density greater than 50%.  Suburban built-up area: pixels where the walking distance circle has a built-up density between 25%-50%. It also includes subdivided land, whether it is wholly unbuilt or not.  Rural built-up area: pixels where the walking distance circle has a built-up density of less than 25% and that are not on subdivided land.  The urbanized open space (mainly refers to unbuilt areas including open countryside, forests, crop fields, parks, unbuilt urban areas, cleared land) is classified into 3 types:  Fringe open space consists of all open space pixels within 100 meters of urban or suburban pixels;  Captured open space consists of all open space clusters that are fully surrounded by urban and suburban built-up pixels and the fringe open space pixels around them, and that are less than 200 hectares in area; and  Rural open space consists of all open spaces that are not fringe or captured open spaces.  The fringe open space and captured open space together make up the urbanized open space in a given study area. In other words, the urban extent consists of all the buildings and the small open space areas (<200 ha) that are surrounded by buildings and the open space fringe that is within 100 meters of urban and suburban areas (i.e. where built up area is more than 25%).  Public space: The Global Public Space toolkit defines Public Space as all places that are publicly owned or of public use, accessible and enjoyable by all, free and without a profit motive, categorized into streets, open spaces and public facilities.  For the purpose of monitoring and reporting on indicator 11.7.1, public space is defined as all places of public use, accessible by all, and comprises open public space and streets. Public space in general is defined as the meeting or gathering places that exist outside the home and workplace that are generally accessible by members of the public, and which foster resident interaction and opportunities for contact and proximity. This definition implies a higher level of community interaction and places a focus on public involvement rather than public ownership or stewardship. For measurement of indicator 11.7.1, the elements which can be considered as open public space include:  Parks: Open space inside an urban territory that provide free air recreation and contact with nature. Their principal characteristic is the significant proportion of green area.  Recreational areas: public areas that contribute to environmental preservation. Their main functions can be both ornamental and passive recreation. These include areas such as playgrounds, riverfronts, waterfronts, public beaches, etc.  Civic parks: Open space created because of building agglomeration around an open area, which was later transformed into a representative civic area. They are characterized by considerable nature, specifically gardens and a good place for cultural events and passive recreation.  Squares and Plazas: Open spaces created because of building agglomeration around an open area. Its main characteristics are the significant architectonic elements and interaction between buildings and the open area. Squares are usually public spaces relevant to the city due to their location, territorial development, or cultural importance.  Streets are defined thoroughfares that are based inside towns, cities and neighbourhoods most commonly lined with houses or buildings used by pedestrians or vehicles in order to go from one place to another in the city, interact and to earn a livelihood. The main purpose of a street is facilitating movement and enabling public interaction. The following elements are considered as streets space: Streets, avenues and boulevards, pavements, passages and galleries, Bicycle paths, sidewalks, traffic island, tramways and roundabouts. Elements excluded from street space include plots (either built-up), open space blocks, railways, paved space within parking lots and airports and individual industries.  Land allocated to streets: refers to the total area of urban surface that is occupied by all forms of streets (as defined above). This indicator only includes streets available at the time of data collection and excludes proposed networks.  **Comments and limitations:**  A major challenge for local monitoring of this indicator is the maintenance and the application/consistency of use of universal definition, which broadly does not consider existing operational/functional administrative demarcations. While urbanization has over the past decade resulted in big urbanized patches/regions which extend beyond existing urban area boundaries, the local operationalization and management of urban systems remain within defined authorities. These authorities are often in charge of governing the urban systems, ensuring effective and efficient functioning through such actions as provision of basic services, development control among others. While some countries have adopted dynamic administrative structures for their urban areas (which shift with expansions in built-up areas), others have maintained confined boundaries. Some of the most common types of boundaries include city, municipality, local authority, metropolitan, mega and meta region demarcations; all of which are set and defined based on prevailing operational dynamics (e.g. governance and service delivery structures).  UN-Habitat has developed tools, programmes and guidelines to assist cities in measuring, and accounting for the available public space in cities. Some cities in the developing world lack formally recognized public spaces, that are publicly maintained. Understanding of the prevailing local contexts and primary data collection in collaboration with city authorities and local communities contribute significantly to collecting accurate and relevant data in these contexts.  Similarly, the types of open public space vary across cities. The types of spaces listed in this indicator are however the most common and accepted variations of the open public space. Data collection processes using the methodology described in this metadata, which has been conducted by UN-Habitat in partnership with cities, as well as by other partners has revealed that there are no major overlaps or omissions in the described broad categories of open public spaces.  Beyond quantifying the amount of open space in public use in cities, this indicator also attempts in minimal ways to capture the quality of the space that may impede its proper use. The qualitative data collected on this indicator strengthens the evidence that an open space exists, and that its public use is guaranteed, to allow city authorities and other stakeholders to further improve its quality and increase its use.  **Computation Method:**  The method to estimate the area of public space has been globally piloted in over 250 cities and this follows a series of methodological developments that go back to the last 7 years. The finalized methodology is a three-step process:  Spatial analysis to delimit the built-up area of the city;  Spatial analysis to identify potential open public spaces, field work to validate data and access the quality of spaces and calculation of the total area occupied by the verified open public spaces;  Estimation of the total area allocated to streets;  Spatial analysis to delimit the built-up area  Built-up areas are a true reflection of multiple (urban) activities, and the presence of populations; with higher built-up density often reflecting higher activity/population concentrations. To monitor and report on indicator 11.7.1, the main focus is on the built-up area defined as the contiguous area occupied by buildings and other impervious surfaces. To delimit the area of analysis for the indicator, follow these steps:  Identify the study area – this can be all cities in a country or a representative sample of cities  Download freely available LANDSAT imagery for the analysis year. Aim for imagery with low cloud cover. Alternative high resolution imagery from other sources can also be used.  Classify LANDSAT imagery into built-up, non-built-up, and water using a GIS or image processing software.  Assess the level of urban-ness for each of the resultant built-up pixels - This can be achieved through spatial statistics in GIS and/or image processing software. Place a 1-km2 circle around each built-up pixel and calculate the share of pixels in the circle that are also built-up. If >=50% of the pixels in the circle are built-up, the pixel is classified as Urban. If >=25% and <50% of the pixels in the circle are built-up, the pixel is classified as Suburban. If <25% of the pixels in the circle are built-up, the pixel is classified as Rural.  Combine contiguous urban and suburban pixels to form an urban cluster of the built-up area.  Spatial analysis to identify potential open public spaces, ground verification and estimate their total area  This step involves mapping of potential open public spaces within the urban boundaries defined in step one above and estimation of their area. Identification of potential open public spaces is based on the spatial character of each space, and is also informed by existing country/ city land use maps and open space inventories. To compute this component of the indicator, follow these steps:  An inventory of Open Public Spaces should be the initial source of information. Additional legal documents, land use plans and other official sources of information can be used to complement the data from the inventory.  Since many cities and countries do not have an open public spaces inventory, satellite imagery can be used to identify potential open public spaces. The identification of such spaces from imagery should be based on careful evaluation of the character of each space against the known forms of open public spaces within that city / country  Digitize the identified potential open public spaces.  Undertake field work to verify the identified spaces and assess their quality. UN-Habitat, in consultation with partners, experts and data producers have developed a detailed tool to facilitate the verification of each space and collection of additional data on the space quality and accessibility. This tool is freely available and allows for on-site definition/ editing of the space’s boundaries. It also contains standard and extended questions which collect data relevant to the indicator, including location of the spaces, their ownership and management, safety, inclusivity and accessibility. This data provides basic information about each space, as well as information relevant for disaggregation - such as access issues linked to age, gender and disabilities, as requested for by the indicator. The tool is dynamic and allows cities to include extra questions which generate information that is useful for their decision making (Tool is available at https://ee.kobotoolbox.org/x/#IGFf6ubq).  Calculate the total area covered by the verified open public spaces.  Computation of land allocated to streets (LAS)  Where street data by width and length fields is available/specified, the following methodology could be used:  Select only the streets included in the urban extent (or clip streets to the working city boundary)  From GIS (or alternative software), calculate the total area occupied by each street by multiplying its length with width. Add up all individual street areas to attain the total amount of land occupied all streets within the defined urban area.  An alternative technique for computing land allocated to the streets is one that adopts sampling principles. An approach that uses the Halton sampling sequence is recommended, specifically because the sequence generates equidistant points, increasing the degree of sample representativeness. To compute LAS using this method, follow the following steps:  Using the urban extent boundary identified earlier, generate a Halton sequence of sample points (Halton sequence refers to quasi-random sequence used to generate points in space that are ex-post evenly spread i.e. Equidistant). The number of points used for each city varies based on its area. In large study areas of more than 20 km2, a density of one circle per hectare is used while in small study areas of less than 20 km2 a density of 0.5 circle per hectare is used.  Buffer the points to get sample areas with an area of 10 hectares each.  Within each 10 hectare sample area, digitize all streets in GIS software and compute the total amount of land they occupy.  Calculate the average land allocated to streets for all sample areas using the following formula:  The land allocated to streets =  The final computation of the indicator is done using the formula: | Satellite imagery (open sources), documentation outlining publicly owned land and community-based maps | UN-Habitat |  | a) UDD, MoHPW  b) Development Authorities, i.e. RAJUK, CDA, KDA, etc  Administrative Data | * sex: male/female * age : 0-15, 15-24, 25-64, 65 and above yrs * disability: Disable/ Non Disable | Annual | Group 2 | 1st Round:  December 2020  2nd Round:  December 2021  3rd Round:  December 2022  4th Round:  December 2023  5th Round:  December 2024 | Reviewed at 8th IAEG-SDG meeting (classified as Tier II)  Reviewed at Webex meeting in Nov. 2017 following 6th IAEG-SDG meeting: Request additional work on definition of cities and methodology as well as additional pilot studies  Fast Track; Reviewed at 5th IAEG-SDG meeting: Request finalised methodology development and results of pilot studies  IAEG-SDG 3rd meeting: There is no established methodology for the indicator (classified as TBD) |
| 11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months | UNODC  **Partner Agencies:**  UN Women,  UN-Habitat | Tier II | **Definition:**  Number of persons who have been victims of physical harassment and/or sexual harassment, as a percentage of the total population of the relevant area.  **Concepts:**  On the basis of the International Classification of Crime for Statistical Purposes (ICCS), an operational definition of physical and sexual harassment was developed. While sexual harassment refers to behaviour with a sexual connotation that is suitable to intimidate their victims, physical harassment refers to all other harassing behaviours that can cause fear for physical integrity and/or emotional distress. For use in a survey, it is necessary to further operationalize the concept and to identify more precisely the set of behaviours and their circumstances to be considered as harassment. On the basis of past surveys, expert discussions and with the inputs from the network of UN-CTS National Focal Points[[17]](#footnote-18), a set of pertinent behaviours was identified and formulated for testing in a pilot survey module. The first tests of the survey module were carried out in 2019 in Nigeria and Saint Lucia and the revised survey module was included in a large representative household survey in Nigeria (sample 33,000 interviews) in June 2019, conducted by the National Bureau of Statistics of Nigeria. The module will also be included in a 2019 pilot survey conducted by the National Statistical Office of Mexico (INEGI) and in a full household survey in Saint Lucia in 2019.  While the precise formulation and wording of the pertinent survey questions may need national customization, a core set of behaviours have been identified as forms of harassment exercised towards a person (see Annex A of the Methodology Development Narrative).  **Comments and limitations:**  Like other experience-based indicators on victimization, the indicator reflects the experience from the perspective of the victim. As such, the response provided by the victims reflects their experience as well as their subjective feeling of victimization, irrespective of whether actual harm was intended or not. The subjective feeling of victimization is an important component of safety and security across space and time (for example, in cities or in the domestic sphere) and a higher prevalence of experienced physical or sexual harassment indicates a negative environment that warrants appropriate responses and interventions.  Like other survey-based indicators, the scope of the indicator also relies on the design and sampling strategy of the survey. For example, most surveys set a low age-limit for practical and ethical reasons (e.g. 18 years and older), which means that data are representative for youth under 18 years.[[18]](#footnote-19) Harassment specifically linked to disability requires relatively large sample sizes in order to obtain a sufficiently large number of disabled persons in the sample.  The same behaviour can have different meanings and therefore have a different impact across cultural contexts and population groups. For this reason, the selection of ‘harassment’ behaviours has been made also with the view of identifying situations of harassment that can be perceived as such across different social and cultural contexts.  **Computation Method:**  Number of persons who experienced a form of physical harassment and/or sexual harassment, divided by the total population. The result would be multiplied by 100.  This is a survey-based indicator that measures the experience of any of a set of behaviours that are collectively referred to as physical harassment and sexual harassment. Questions on physical and sexual harassment are to be measured separately. The results can then be combined. Both numerator and denominator are measured through sample surveys of the general population.  The computation of this indicator requires the inclusion of a short module of eight questions in a representative population survey. The following table illustrates the content of the questions needed to compute the indicator.   |  |  | | --- | --- | | **Content of question** | **Instruction** | | 1. Experience of sexual harassment in the past three years, by type of harassment | If no sexual harassment was experienced, skip to 5, otherwise go to 2. | | 1. Most recent type of harassment experienced | Continue with 3. | | 1. Time period of last harassment | Continue with 4. | | 1. Place of last harassment, by type of location | Go to 5. | | 1. Experience of physical harassment in the past three years, by type of harassment | If no physical harassment was experienced, skip to END, otherwise go to 6. | | 1. Most recent type of harassment experienced | Continue with 7. | | 1. Time period of last harassment | Continue with 8. | | 1. Place of last harassment, by type of location | Go to END. |   Based on the responses to questions, the following indicators can be computed:  Prevalence rate of sexual harassment: Number of persons who experienced at least one form of sexual harassment, divided by the total population. The result would be multiplied by 100.  Prevalence rate of physical harassment: Number of persons who experienced at least one form of physical harassment, divided by the total population. The result would be multiplied by 100.  Prevalence rate of physical or sexual harassment (SDG indicator 11.7.2): Number of persons who experienced either a form of sexual harassment or a form of physical harassment, divided by the total population. The result would be multiplied by 100. | Household survey | National Statistical Offices (NSOs | VAWS, BBS | BBS  GBVS | * Sex: male/female * Age: 0-15, 15-24, 25-64, 65 and above years * Place of occurrence * Disability: Disable/ Non Disable | Triennial | Group 1 | -  1st Round:  June, 2021  2nd Round:  June, 2024  3rd Round:  June, 2027  4th Round:  June, 2030 | Reviewed at 10th IAEG-SDG meeting  (classified as Tier II) |
|  | Target 11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning | | | | | | | | | | | |
| 11.a.1 Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space | UN-Habitat  **Partner Agencies:**  UNFPA | TBD | Definition and concepts:  ***National Urban Policies and regional development plans:***  A National Urban Policy (NUP) is defined by UN-Habitat as a coherent set of decisions derived through a deliberate government led process of coordinating and rallying various actors for a common vision and goal that will promote more transformative, productive, inclusive, and resilient urban development for the long term.  This standard definition will be extended and adapted to country contexts and may include, where applicable terms such as National Urban *Plan*, *Framework*, or *Strategy*… as long as they are aligned with the above qualifiers. Similarly, regional development plans follow the same definition, only applied at the subnational level.    ***NUP that responds to population dynamics:***  This first qualifier examines to what extent the NUP addresses issues to do with population composition, trends and projections in achieving development goals and targets.   * *Population composition* includes size, geographic distribution and density, household size and composition, mobility and migration, age and sex distribution and disaggregation, as specified in SDG target 17.18 * *Trends* are changes in composition of the population from over time * *Projections* are expected changes over time that the NUP needs to ensure that they are well addressed.     Key questions for the assessment:   * To what extent are quality and timely data on urban and rural population composition, trends and projections available for use in the development, implementation and monitoring of NUPs or RDPs? * To what extent do the NUP and/or RDPs use or refer to population composition, trends and projections to set goals and targets over the timeframe of the plan?     ***Ensure balanced territorial development:***  This second qualifier entails the promotion of a spatially coherent territory that includes a balanced system of human settlements including cities and towns and including urban corridors; that addresses social, economic, environmental and spatial disparities particularly considering the urban-rural continuum.    Key questions for the assessment:   * To what extent does the national urban policy take into account the need for balanced development of the territory as a whole including the equal development of all types of settlements including villages, cities and towns, including urban corridors? * To what extent are the linkages – social, economic, environmental and spatial – between urban, peri-urban and rural areas take into account with the ultimate goal of strengthening the urban-rural continuum?     ***Increase local fiscal space:***  Local fiscal space is understood as the sum of financial resources available for improved delivery of basic social and economic services at the local level as a result of the budget and related decisions by governments at all levels without any prejudice to the sustainability of a government’s financial position.    Key questions for the assessment:   * To what extent has the policy made allowance for the provision of local financial resources to provide for the implementation of the policy and for the delivery of essential basic social and economic services * To what extent has the policy assessed the status of human capacities required to effectively use financial resources for the implementation of the policy and the delivery of essential basic social and economic services?     ***Developing:***  Developing refers to the policy development phases that consider the feasibility, diagnosis of policy problems and opportunities, the formulation/drafting of the policy until the approval of the policy    ***Implementing:***  Implementation refers to the realization of the policy proposal through legislative or financial action/commitments, including the continued monitoring and evaluation of that policy    Method of computation:  The methodology uses a policy evaluation framework that assesses and tracks progress on the extent to which country level national urban policy or regional development plans are being developed or implemented to cover or satisfy the following criteria:   * 1. Responds to population dynamics   2. Ensures balanced regional and territorial development   3. Increases local fiscal space     Essentially, countries that already have NUP and regional development plans, the NUPs are examined for their consistency in covering the 3 above qualifiers. While for countries that do not have NUP or are currently developing NUP, these are noted and documented as steps towards developing a NUP. Such countries are counted with zero scores to ensure a full coverage of status on all countries.  To maintain the objectivity and comparability in the policy analysis, five categories of assessment are used for each qualifier. These categories correspond to a progressive evaluation of the extent to which national and regional policies in plans integrate elements that contribute to the realization of each qualifier:     * + Category 1: policy document does not make any reference to the qualifier or the country is not developing or implementing a policy (no national urban policy exists)   + Category 2: policy document make some reference to the specific qualifier, but this qualifier is not integrated in the diagnosis and recommendations of the policy   + Category 3: policy document integrates the specific qualifier, but this qualifier is poorly understood or misinterpreted   + Category 4: policy document integrates in a cross-cutting perspective the specific qualifier without clear policy recommendations   + Category 5: policy document integrates and mainstreams the specific qualifier with clear policy recommendations derived from the qualifier     Each category is assigned a percentage bracket, as follows:     * + Category 1: 0 per cent   + Category 2: 1-25 per cent   + Category 3: 26-50 per cent   + Category 4: 51-75 per cent   + Category 5: 76-100 per cent | - | - |  | a) LGD (City Corporations)  b) Development Authorities, i.e. RAJUK, CDA, KDA, etc., MoHPW  Administrative Data | * size of city | Annual |  | 1st Round:  December, 2020  2nd Round:  December, 2021  3rd Round:  December, 2022  4th Round:  December, 2023  5th Round:  December, 2024 | UNSC 51 replacement included in the 2020 comprehensive review  Reviewed at Webex meeting in Nov. 2017 following 6th IAEG-SDG meeting: Request additional work on definition of cities and methodology as well as additional pilot studies |
|  | Target 11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels | | | | | | | | | | | |
| 11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 | UNDRR  **Partner Agencies:**  UN-Habitat,  UNEP | Tier II | Definition:  NA  [a] An open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction established by the General Assembly (resolution 69/284) is developing a set of indicators to measure global progress in the implementation of the Sendai Framework. These indicators will eventually reflect the agreements on the Sendai Framework indicators.  Comments and limitations:  The HFA Monitor started in 2007 and over time, the number of countries reporting to UNISDR increased from 60 in 2007 to 140+ countries now undertaking voluntary self-assessment of progress in implementing the HFA. During the four reporting cycles to 2015 the HFA Monitor has generated the world’s largest repository of information on national DRR policy inter alia. Its successor, provisionally named the Sendai Monitor, is under development and will be informed by the recommendations of the OEIWG. A baseline as of 2015 is expected to be created in 2016-2017 that will facilitate reporting on progress in achieving the relevant targets of both the Sendai Framework and the SDGs.  Members of both the OEIWG and the IAEG-SDGs have addressed that indicators that simply count the number of countries are not recommended, instead that, indicators to measure progress over time have been promoted. Further to the deliberations of the OEIWG as well as the IAEG, UNISDR has proposed computation methodologies that allow the monitoring of improvement in national and local DRR strategies over time. These methodologies range from a simple quantitative assessment of the number of these strategies to a qualitative measure of alignment with the Sendai Framework, as well as population coverage for local strategies.  **Computation Method:**  Note: Computation methodology for several indicators is very comprehensive, very long (about 180 pages) and probably out of the scope of this Metadata. UNISDR prefers to refer to the outcome of the Open Ended Intergovernmental Working Group, which provides a full detailed methodology for each indicator and sub-indicator. | The official counterpart(s) at the country level will provide National Progress Report of the Sendai Monitor. | The coordinating lead institution chairing the National DRR platform which is comprised of special purpose agencies including national disaster agencies, civil protection agencies, and meteorological agencies. |  | MoDMR  Administrative Data | * location: city | Triennial | Group 2 | 1st Round:  June 2020  2nd Round:  June 2023  3rd Round:  June 2026  4th Round:  June 2029  5th Round:  June 2030 | Data availability reviewed in Oct. 2019 (classified as Tier II)  Data availability reviewed in Nov. 2017 (classified as Tier I)  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as Tier II)  1.5.3 & 13.1.2 are repeated |
| 11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies | UNDRR  **Partner Agencies:**  UNEP,  UN-Habitat | Tier II | **Definition:**  The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted by UN Member States in March 2015 as a global policy of disaster risk reduction. One of the targets is: “Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020”.  In line with the Sendai Framework for Disaster Risk Reduction 2015-2030, disaster risk reduction strategies and policies should mainstream and integrate disaster risk reduction within and across all sectors, across different timescales and with targets, indicators and time frames.  These strategies should be aimed at preventing the creation of disaster risk, the reduction of existing risk and the strengthening of economic, social, health and environmental resilience.  The open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (OIEWG) established by the General Assembly (resolution 69/284) has developed a set of indicators to measure global progress in the implementation of the Sendai Framework, which was endorsed by the UNGA (OIEWG [report A/71/644](http://www.preventionweb.net/publications/view/51748)). The relevant SDG indicators reflect the Sendai Framework indicators.  **Comments and limitations:**  The Hyogo Framework for Action Monitor (HFA Monitor) started in 2007 and over time, the number of countries reporting to UNISDR increased from 60 in 2007 to approximately 100 countries in 2015 undertaking voluntary self-assessment of progress in implementing the HFA. During the four reporting cycles the HFA Monitor has generated the world’s largest repository of information on national disaster risk reduction policy inter alia. In 2018 the Sendai Framework Monitor system will launch and all Member States are expected to report data of the previous year(s).  **Computation Method:**  Member States count the number of local governments that adopt and implement local DRR strategies in line with the national strategy and express it as a percentage of the total number of local governments in the country.  Local governments are determined by the reporting country for this indicator, considering sub-national public administrations with responsibility to develop local disaster risk reduction strategies. It is recommended that countries report on progress made by the lowest level of government accorded the mandate for disaster risk reduction, as the Sendai Framework promotes the adoption and implementation of local disaster risk reduction strategies in every local authority.  Each Member State will calculate the ratio of the number of local governments with local DRR strategies in line with national strategies and the total number of local governments.  Global Average will then be calculated as below through arithmetic average of the data from each Member State.  Further information of the methodology can be obtained in the Technical Guidance (see reference). | The national Sendai Framework Focal Points will compile all inputs from their line ministries, NSO, and other entities, if appropriate, and report through the Sendai Framework Monitoring System. | National Sendai Framework Focal Points usually represent the coordinating lead institution chairing the National DRR platform which is comprised of special purpose agencies including national disaster agencies, civil protection agencies, and meteorological agencies. | DDM, MoDMR  Administrative Data | DDM, MoDMR  Administrative Data | By local  government | Annual | Group 1 | 1st Round:  2019  2nd Round:  July, 2020  3rd Round:  July, 2021  4th Round:  July, 2022  5th Round:  July, 2023 | Reviewed at 6th IAEG-SDG meeting (classified as Tier II)  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as TBD)  1.5.4 & 13.1.3 are repeated |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

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| --- | --- |
| A close up of a sign  Description automatically generated | Ensure sustainable consumption and production patterns |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier**  **Classifi-**  **cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
|  | Target 12.1 Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries | | | | | | | | | | | |
| 12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies | UNEP | Tier II | **Definition:**  This indicator allows for the quantification (#) and monitoring of countries making progress along the policy cycle of binding and non-binding policy instruments aimed at supporting Sustainable Consumption and Production.  Sustainable Consumption and Production: the working definition of Sustainable Consumption and Production (SCP) used in the context of this framework is: “The use of services and related products, which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of future generation.”[[19]](#footnote-20)  Policy: although quite flexible and contexts specific, a policy is usually defined as a course of action that has been officially agreed by an entity or an organization (governmental or non-governmental) and is effectively implemented to achieve specific objectives.  Policy instruments for sustainable consumption and production: policy instruments refer to the means – methodologies, measures or interventions – that are used to achieve those objectives. In the case of SCP, such instruments are designed and implemented to reduce the environmental impacts of consumption and production patterns, with a view of generating economic and/or social benefits.  Making progress along the policy cycle refers to the development, adoption, implementation or evaluation of such policy instruments.  **Concepts:**  As mentioned above, policy instruments are distinguished in legally binding policies and non-legally binding ones.Legally binding: a legally binding policy instrument refers to a system of rules, procedures and/or principles which are prescribed and enforced by a governing authority with the aim of requiring or preventing specific actions or providing incentives that lead to change in actions or preferences. It includes: laws, regulations, standards, by-laws, codes, etc. They can relate to different types of jurisdictions such as a ministry, state, municipality, or group of states.  Non-binding: a non-binding policy instrument refers to a coherent set of decisions associated to a common vision, objective and/or direction, and to a proposed course of action to achieve these. It includes, for instance: action plans, policies, strategies, programmes, and projects. They can have different scopes of application (international, national, local, etc.).  At another level, different categories of policy instruments can be distinguished:  Macro policies (e.g. national strategies/action plans, new institutions/entities)  Regulatory and legal instruments (e.g. laws, standards, enforcement measures)  Economic and fiscal instruments (taxes and tax incentives, grants, preferential loans, etc.)  Voluntary and self-regulation schemes (e.g. sectoral partnerships, codes of conduct, CSR initiatives)  It is important to note that, except for regulatory / legal instruments and voluntary / self-regulation schemes, the options above are not mutually exclusive: for instance, an economic instrument can be legally binding.  “Policy cycle”: this political science concept is widely used to analyse and inform public policy-making processes, but can be transposed to any recurrent pattern leading to the implementation of a policy or policy instrument. The following approach with regards to the various stages of the policy cycle is adopted:  Policy development, including Agenda setting (e.g. the problem identified is high enough on the public agenda that action becomes likely) and Policy design (e.g. setting objectives, identifying costs-benefits of potential policy instruments and selecting);  Policy adopted or officially launched (e.g. adopting or authorizing the preferred policy options through the legislative process and refined through the bureaucratic process);  Policy under implementation through specific actions (e.g. translating policy into concrete action and policy instruments); results and impacts are being monitored;  Policy and related action plan has reached its end date and has been evaluated.  **Comments and limitations:**  Whereas the indicator quantifies and monitors countries’ progress along the policy cycle of binding and non-binding policy instruments aimed at supporting Sustainable Consumption and Production; it does not provide any qualitative information and whether policies were well-designed or if a proper background analysis had been conducted, the quality of implementation, level of enforcement, and its effects. These aspects will have to be looked at through narrative reports / qualitative analysis.  The indicator encompasses policy instruments supporting the shift to SCP, including: policies which identify SCP as a key priority, policies focused on SCP and sectoral policies with SCP objectives. It is acknowledged that sectoral policies are also being reported under other SDG indicators and in particular 12.7.1 (# of countries implementing sustainable public procurement policies and action plans) and 12.b.1 (# of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools).  Establishing baselines and targets can be time and resource intensive and depends on the willingness of 10YFP National Focal Points to communicate necessary information.  Main aspects regarding precision, reliability, attribution and double counting are addressed above. If you come across additional issues, please inform the 10YFP Secretariat.  Computation Method:  To be reported under this indicator, a government should have moved through one or more new stage(s) of the “Policy cycle” on one or more policy instrument(s) during the reporting period.  This indicator is calculated at relevant aggregation levels based on the information collected from the National Focal Points and other government officials; users of the data should be mindful of double counting one same policy, when aggregating data across reporting years. | Online survey | National data provider: 10YFP National Focal Points – the full list of National Focal Points is available here. In countries there is no nominated 10YFP national focal point, the survey will be sent to the UN Environment Focal Point. |  | MoEFCC  Administrative Data | * ministry * policy: macro-policy; policy instrument. * type of macro-policy: macro-policy specifically focused on SCP; macro-policy with SCP as a key priority/objective; sectoral macro-policy with SCP objectives * Type of instrument: regulatory/legal; economic/financial; voluntary/self-regulatory * Policy cycle stage: Under development (initial stage); just adopted; under implementation through specific actions; has reached its end date and has been evaluated * Year of adoption: 2002-2022 * Legal status: binding/non-binding * Sectors: Agriculture and fishery; Buildings and construction; Consumer goods; Culture and recreation; Financial sector; Education; Energy, Food & Beverage; Forestry; Environmental protection; Environmental services; Government and Civil Society; Housing; Industrial sector (Including SMEs); Scientific Research, Development and Innovation; Tourism; Transport; Waste (including Chemicals); Water * Actors involved: national ministries or other specialized national agencies; local authorities; civil society organizations; scientific and technical organizations; United Nations/inter-governmental organizations; business sector * Support received from non – national partner:: United Nations/inter-governmental organizations; multilateral financial institutions; bilateral organizations; international non-governmental organizations * Support received from 10YFP: encouraged the development/implementation; technical support; financial support; capacity-building activities; experience and knowledge-sharing tools; no connection to 10YFP * Support received from 10YFP programmes: sustainable public procurement; sustainable tourism; consumer information for SCP; sustainable food systems; sustainable lifestyles and education; sustainable buildings and construction; none of the above | Triennial | Group 2 | 1st Round:  June 2019  2nd Round:  June 2022  3rd Round:  June 2025  4th Round:  June 2028  5th Round:  June 2030 | Reviewed at 6th IAEG-SDG meeting (classified as Tier II) |
| Target 12.2 By 2030, achieve the sustainable management and efficient use of natural resources | | | | | | | | | | | | |
| 12.2.1 Material footprint, material footprint per capita, and material footprint per GDP | UNEP  **Partner Agencies:**  OECD | Tier II | **Definition:**  Material Footprint (MF) is the attribution of global material extraction to domestic final demand of a country. The total material footprint is the sum of the material footprint for biomass, fossil fuels, metal ores and non-metal ores.  **Concepts:**  Domestic Material Consumption (DMC) and MF need to be looked at in combination as they cover the two aspects of the economy, production and consumption. The DMC reports the actual amount of material in an economy, MF the virtual amount required across the whole supply chain to service final demand. A country can, for instance have a very high DMC because it has a large primary production sector for export or a very low DMC because it has outsourced most of the material intensive industrial process to other countries. The material footprint corrects for both phenomena.  **Comments and limitations:**  The global material flows database is based on country material flow accounts from the European Union and Japan and estimated data for the rest of the world.  **Computation Method:**  It is calculated as raw material equivalent of imports (RMEIM) plus domestic extraction (DE) minus raw material equivalents of exports (RMEEX). For the attribution of the primary material needs of final demand a global, multi-regional input-output (MRIO) framework is employed. The attribution method based on I-O analytical tools is described in detail in Wiedmann et al. 2015. It is based on the EORA MRIO framework developed by the University of Sydney, Australia (Lenzen et al. 2013) which is an internationally well-established and the most detailed and reliable MRIO framework available to date. | The IRP Global Material Flows and Resource Productivity working group compiles the data from countries  and from other sources. | BBS |  | BBS  NAW | * material category * domestic final demand sector: household consumption, government consumption and capital investment * foreign final demand * economic sector | Annual | Group 2 | -  1st Round: June 2021  2nd Round: June 2022    3rd Round: June 2023  4th Round: June 2024  5th Round: June 2025 | [ Repeated 8.4.1 ]  Reviewed at 9th IAEG-SDG meeting. Agreed methodology only at global level. Not for country level monitoring (classified as Tier II)  Reviewed at Jan. 2019 WebEx meeting: request UNEP to do additional methodological work and await approval as international standard before indicator  reclassified. (classified as TBD)  IAEG-SDG 3rd meeting: There is no established methodology for the indicator (classified as TBD) |
| 12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP | UNEP  **Partner Agencies:**  OECD | Tier I | **Definition:**  Domestic Material Consumption (DMC) is a standard material flow accounting (MFA) indicator and reports the apparent consumption of materials in a national economy.  **Concepts:**  Domestic Material Consumption (DMC) and MF need to be looked at in combination as they cover the two aspects of the economy, production and consumption. The DMC reports the actual amount of material in an economy, MF the virtual amount required across the whole supply chain to service final demand. A country can, for instance have a very high DMC because it has a large primary production sector for export or a very low DMC because it has outsourced most of the material intensive industrial process to other countries. The material footprint corrects for both phenomena.  **Comments and limitations:**  DMC cannot be disaggregated to economic sectors which limits its potential to become a satellite account to the System of National Accounts (SNA).  **Computation Method:**  It is calculated as direct imports (IM) of material plus domestic extraction (DE) of materials minus direct exports (EX) of materials measured in metric tonnes. DMC measure the amount of materials that are used in economic processes. It does not include materials that are mobilized the process of domestic extraction but do not enter the economic process. DMC is based on official economic statistics and it requires some modelling to adapt the source data to the methodological requirements of the MFA. The accounting standard and accounting methods are set out in the EUROSTAT guidebooks for MFA accounts in the latest edition of 2013. MFA accounting is also part of the central framework of the System of integrated Environmental-Economic Accounts (SEEA). | The IRP Global Material Flows and Resource Productivity working group compiles the data from countries  and from other sources. | BBS |  | BBS  NAW | * material follow categories: biomass, fossil fuels, metal ores, non-metallic minerals at highest disaggregation level; DMC: 11 categories; DE: 44 categories * foreign final demand: export | Annual | Group 2 | -  1st Round: December 2020  2nd Round: December 2021    3rd Round: December 2022  4th Round: December 2023  5th Round: December 2024 | Repeated 8.4.2  Data availability reviewed in Nov. 2017 (classified as Tier I) |
|  | Target 12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses | | | | | | | | | | | |
| 12.3.1 (a) Food loss index and (b) food waste index | FAO,  UNEP | Tier II | **For part (a)**  **Definition:**  Index of the changes in the food losses percentages along the supply chain of key commodities over time.  The indicator is computed as a ratio of Food Loss Percentages in the current year and the Food Loss Percentages in the base year according to a standard fixed-base index formula.  FAO proposes to define food losses to be measured in the framework of SDG indicator 12.3.1 (a) as:   * Food losses are all the crop and livestock human-edible commodity quantities that, directly or indirectly, completely exit the post-harvest/slaughter production/supply chain by being discarded, incinerated or otherwise, and do not re-enter in any other utilization (such as animal feed, industrial use, etc.), up to, and excluding, the retail level. Losses that occur during storage, transportation and processing, also of imported quantities, are therefore all included. Losses include the commodity as a whole with its non-edible parts.   The Food Loss Index scope within food chains is described as follows:   * The Food Loss Index for SDG monitoring and reporting purposes will be aligned with the Food Balance Sheets framework, starting with postharvest operations on the farm up to but not including the retail level, * The scope of the index at the national level narrows down to 10 key commodities set by the countries in five headings for comparability. * At country level, countries can include harvest losses in the scope of the index through ad hoc surveys and by adjusting the concept of production. * Pre-harvest losses are covered by Target 1.5. Moreover, pre-harvest losses refer to the concept of potential production that cannot be used for the indicator. * A separate Food Waste Index is being developed to cover food waste at the retail and consumption level.     **Concepts:**  The following concepts are adopted for the calculation of indicator 12.3.1:   * **Quantitative food loss and waste** – is the decrease in mass of food (FAO’s Conceptual Framework for Food Losses and Waste). * **Loss** takes place from the point of maturity up to but excluding the retail stage (the meaning of ‘maturity’ for livestock and fish must be defined). For the indicator and the data collected loss is measured in percentage terms (id). * **Agriculture production** data for crops refer to the actual harvested production from the field orchard or garden, excluding harvesting and threshing losses and that part of crop not harvested for any reason. * The **value of production** which serves as weights is equal to production quantities multiplied by a reference price. The reference prices used in the GFLI are international dollar prices calculated using the Geary Khamis equation method and based on FAOSTAT production and produce price data. Value of production is also the default selection criteria for the ten key commodities by country. * The FLI is based on the international **Central Product Classification** version 2.1 expanded. Commodities are then grouped according to FAO’s Food Groups used in the Supply Utilization Accounts and Food Balance Sheets and further grouped into fine main categories.   **Comments and limitations:**  Food losses are an extremely complex phenomenon to measure because they are multi-dimensional and data collection is costly.  A major limitation is data availability. The reported data accounts for a small percentage or the data needs: only 23 countries out of 185 reported on losses in 2016 for one commodity or more and only 4.4% of loss factors in the SUA/FBS database are officially reported, all others being estimated  The index is limited in scope as harvest losses cannot be included in the international indicator for comparability reasons. Moreover, the index covers ten key commodities in each country, because requesting regular loss data for a larger number of crops would be a difficult and unsustainable exercise for most countries.  The index covers quantitative losses only, that challenging enough to measure. Qualitative and economic losses are also very relevant but less consistent out of the scope of the indicator.  This indicator is particularly challenging for countries because it requires several surveys to collect all the necessary information along the supply chain. The most appropriate data sources would be an ensemble of surveys however, most countries lack the capacity and resources to carry out this exercise. A suite of statistical and modelling tools, combined where possible with administrative records will have to be used.  **Computation Method:**  SDG 12.3 for a single country, called Food Loss Index (FLI), is a fixed-based index as follows:  Where:   * is the average food loss percentage of the country in the current year * is the average food loss percentage of the country in the base year * i = country, * j = commodity, the GFLI will cover the top 10 commodities in five main categories * t = year, 0 is the base year * is the loss percentage (estimated or observed) of commodity j in country i year t * is the production quantities by country, commodity in the base period * is the average 2004-2006 international price by commodity (at international $)   The weights for the GFLI reflect the economic importance of the country’s agricultural value of production at international dollar prices relative to the rest of the world[[20]](#footnote-21). For the FLI and FLP, the weights are the value of the focus commodities at international dollar prices. The weight is fixed in the reference year. The weighting pattern was chosen based on the efficiency of markets operating in economic terms, rather than based on contribution to diets (caloric or protein value), environmental factors or other non-market valued opportunity costs.  Commodity Coverage  One of the challenges in effectively measuring the progress of the FLI is the coverage of commodities. Countries will not be able to measure losses of all commodities in their production system and the key commodities can differ across countries, while international comparability is needed. The proposal for the index to cover ten commodities by country in five groups ensures the index relevance to the countries while providing some degree of international comparability.  The default selection criterion for the priority commodities and the related FLI is to rank commodities by value of production in within each country and commodity group. The default process is to:  • Compile value of production for every commodity  • Group commodities by category and rank them  • Select the top 2 in each group  The default selection process is based on value of the commodity in international dollar prices in the base year. At national level, countries can use their own set of values, quantities or prices, or use different policy based criteria, as long as the main headings are covered.  The five main headings, with two commodities per heading are:  1. Cereals & Pulses  2. Fruits & Vegetables  3. Roots & Tubers and Oil-Bearing crops  4. Animals Products  5. Fish and Fish Products.  Aggregating the loss percentages along the value chain for each commodity, country and year  The objective of the FLI is to estimate losses at the national level from production to the retail level in line with the Food Balance Sheet conceptual framework. Using the index notation, these percentage losses are the where:  is the loss percentage (estimated or observed) of commodity j in country i year t  When losses are not estimated for the entire tract of the supply chain, they can be broken by stage of the value chain. It is expected that the losses at each stage of the value chain are nationally representative, but that there are underlying distributions of different actors at each stage. The best method for estimating losses and ensuring comparability across stages and time is a sample survey using objective measurement.  A simplified process is proposed to standardize losses and aggregate losses along the supply chain to obtain the overall percentage of production that does not reach the retail stage. The process assumes that *measured* losses at each point are independent of each other and works in the following way:   * The percentage along the stages in the supply chain are applied to a reference quantity and subtracted from the remainder of the previous stage’s amount. This enables to take into account imports at the various stages of the supply chain (primary products at wholesale level, semi-processed products for further processing, etc.). * At the end of the supply chain the remainder is then divided by the original reference quantity to convert back to a percentage.      |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Starting Amount - Agriculture production | 1000 | |  | | | | Average Losses (%) | Farm | Transport | Storage | Wholesale | Processing | | 7.3 | 1.5 | 7.7 | 0 | 3.5 | | Amount Lost | 73 | 13.905 | 70.308 | 0 | 29.497 | | Amount Remaining | 927 | 913.095 | 842.787 | 842.787 | 813.289 | |  | | | | | | | % of total supply still in the market | 81.3% = (813.289/1000) \*100 | | | | | | % lost from farm to (but not including) retail | 18.7% = (1-0.813)\*100 | | | | |   Table 1. Aggregation of Maize Loss percentages along the supply chain  The 18.7% in the table would then be the reported quantity for that supply chain, for the country in the given year. This percentage would be applied to the production to calculate the quantity of losses to be reported in the Food Balance Sheets. The loss percentage would also be used in the Food Loss Index for the country, an applied to the base weights and then can be compared to the loss percentages times the weights in the base year to analyze the trends over time.  For part (b)  **Definition:**  The indicator aims to measure the total amount of food that is wasted in tonnes. It complements SDG 12.3.1(a) on Food Loss (which is under the custodianship of FAO). Both indicators look to divide the food value chain and measure the efficiency of the food system.   |  |  | | --- | --- | | **Level I indicators** | | | *Food waste in the waste stream* | Estimated from a global model, based on regional coefficients for food waste in the total waste stream. | | **Level II indicators** | | | *Food waste generation by supply chain stage* | Collect data on food waste generation from supply chain stages based on national priorities |   A full methodology for this indicator is available in the document entitled, “Measuring Waste in the Context of the SDGs”.    **Concepts:**  *Food:* Any substance—whether processed, semi-processed, or raw—that is intended for human consumption. “Food” includes drink and any substance that has been used in the manufacture, preparation, or treatment of food. “Food” also includes material that has spoiled and is therefore no longer fit for human consumption. It does not include cosmetics, tobacco, or substances used only as drugs. It does not include processing agents used along the food supply chain, for example, water to clean or cook raw materials in factories or at home.  *Inedible (or non-edible) parts:* Components associated with a food that, in a particular food supply chain, are not intended to be consumed by humans. Examples of inedible parts associated with food could include bones, rinds, and pits/stones. “Inedible parts” do not include packaging. What is considered inedible varies among users (e.g., chicken feet are consumed in some food supply chains but not others), changes over time, and is influenced by a range of variables including culture, socio-economic factors, availability, price, technological advances, international trade, and geography.  *Municipal Solid Waste (MSW)* includes waste originating from households, commerce, and trade, small businesses, office buildings and institutions (schools, hospitals, government buildings). It also includes bulky waste (e.g., old furniture, mattresses) and waste from selected municipal services, e.g., waste from park and garden maintenance, waste from street cleaning services (street sweepings, the content of litter containers, market cleansing waste), if managed as waste. Further information on municipal solid waste is defined in the SDG indicator methodology for 11.6.1.  **Comments and limitations:**  The challenge resulting from the flexible three-level approach to presenting a methodology is one of consistency and comparability. Can one compare between levels or across methods? Not directly and not without caveats. It is possible to compare at regional levels where the random error is relatively high (e.g. around 25%) for each country but it would not be appropriate to compare countries against each other unless there was a much greater difference in their estimates than the combined amount of error. The approach to consistency is one of transparency against a framework.  Different methods of quantification can also be used for other relevant and related purposes (for example, “where are the greatest opportunities within the waste that is produced to reduce it?”). Taking in-home consumption as an example, it is difficult to obtain reasons for discarding food (and therefore the opportunities for influencing citizen behaviour) without the use of diaries or ethnography. However, direct weighing of waste volumes could give a significantly more accurate quantity.  **Computation Method**  A full methodology for this indicator is available in the document entitled, “Measuring Waste in the Context of the SDGs”.  For the purpose of this indicator, the methodology aims to estimate the amount of food in total waste stream.  For level 1, the global modeling approach will estimate a proportion of food in the total waste stream data (e.g. municipal solid waste, MSW) and apply the proportion to the total. The work on this model will utilize the existing efforts to compile information for SDG 11.6.1 on municipal solid waste management and will utilize existing information on global waste, including World Bank publication “What a Waste 2.0, A Global Snapshot of Solid Waste Management to 2050”. Some countries publish data on the ratio of food waste to the total MSW. The existing data will be used to create a regional coefficient for each SDG sub-region. These regional coefficients will then be applied to the data for 11.6.1 and What a Waste data to fill data gaps. (Not that when a country reports data then no global estimation will be done, the country data will be used directly.)  For level 2, countries should identify the scope of which stages of the supply chain can be covered and estimate the total amount of food wasted for each supply chain stream. The amount of food waste within a stage of the food supply chain shall be established by measuring food waste generated by a sample of food business operators or households in accordance with any of the following methods or a combination of those methods or any other method equivalent in terms of relevance, representativeness and reliability.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Stages of the food supply chain** | **Methods of measurement** | | | | | | Primary production | - Direct measurement | -Mass balance |  | -Questionnaires and interviews  -Coefficients and production statistics  -Waste composition analysis | | | Processing and manufacturing | | Retail and other distribution of food | -Waste composition analysis | -Counting/ scanning |  | | Restaurants and food services |  | -Diaries | | Households |  | | Loss data collection is already taking place though FAO’s annual Agriculture Production Questionnaire in April every year. | Given the various data sources, national data providers vary. Official information on food commodity production and utilization used by FAO to compile Food Balance Sheets is provided mainly by Statistical Units of the Ministry of Agriculture or the National Statistical Offices. | BBS  Survey | a) BBS  Survey  b) FPMU, MoF | * by geographic area or agro-ecological zone * points of the value chain (farm, transport, markets, processers) * economic sectors (small-holders or traditional sector versus large and commercial farms/firms) | Annual | Group 2 | 1st Round: December, 2020  2nd Round: December, 2021    3rd Round: December, 2022  4th Round: December, 2023  5th Round: December, 2024 | Part (b) reviewed at Nov./Dec. 2019 WebEx (classified as Tier II)  UNSC 50 refinement; Part (a) reviewed at 8th IAEG-SDG meeting (classified as Tier II)  Reviewed at Webex meeting in Nov. 2017 following 6th IAEG-SDG meeting: Request more clarification on methodology and metadata as well as results of pilot studies |
| Target 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment | | | | | | | | | | | | |
| 12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement | UNEP | Tier I | Definition:  The indicator refers to the number of parties (=countries that have ratified, accepted, approved or accessed), to the following Multilateral Environmental Agreements (MEAs):  The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention);  The Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade (Rotterdam Convention);  The Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention);  The Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol);  Minamata Convention on Mercury (Minamata Convention),  Which have submitted the information to the Secretariat of each MEA, as required by each of the agreements.  The information required is as follows:  Basel Convention**[[21]](#footnote-22)**:  Designation of the Focal Point and one or more Competent Authorities;  Submission of the annual national reports.  Rotterdam Convention:  Designation of the Designated National Authority(-ies) and Official contact points;  Submission of the import responses.  Stockholm Convention:  Designation of the Stockholm Convention official contact points and national focal points;  Submission of the national implementation plans;  Submission of the revised national implementation plan addressing amendments;  Submission of the national reports.  Montreal Protocol:  Compliance with reporting requirements for production and consumption of ozone-depleting substances under (Article 7 of) the Montreal Protocol;  Submission of information on Licensing systems under (Article 4B of) the Montreal Protocol.  Minamata Convention:  Designation of a national focal point for exchange of information under Article 17 of the Convention;  Submission of national reports as required under Article 21 of the Minamata Convention.  Concepts:  Parties: countries that have ratified, accepted, approved or accessed a convention.  Information: Parties to the Basel Convention have an obligation to present an annual national report as provided for by Article 13, paragraph 3 in order to enable monitoring of the implementation of the Basel Convention by its Parties. The reports are to contain, inter alia, Information regarding transboundary movements of hazardous wastes or other wastes in which Parties have been involved, including the amount of hazardous wastes and other wastes exported, their category, characteristics, destination, any transit country and disposal method as stated on the response to notification, the amount of hazardous wastes and other wastes imported their category, characteristics, origin, and disposal methods; information on accidents occurring during the transboundary movement and disposal of hazardous wastes and other wastes and on the measures undertaken to deal with them; information on disposal options operated within the area of their national jurisdiction; and other information as per reporting format.  Import responses under the Rotterdam Convention are the decisions provided by Parties indicating whether or not they will consent to import the chemicals listed in Annex III of the Convention and subject to the prior informed consent (PIC) procedure. Article 10 of the Rotterdam Convention sets out the obligations of Parties with respect to the future import of chemicals listed in Annex III.  Under the Stockholm Convention a Party has an obligation to report on the measures it has taken to implement the provisions of the Convention and on the effectiveness of such measures in meeting the objectives of the Convention. The national reports include statistical data on the total quantities of production, import and export of each of the chemicals listed in Annex A and Annex B or a reasonable estimate of such data; and to the extent practicable, a list of the States from which it has imported each such substance and the States to which it has exported each such substance. A National Implementation Plan under the Stockholm Convention is a plan explaining how a Party is going to implement the obligations under the Convention and make efforts to put such a plan into operation ([Article 7](http://chm.pops.int/Portals/0/Repository/conf/UNEP-POPS-CONF-4-AppendixII.5206ab9e-ca67-42a7-afee-9d90720553c8.pdf#Article%207)). Changes in the obligations arising from amendments to the Convention or its annexes, for example when a new chemical is listed into the annexes of the Convention, a Party will review and update its implementation plan, and transmit the updated plan to the Conference of the Parties within two years of the entry into force of the amendment for it, consistent with paragraph 1 (b) of the Convention (according to paragraph 7 of the annex to decision SC-1/12).  **Comments and limitations:**  The transmission of information as required by the five Conventions follows a different timing. This is the reason why the reporting to this indicator has been scheduled for 5-year cycles, which would allow capturing the compliance of Parties with the transmission of information of all the Conventions.  Please also note that the timing for submission of reporting for the Minamata Convention has not yet been agreed on. It is not clear whether any reporting will be required prior to 2020, nor it is clear how many times reporting would be required prior to 2030. Thus, the Minamata Convention is included here, but the reporting is subject to further decisions on this.  **Computation Method:**  In the following methodology, reporting is to take place in 2017 for the period 2010-2014, in 2020 for the period 2015-2019, in 2025 for the period 2020-2024 and in 2030 for the period 2025-2029. Reporting parameters include the following:  The Country Score depends on the amount of information that is sent to the Conventions’ Secretariat, and is calculated as follows (and communicated by the Secretariats):  Basel Convention:  Designation of the Focal Point and one or more Competent Authorities (1 point);  Submission of the annual national reports during the reporting period (1 point per report).  Rotterdam Convention:  Designation of the Designated National Authority(-ies) and Official contact point (1 point);  Submission of the import responses during the reporting period (0,2 point per import response).  Stockholm Convention:  Designation of the Stockholm Convention official contact point and national focal point (1 points);  Submission of the national implementation plan (1 points);  Submission of the revised national implementation plan(s) addressing the amendments adopted by the Conference of the Parties within the reporting period (1 point per revised and updated plan)[[22]](#footnote-23);  Montreal Protocol:  1. Compliance with reporting requirements for production and consumption of ozone-depleting substances under (Article 7 of) the Montreal Protocol (15 points);  2. Submission of information on Licensing systems under (Article 4B of) the Montreal Protocol (5 points).  Minamata Convention :  1. Designation of a national focal point (Article 17) (5 points);  2. Submission of national report (Article 21) (15 points).    The final indicator will be a number expressed as percent, where 100% is the maximum degree of compliance with the reporting obligations of the MEAs to which a Country is a Party, and 0% the least degree of compliance with those obligations. | Data is collected by the Secretariat of the Basel, Rotterdam and Stockholm Conventions from Focal Points for the Basel Conventions, Official contact points for the Rotterdam Convention, official contact points for the Stockholm Convention, by the Ozone Secretariat from national focal points for the Montreal Protocol, and by the Secretariat of the Minamata Convention from national focal points for the Minamata Convention. | Focal Points and Competent Authorities for the Basel Conventions (185 Parties);  Designated National Authorities and Official contact points for the Rotterdam Convention (180 Parties);  Official contact points and national focal points for Stockholm Convention (156 Parties);  Focal points for Montreal Protocol (197 Parties);  Focal points for information exchange and national focal points for the Minamata Convention (currently 35 Parties). |  | DoE, MoEFCC  Administrative Data | * agreement/convention: Stockholm/ Rotterdam/ Basel Convention on hazardous waste and other chemicals-Montreal Protocol on hazardous waste and other chemical | Annual | Group 2 | 1st Round: December, 2019  2nd Round: December, 2020    3rd Round: December, 2021  4th Round: December, 2022  5th Round: December, 2023 |  |
| 12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment | UNSD,  UNEP  **Partner Agencies:**  OECD,  Eurostat,  UNU | Tier II | **Definition:**  The indicator includes hazardous generated, hazardous waste generated by type (including e-waste as a sub-indicator) and the proportion of hazardous waste treated. For the e-waste sub-category, United Nations University is a co-custodian.  **Hazardous waste generated (in tonnes, per km sq of land area and per capita)**: Hazardous waste collected + Hazardous waste given by generator to treatment or disposal facilities + Estimation of Unaccounted for hazardous waste  **Hazardous waste generated by type, including e-waste**: A breakdown of hazardous waste generated by key type of waste, including e-waste  **Proportion of hazardous waste treated**: Quantity of hazardous waste treated during reporting year/quantity of hazardous waste generated x 100  A full methodology for this indicator is available in the document entitled, “Measuring Waste in the Context of the SDGs (UNEP, forthcoming)”.  **Concepts:**  *Hazardous waste* is waste with properties that make it hazardous or capable of having a harmful effect on human health or the environment. Hazardous waste is generated from many sources, ranging from industrial manufacturing process waste to domestic items such as batteries and may come in many forms, including liquids, solids, gases and sludge. They can be discarded as commercial products, like cleaning fluids or pesticides or the by-products of manufacturing processes, from Basel Convention (Article 1, paragraph 1(a)). Waste listed in Annex VIII of the Basel Convention is presumed to be hazardous, while waste listed in Annex IX is presumed not to be hazardous. For the purpose of this indicator, due to comparability reasons, additional waste considered hazardous as per national definitions, as provided by the Basel Convention under Article 1, paragraph 1 (b), are excluded.  *Hazardous waste generated* refers to the quantity of hazardous waste (as per the definition above) that is generated within the country during the reported year, prior to any activity such as collection, preparation for reuse, treatment, recovery, including recycling, or export, no matter the destination of this waste. In case waste that are not covered under the above definition, but are defined as, or are considered to be hazardous waste by national definitions are included in the “hazardous waste generated” amount, a specific note should be added specifying the additional types/streams of hazardous waste included as well as their quantities.  The hazardous waste generated should be reported as a total amount generated during the year, as well as by its distribution among wide categories of economic activities and by households. The economic included in the scope of hazardous waste:  • Agriculture, forestry and fishing (ISIC 01-03)  • Mining and quarrying (ISIC 05-09)  • Manufacturing (ISIC 10-33)  • Electricity, gas, steam and air conditioning supply (ISIC 35)  • Construction (ISIC 41-43)  • Other economic activities excluding ISIC 38  As not all hazardous waste generated is immediately treated or disposed of, the stock of hazardous waste should also be reported, as per the categories and indications in Table R2 of the UNSD/UNEP Questionnaire (waste section).  Related questionnaire statistics   * R2.2 Hazardous waste generated * R2.5 Hazardous waste treated or disposed of during the year (R2.2 + Imports – Exports) * R2.6-10 Amounts going to the different types of treatment:   + Recycling   + Incineration     - Incineration with energy recovery   + Landfilling   + Other   **Comments and limitations:**  Data on hazardous waste generation and treatment may be scarce in some countries, due to a series of factors, such as lack of, or insufficient, policies and regulations on management and/or reporting; limited human, financial and technical resources within government agencies, lack of clear disclosure and reporting rules and requirements, and unwillingness of generators and public officials in certain countries to disclose the quantities of hazardous waste generated. Some countries may have the data and monitoring systems needed to report, while for others there is a need for training and capacity development to enhance data collection, validation and reporting capacity.  Limitations in terms of usable data for calculating the indicator(s) may arise due to differences in the way of understanding the terminology used in the indicator or differences between these definitions and the definitions included in national legislation. This can lead to differences in reported values and difficulties in cross-checking of reported data. For example, by national legislation, countries may define additional types of waste to be considered as hazardous beyond the waste streams defined in the Basel Convention.  **Computation Method**  A full methodology for this indicator is available in the document entitled, “Measuring Waste in the Context of the SDGs” (UNEP forthcoming).  For the purpose of this indicator,  Hazardous waste generated should include collected hazardous waste (either by specialized companies or by municipal services), hazardous waste which is given by the generator directly to the treatment or disposal facility, as well as an estimation of the hazardous waste which is unaccounted for. Generated hazardous waste includes exported hazardous waste and excludes imports of hazardous waste.  =    The estimation of hazardous waste unaccounted for is the most difficult aspect of this methodology as it requires local-level knowledge and estimation. This aspect of the indicator is particularly important as hazardous waste that is unaccounted for is typically also untreated and has a high potential to impact the environment.  The proportion of hazardous waste treated is presented below. Note that the total quantity of hazardous waste treated during the reported year in the reporting country is calculated by adding quantities of hazardous waste treated, per each type of treatment (recycling, incineration with/without energy recovery, landfilling or other), including exports and excluding imports. This matches with the definition of recycling in 12.5.1.  \* Hazardous waste treated in the country plus materials exported for treatment minus the materials imported for treatment. | The custodian agencies collect national data through the UNSD/UNEP Questionnaire on Environment Statistics (waste section). | National Statistical Systems |  | a) LGD  b) DoE, MoEFCC  c) MoST  Administrative Data | * by ISIC codes * by type of landfilling * by type of treatment per each generating sector * by type of recycling operation * by territorial division | Annual | Group 2 | -  1st Round: December, 2020  2nd Round: December, 2021    3rd Round: December, 2022  4th Round: December, 2023  5th Round: December, 2024 | Reviewed at Nov./Dec. 2019 WebEx meeting (classified as Tier II)  IAEG-SDG 3rd meeting: There is no established methodology for the indicator (classified as TBD) |
|  | Target 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse | | | | | | | | | | | |
| 12.5.1 National recycling rate, tons of material recycled | UNSD,  UNEP  **Partner Agencies:**  OECD,  Eurostat,  UNU | Tier II | - *No data for this indicator is currently available and its methodology is still under development* | - | - |  | DoE  Administrative Data | - | Annual | Group 2 | -  1st Round: December, 2020  2nd Round: December, 2021    3rd Round: December, 2022  4th Round: December, 2023  5th Round: December, 2024 | Reviewed at Feb. 2020 WebEx meeting  (classified as Tier II)  Reviewed at Nov./Dec. 2019 WebEx meeting: IAEG to review full methodology and provide comments to UNEP (classified as TBD) |
|  | Target 12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle | | | | | | | | | | | |
| 12.6.1 Number of companies publishing sustainability reports | UNEP,  UNCTAD | Tier II | **Definition:**  Sustainability Reports:  For the purposes of this indicator, ‘sustainability reports’ will not be limited to stand-alone sustainability reports produced by companies, but will be considered as ‘reporting sustainability information’ and expanded to other forms of reporting sustainability information, such as publishing sustainability information as part of the company’s annual reports or reporting sustainability information to the national government. This is to ensure that the focus of the indicator is on tracking the publishing of sustainability information, rather than on the practice of publishing stand-alone sustainability reports. It also ensures that the indicator interpretation is aligned with the wording of Target 12.6 which refers to promoting “the integration of sustainability information into the annual reporting cycle of companies”.  Not every report called ‘Sustainability Report’ will be counted towards the indicator. In order to be counted, they will have to comply with a ‘minimum requirement’ in terms of sustainability disclosures reported on (see below).  Company:  While many companies report at the group level, many of their impacts will be local, and some subsidiaries or franchises produce separate sustainability reports. As a practice that should be encouraged, and one that is useful to monitor, is therefore proposed to count both the group and subsidiary/franchise level separately, as separate entities. “Company” can therefore apply to either the parent company, or a franchise or subsidiary, depending on their reporting practices.  **Concepts:**  It is proposed that, to be counted towards the indicator, companies must publish information that meets a “Minimum requirement” of disclosure. A core set of economic, environmental, social and governance disclosures of sustainability information is therefore identified. In defining these disclosure elements, the custodian agencies attempted to align with the disclosures that appear in existing related reporting frameworks, including the IIRC reporting framework, the Global Reporting Initiative Standard (GRI), the Sustainability Accounting Standards Board (SASB) (see Annex I for a comparison of the various sustainability disclosures contained under each.  It also attempts to align with the UNCTAD Core Indicators for company reporting on the contribution towards the attainment of the Sustainable Development Goals. UNCTAD has prepared Guidance on Core indicators for entity reporting on the contribution towards the attainment of the Sustainable Development Goals (SDGs) to support entities in the provision of information under indicator 12.6.1 and governments in assessing the private sector contribution to the SDGs. The Guidance reflects the Agreed Conclusions of the thirty-fourth session of the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR), which in 2017 requested UNCTAD to develop the guiding document. The UNCTAD Guidance includes detailed definitions and data sources for the core indicators in the company accounts to assist the entities in the reporting.  The purpose is not to create a new reporting standard or framework, but to ensure that the minimum requirement for Indicator 12.6.1 is aligned with existing global frameworks currently used by companies, so that they may continue to use these frameworks and be counted towards the indicator.  While establishing a minimum requirement in terms of reporting ensures that only companies disclosing meaningful information on all aspects of sustainability are counted towards the indicator, it could be perceived as giving the message that the minimum suffices and that companies do not need to go beyond it.  Therefore, it is proposed that the methodology include an advanced level, with a further set of disclosure elements which would further provide impetus for examining and reporting on the sustainability practices and impacts of the company. These include: 1) stakeholder engagement, 2) assessing impacts beyond the company boundaries and along the supply chain; 3) supplier and consumer engagement on sustainability issues; 4) procurement and sourcing practices; and 5) environmental performance information in the form of intensity values to be monitored over time, such as consumption of energy, water or materials per unit of production or per unit of profit.  Having different levels will also allow for information to be collected on the degree of reporting of different companies, including whether the same companies produce more ambitious reports, and go further in their sustainability practices with time, such as through supplier engagement. It would allow for companies who are beginning to produce sustainability reports to be counted towards the indicator once they achieve the minimum level, but provide incentive, through their inclusion in the indicator count, for them to work towards more ambitious reporting and demonstrate their progress over time.  **Comments and limitations: N/A**  **Computation Method:**  Companies will be counted towards the indicator if they publish sustainability information covering the following sustainability disclosures:  **Minimum Requirement:**  **Institutional and governance:**   * Materiality assessment\* * Sustainability strategy and/or principles related to sustainability * Management approach to address materiality topics * Governance structure, including for economic, environmental and social issues * Key impacts, risks, opportunities * Anti-fraud, anti-corruption and anti-competitive behaviour practices   **Economic:**   * Direct measure of economic performance (revenue, net profit, value added, payouts to shareholders) * Indirect measure of economic performance (community investment, investment in infrastructure or other significant local economic impact)   **Environmental:**   * Energy consumption and energy efficiency * Water consumption, wastewater generation, integrated water resource management practices, or water recycling/re-use and efficiency * Greenhouse gas emissions * Other emissions and effluents, including Ozone-depleting substances, Nitrogen Oxides (NOX), Sulphur Oxides (SOX), and chemicals * Waste generation, including hazardous wastes * Waste minimisation and recycling practices * Use and/or production of hazardous chemicals and substances   **Social:**   * Occupational health and safety * Total number of employees, by contract type and gender * Employee training * Unfair and illegal labour practices and other human rights considerations * Diversity, equal opportunity and discrimination in governance bodies and among employees * Worker rights and collective agreements   The methodology will make allowance for application of the **‘comply or explain’ principle for the minimum standard**, which allows reporting entities to highlight why certain disclosures are not relevant for their specific company and make it more accessible to small companies. However, this would not apply to issues that have been identified as material to the company, on which they are expected to report.  Advanced level requirement:  As for minimum requirement, with the following additional disclosures and/or indicators:  **Institutional and governance:**   * Details of supply chain * Details of stakeholder engagement surrounding sustainability performance * Details of remuneration   **Economic**   * Sustainable public procurement policies and practices * Percentage or proportion of local suppliers/procurement * Charitable donations   **Environmental**   * Supplier environmental assessment * Material consumption, sourcing of materials and reclaimed or recycled materials used * Energy intensity and renewable energy sources * Water intensity and Integrated water resource management * GHG intensity * Waste intensity * Biodiversity impacts * Supplier and consumer/customer engagement on environmental issues   **Social**   * Supplier social assessment * Local community impacts * Supplier and consumer engagement on sustainability issues | The custodian agencies propose to establish a global platform or database which would:    Collate and analyse sustainability reports through advanced analytics to determine coherence with the minimum requirement and advanced level  Provide country specific information  Aggregate data at sub-regional, regional and global levels (avoiding double-counting of the same companies)  Disaggregate data (company size, per industry) | National statistics offices |  | DoE, MoEFCC  Administrative Data | * Reporting eligibility: Meet the minimum requirements, Meet the advanced level requirement * Company size * Company sector: ISCIC | Annual | Group 2 | -  1st Round: December, 2020  2nd Round: December, 2021    3rd Round: December, 2022  4th Round: December, 2023  5th Round: December, 2024 | Reviewed at Sep. 2019 WebEx meeting  (classified as Tier II) |
|  | Target 12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities | | | | | | | | | | | |
| 12.7.1 Number of countries implementing sustainable public procurement policies and action plans | **UNEP** | Tier II | - *No data for this indicator is currently available and its methodology is still under development* | - | - |  | CPTU, IMED  Administrative Data | - | Annual | Group 2 | -  1st Round: December, 2020  2nd Round: December, 2021    3rd Round: December, 2022  4th Round: December, 2023  5th Round: December, 2024 | Reviewed at Feb. 2020 WebEx meeting  (classified as Tier II with a revised list of sub-indicators)  Reviewed at Nov./Dec. 2019 WebEx meeting: IAEG to work with UNEP on suggestions for simplifying methodology (classified as TBD) |
|  | Target 12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature | | | | | | | | | | | |
| 12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment | UNESCO-UIS  **Partner Agencies:**  UNEP | Tier II | Definition:  Indicator 4.7.1/12.8.1/13.3.1 measures the extent to which countries mainstream Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) in their education systems. This is an indicator of characteristics of different aspects of education systems: education policies, curricula, teacher training and student assessment as reported by government officials, ideally following consultation with other government ministries, national human rights institutes, the education sector and civil society organizations. It measures what governments intend and not what is implemented in practice in schools and classrooms.    For each of the four components of the indicator (policies, curricula, teacher education, and student assessment), a number of criteria are measured, which are then combined to give a single score between zero and one for each component. (See methodology section for full details.)    The indicator and its methodology have been reviewed and endorsed by UNESCO’s Technical Cooperation Group on the Indicators for SDG 4-Education 2030 (TCG), which is responsible for the development and maintenance of the thematic indicator framework for the follow-up and review of SDG 4. The TCG also has an interest in education-related indicators in other SDGs, including global indicators 12.8.1 and 13.3.1. The TCG is composed of 38 regionally representative experts from UNESCO Member States (nominated by the respective geographic groups of UNESCO), as well as international partners, civil society, and the Co-Chair of the Education 2030 Steering Committee. The UNESCO Institute for Statistics acts as the Secretariat.  Concepts:  Education for Sustainable Development (ESD): empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society for present and future generations, while respecting cultural diversity. It can be summarised as ‘learning to live sustainably’. It covers sustainable lifestyles and ways of life, climate change, biodiversity, environmental sustainability, the greening of the economy and sustainable consumption, caring for the planet, and disaster risk reduction.  Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) nurture respect for all, build a sense of belonging to a common humanity, foster responsibility for a shared planet, and help learners become responsible and active global citizens and proactive contributors to a more peaceful, tolerant, inclusive, secure and sustainable world. They aim to empower learners of all ages to face and resolve local and global challenges and to take informed decisions and actions for environmental integrity, economic viability and a just society for present and future generations, while respecting cultural diversity.  Comments and limitations:  The indicator is based on self-reporting by government officials. However, countries will be asked to provide supporting evidence in the form of documents or links (e.g. education policies or laws, curricula, etc.) to back up their responses. In addition, UNESCO will compare responses with available information from alternative sources and, if appropriate, raise queries with national respondents. At the end of the reporting cycle, country responses and the supporting documents will be made publicly available.  Computation Method:    Information collected with the questionnaire for monitoring the implementation by UNESCO Member States of the 1974 *Recommendation concerning Education for International Understanding, Co-operation and Peace and Education relating to Human Rights and Fundamental Freedoms* will be used for the construction of the global indicator. For each of the four components of the indicator (policies, curricula, teacher education, and student assessment), a number of criteria are measured, which are then combined to give a single score between zero and one for each component. Only information for primary and secondary education will be used for calculation of indicator 4.7.1/12.8.1/13.3.1.    (a) Laws and policies    The following questions are used to calculate the policies component of the indicator:    *A2: Please indicate which GCED and ESD themes are covered in national or sub-national laws, legislation or legal frameworks on education.*  There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) and two levels of government (national and sub-national) = 16 responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = simple mean of the 0 and 1 scores, excluding not applicables (i.e., if eight of the 16 responses are ‘not applicable’, the sum of the 0 and 1 scores is divided by 8 to get the mean and not by 16).  A4. Please indicate which GCED and ESD themes are covered in national or sub-national education policies, frameworks or strategic objectives.  There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) = 8 responses.  Response categories are no = 0, yes = 1, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.  *A5. Please indicate whether national or sub-national education policies, frameworks or strategic objectives on education provide a mandate to integrate GCED and ESD.*    There are two levels of government (national, sub-national) and five areas of integration (curricula, learning objectives, textbooks, teacher education, and student assessment) = 10 responses. Response categories are no = 0, yes = 1, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = simple mean of the 0 and 1 scores, excluding not applicables (i.e., if five of the 10 responses are ‘not applicable’, the sum of the 0 and 1 scores is divided by 5 to get the mean and not by 10).    *E1. Based on your responses to questions in the previous section (laws and policies) please indicate to what extent global citizenship education (GCED) and education for sustainable development (ESD) are mainstreamed1 in education laws and policies in your country.*    There are two levels of government (national, sub-national) = 2 responses.  Response categories are not at all = 0, partially = 1, extensively = 2, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = half the simple mean of the 0, 1 and 2 scores, excluding not applicables (i.e., if one of the two responses is ‘not applicable’, the sum of the 0, 1 and 2 scores is divided by 2 to get half the mean and not by 4). The score is half the mean in order to ensure it lies between 0 and 1 as do the scores for the other three questions in this section.    Policy component score = simple mean of the scores for questions A2, A4, A5 and E1 (except where the component score should not be calculated because too many responses were unknown or blank).    (b) Curricula    The following questions are used to calculate the curricula component of the indicator:    *B2: Please indicate which GCED and ESD themes are taught as part of the curriculum.*    There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) = 8responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated. Note that responses to ‘other subjects, please specify’ in the question are ignored. If appropriate, during quality assurance answers in this category may be recoded to one of the other 12 subjects.    Question score = simple mean of the 0 and 1 scores.  *B4. Please indicate the approaches used to teach GCED and ESD in primary and secondary education.*    There are four teaching approaches (GCED/ESD as separate subjects, cross-curricular, integrated, whole school) = 4 responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank the component score is not calculated.  1  ities),    Question score = simple mean of the 0 and 1 scores.    *E1. Based on your responses to questions in the previous section (curricula) please indicate to what extent global citizenship education (GCED) and education for sustainable development (ESD) are mainstreamed2 in curricula in your country.*    There are two levels of government (national, sub-national) = 2 responses.  Response categories are not at all = 0, partially = 1, extensively = 2, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = half the simple mean of the 0, 1 and 2 scores, excluding not applicables (i.e., if one of the two responses is ‘not applicable’, the sum of the 0, 1 and 2 scores is divided by 2 to get half the mean and not by 4). The score is half the mean in order to ensure it lies between 0 and 1, as do the scores for the other three questions in this section.    Curricula component score = simple mean of the scores for questions B2, B3, B4 and E1 (except where the component score should not be calculated because too many responses were unknown or blank).    (c) Teacher education    The following questions are used to calculate the teacher education component of the indicator:    *C2: Please indicate whether teachers, trainers and educators are trained to teach GCED and ESD during initial or pre-service training and/or through continuing professional development.*  There are two types of training (initial/pre-service and continuing professional development) and two types of teachers (of selected subjects in which ESD/GCED are typically taught, and of other subjects) = 4 responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *C3. Please indicate on which GCED and ESD themes pre-service or in-service training is available for teachers, trainers and educators.*    There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) = 8 responses.  Response categories are no = 0, yes = 1 and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.  2  ities),    *C4. Please indicate whether teachers, trainers and educators are trained to teach the following dimensions of learning in GCED and ESD.*    There are four learning dimensions (knowledge, skills, values, and attitudes/behaviours) = 4 responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *C5. Please indicate whether teachers, trainers and educators are trained to use the following approaches to teach GCED and ESD in primary and secondary education*.    There are four teaching approaches (GCED/ESD as separate subjects, cross-curricular, integrated, whole school) = 4 responses.  Response categories are no = 0, yes = 1 and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *E1. Based on your responses to questions in the previous section (teacher education), please indicate to what extent global citizenship education (GCED) and education for sustainable development (ESD) are mainstreamed3 in teacher education in your country.*    There are two levels of government (national, sub-national) = 2 responses.  Response categories are not at all = 0, partially = 1, extensively = 2, unknown (treated as zero), and not applicable (which is ignored). Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = half the simple mean of the 0, 1 and 2 scores, excluding not applicables (i.e., if one of the two responses is ‘not applicable’, the sum of the 0, 1 and 2 scores is divided by 2 to get half the mean and not by 4). The score is half the mean in order to ensure it lies between 0 and 1, as do the scores for the other three questions in this section.    Teacher education component score = simple mean of the scores for questions C2, C3, C4, C5 and E1 (except where the component score should not be calculated because too many responses were unknown or blank).    (d) Student assessment    The following questions are used to calculate the student assessment component of the indicator:  *D2: Please indicate whether the GCED and ESD themes below are generally included in student assessments or examinations.*    There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) = 8 responses.  Response categories are no = 0, yes = 1 and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *D3. Please indicate which of the dimensions of learning in GCED and ESD below are generally included in student assessments or examinations.*    There are four learning dimensions (knowledge, skills, values, and attitudes/behaviours) = 4 responses..  Response categories are no = 0, yes = 1 and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *E1. Based on your responses to questions in the previous section (student assessment), please indicate to what extent global citizenship education (GCED) and education for sustainable development (ESD) are mainstreamed4 in student assessment in your country.*    There are two levels of government (national, sub-national) = 2 responses.  Response categories are not at all = 0, partially = 1, extensively = 2, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = half the simple mean of the 0, 1 and 2 scores, excluding not applicables (i.e., if one of the two responses is ‘not applicable’, the sum of the 0, 1 and 2 scores is divided by 2 to get half the mean and not by 4). The score is half the mean in order to ensure it lies between 0 and 1, as do the scores for the other three questions in this section.    Student assessment component score = simple mean of the scores for questions D2, D3 and E1 (except where the component score should not be calculated because too many responses were unknown or blank).    The component scores all lie between zero and one and are presented as a dashboard of four scores. They are not combined to create a single overall score for the indicator. The higher the score, the more GCED and ESD are mainstreamed in the given component. In this way, users can make a simple assessment in which component area more efforts may be needed. | Responses are submitted by national governments, typically by officials in Ministries of Education. Respondents are asked to consult widely across other government ministries, with national human rights institutes, the education sector and civil society organizations in compiling their responses. | National data providers and national statistical offices |  | a) SHED, MoE  b) TMED, MoE  c) MoPME  Administrative Data | * education policy: national education policies/ curricula/ teacher education/ students’ assessment * global citizenship education/ education for sustainable development | Triennial | Group 2 | -  1st Round: December, 2020  2nd Round: December, 2021    3rd Round: December, 2022  4th Round: December, 2023  5th Round: December, 2024 | UNSC 51 refinement  4.7.1 & 13.3.1 are repeated  Reviewed at Nov./Dec. 2019 WebEx meeting (classified as Tier II)  Reviewed at Dec. 2018. WebEx meeting:  request additional work on questionnaire methodology (classified as TBD)  Reviewed at 8th IAEG-SDG meeting: request additional work on methodology |
|  | Target 12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production | | | | | | | | | | | |
| 12.a.1 Installed renewable energy-generating capacity in developing countries (in watts per capita) |  | TBD | - *No data for this indicator is currently available and its methodology is still under development* | - | - |  | SREDA, PD  Administrative Data |  | Annual |  | -  July, 2018  1st Round: July, 2018  2nd Round: July, 2019    3rd Round: July, 2020  4th Round: July, 2021  5th Round: July, 2022 | UNSC 51 replacement included in the 2020 comprehensive review  [ Repeated 7.b.1] |
|  | Target 12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products | | | | | | | | | | | |
| 12.b.1 Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability |  | TBD | **Definition:**  The indicator “Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability” relates to the stage of implementation of two accounting standards: the Tourism Satellite Account: Recommended Methodological Framework 2008 and the System of Economic-Environmental Accounting 2012.  **Concepts:**    All the concepts related to tourism statistics can be found in the International Recommendations fo[r Tourism Statistics 2008:](http://statistics.unwto.org/content/irts2008)    The [SEEA](https://seea.un.org/content/seea-central-framework) brings together economic and environmental information in an internationally agreed set of standard concepts, definitions, classifications, accounting rules and tables to produce internationally comparable statistics.      **Computation Method:**    Sum of the tables produced in both the TSA and the SEEA:   * TSA core tables (from table 1 to table 6) * SEEA tables relevant to tourism: water flows, energy flows, GHG emissions and solid waste | UNWTO collects the data on SEEA implementation through a questionnaire directly from UNSD. | For the TSA: National Statistics Offices and/or National Tourism Administrations.  For the SEEA: National Statistics Offices and/or environment or planning offices. |  | NAW, BBS | Not applicable | Triennial |  | -  1st Round: December, 2020  2nd Round: December, 2021    3rd Round: December, 2022  4th Round: December, 2023  5th Round: December, 2024 | UNSC 51 replacement included in the 2020 comprehensive review |
| Target 12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities | | | | | | | | | | | | |
| 12.c.1 Amount of fossil-fuel subsidies per unit of GDP (production and consumption) | UNEP | Tier I | Definition:  In order to measure fossil fuel subsidies at the national, regional and global level, three sub-indicators are recommended for reporting on this indicator: 1) direct transfer of government funds; 2) induced transfers (price support); and as an optional sub-indicator 3) tax expenditure, other revenue foregone, and under-pricing of goods and services. The definitions of the IEA Statistical Manual (IEA, 2005) and the Agreement on Subsidies and Countervailing Measures (ASCM) under the World Trade Organization (WTO) (WTO, 1994) are used to define fossil fuel subsidies. Standardised descriptions from the United Nations Statistical Office’s Central Product Classification should be used to classify individual energy products. It is proposed to drop the wording “as a proportion of total national expenditure on fossil fuels” and thus this indicator is effectively "Amount of fossil fuel subsidies per unit of GDP (production and consumption)".    **Concepts:**  The concepts and definitions used in the methodology have been based on existing international frameworks and glossaries.   * Use definition of fossil fuels from IEA Statistics Manual, “Fossil fuels are taken from natural resources which were formed from biomass in the geological past. By extension, the term fossil is also applied to any secondary fuel manufactured from a fossil fuel.” * Use the terms set out in CPC Rev. 2.1 for the statistical classification of the individual products. No other commonly accepted definition identified * Include electricity and heat generated from fossil fuels in the scope of fossil fuels. * Include non-energy uses with monitoring optional for the measuring of this indicator. * Additional details are provided in the methodological document entitled, Measuring Fossil Fuel Subsidies in the Context of the Sustainable Development Goals.   **Comments and limitations:**  The monitoring and reporting of SDG Indicator 12.c.1 requires capacity within national statistical systems to evaluate direct and indirect transfers of government funds. Data collection by the statistical agencies from the sectoral ministries and state-owned enterprises, including at the sub-national level, which depends on their capacity. There is a need for additional training materials and sharing of experiences on the indicator.  The indicator methodology utilizes a phased monitoring to allow for countries with different capacities to engage in monitoring 12.c.1. The two phases include global monitoring based on price gap estimates plus national monitoring of direct and indirect transfers with optional monitoring of tax expenditure foregone.  **Computation Method:**  It is proposed that countries report on the subsidy categories listed below as sub-indicators.  - Direct transfers;  - Induced transfers (reporting on regulated prices and calculation of the total amount);  - Tax expenditure, other government revenue foregone and under-pricing of goods and services, including risk (optional).  The last category should be included as an optional sub-indicator. Each sub-indicator should be expressed in national currency or United States dollars in current prices. UN Environment will use market exchange rates to calculate between national currency and United States dollar.  Care should be given if a country chooses to aggregate across the three sub-indicators in order to avoid double counting and all three sub-indicators should be publicly available to ensure transparency. Care needs to be taken when aggregating estimates of induced transfers with data on direct transfers and some measures in under-pricing of goods and services.  Estimates of subsidies to consumers observable through price-gaps (i.e., consumer price support) have been calculated by several international organizations (IADB, IEA, and IMF), covering different geographic regions and time-periods. The three organisations that produce these estimates use roughly the same approach, which can be summed up by the following equation:  Consumer price support = (adjusted net-of-tax reference unit price – local net-of-tax unit price) x units subsidized  Estimates are based on reference prices on import (or export) parity prices using the price of a product at the nearest international hub, adjusted for quality differences if necessary, plus (or minus) the cost of freight and insurance to the net importer (or back to the net exporter), plus the cost of internal distribution and marketing and any value-added tax (VAT). For tradable commodities (mainly coal, crude oil, and petroleum products), the reference prices are based on the spot price at the nearest international hub – e.g., the United States, Northwest Europe, or Singapore. | The data will be collected by UN Environment through electronic reporting being developed by UN Environment. | National Focal Points from National Statistical Systems.  OECD  IMF and IEA | FD  Administrative Data | a) FD  b) EMRD  Administrative Data | by category of subsidies | Annual | Group 1 | 1st Round:  2015  2nd Round:  December, 2020  3rd Round:  December, 2021  4th Round:  December, 2022  5th Round:  December, 2023 | Refinement of the indicator name approved by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) on 13 March and 2 April 2020. Final approval pending the 52nd session of the Statistical Commission in March 2021  UNSC 51 refinement  Data availability reviewed in Oct. 2019  (classified as Tier I)  Reviewed at Sept 2018 WebEx meeting  (classified as Tier II) |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

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| A close up of a logo  Description automatically generated | Take urgent action to combat climate change and its impacts |

| **Targets and Indicators** | **Custodian**  **Agency (ies)** | **Tier**  **Classifi-**  **cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities**  **of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
|  | Target 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries | | | | | | | | | | | |
| 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population | UNDRR  **Partner Agencies:**  WMO,  UNFCCC,  UNEP | Tier II | **Definition:**  This indicator measures the number of people who died, went missing or were directly affected by disasters per 100,000 population.  **Concepts:**  **Death:** The number of people who died during the disaster, or directly after, as a direct result of the hazardous event.  **Missing:** The number of people whose whereabouts is unknown since the hazardous event. Itincludes people who are presumed dead, for whom there is no physical evidence such as a body, and for which an official/legal report has been filed with competent authorities.  **Directly affected:** The number of people who have suffered injury, illness or other health effects; who were evacuated, displaced, relocated or have suffered direct damage to their livelihoods, economic, physical, social, cultural and environmental assets. Indirectly affected are people who have suffered consequences, other than or in addition to direct effects, over time, due to disruption or changes in economy, critical infrastructure, basic services, commerce or work, or social, health and psychological consequences.  **Computation Method:**  This indicator, *X*, is calculated as a simple summation of related indicators (death, missing people, and affected people) from national disaster loss databases divided by the global population data (from national censuses, World Bank or UN Statistical Commission information).  Where:  A2  Number of deaths attributed to disasters;  A3 Number of missing persons attributed to disasters; and  B1 Number of directly affected people attributed to disasters.  \* Detailed methodologies can be found in the Technical Guidance (see below the Reference section)  **Comments and limitations:**  The Sendai Framework Monitoring System has been developed to measure the progress in the implementation of the Sendai Framework by UNGA endorsed indicators. Member States will be able to report through the System from March 2018. The data for SDG indicators will be compiled and reported by UNISDR. | In most countries disaster data are collected by line ministries and national disaster loss databases are established and managed by special purpose agencies including national disaster management agencies, civil protection agencies, and meteorological agencies. The Sendai Framework Focal Points in each country are responsible of data reporting through the Sendai Framework Monitoring System. | National statistics offices | BBS  BDRHS | BDRHS ,BBS  DDM, MoDMR  Administrative Record | * Income: High/Medium/Low * Event (as occurred) * Hazard Type * Hazard Family: Climatological, Hydrological, Meteorological, Geophysical, Biological, Extra-Terrestrial * Disaster-Related Victims: Dead/Missed   /Directly Affected   * Location Of Residence: Urban/Rural * Age: 0-15 yrs/ 16-24 yrs/ 25-64 yrs/ 64+ yrs * Sex: Male/Female | 5-Yearly  Annual | Group 1 | 1st Round:  2014  2nd Round:  December, 2020  3rd Round:  December, 2021  4th Round:  December, 2022  5th Round:  December, 2023 | Need to modify the D-form by DDM  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as Tier II)  1.5.1/11.5.1/13.1.1 are repeats |
| 13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 | UNDRR  **Partner Agencies:**  UN-Habitat,  UNEP | Tier II | Definition:  NA  [a] An open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction established by the General Assembly (resolution 69/284) is developing a set of indicators to measure global progress in the implementation of the Sendai Framework. These indicators will eventually reflect the agreements on the Sendai Framework indicators.  Comments and limitations:  The HFA Monitor started in 2007 and over time, the number of countries reporting to UNISDR increased from 60 in 2007 to 140+ countries now undertaking voluntary self-assessment of progress in implementing the HFA. During the four reporting cycles to 2015 the HFA Monitor has generated the world’s largest repository of information on national DRR policy inter alia. Its successor, provisionally named the Sendai Monitor, is under development and will be informed by the recommendations of the OEIWG. A baseline as of 2015 is expected to be created in 2016-2017 that will facilitate reporting on progress in achieving the relevant targets of both the Sendai Framework and the SDGs.  Members of both the OEIWG and the IAEG-SDGs have addressed that indicators that simply count the number of countries are not recommended, instead that, indicators to measure progress over time have been promoted. Further to the deliberations of the OEIWG as well as the IAEG, UNISDR has proposed computation methodologies that allow the monitoring of improvement in national and local DRR strategies over time. These methodologies range from a simple quantitative assessment of the number of these strategies to a qualitative measure of alignment with the Sendai Framework, as well as population coverage for local strategies.  **Computation Method:**  Note: Computation methodology for several indicators is very comprehensive, very long (about 180 pages) and probably out of the scope of this Metadata. UNISDR prefers to refer to the outcome of the Open Ended Intergovernmental Working Group, which provides a full detailed methodology for each indicator and sub-indicator.  The latest version of these methodologies can be obtained at:  http://www.preventionweb.net/documents/oiewg/Technical%20Collection%20of%20Concept%20Notes%20on%20Indicators.pdf  A short summary:  Summation of data from National Progress Reports of the Sendai Monitor | The official counterpart(s) at the country level will provide National Progress Report of the Sendai Monitor. | The coordinating lead institution chairing the National DRR platform which is comprised of special purpose agencies including national disaster agencies, civil protection agencies, and meteorological agencies. |  | MoDMR  Administrative Data | * location: city * By Division | Triennial | Group 2 | 1st Round:  December, 2021  2nd Round:  December, 2024  3rd Round:  December, 2027  4th Round:  December, 2030 | Data availability reviewed in Oct. 2019 (classified as Tier II)  Data availability reviewed in Nov. 2017 (classified as Tier I)  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as Tier II)  1.5.3/11.b.1 are repeated |
| 13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies | UNDRR | Tier II | **Definition:**  The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted by UN Member States in March 2015 as a global policy of disaster risk reduction. One of the targets is: “Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020”.  In line with the Sendai Framework for Disaster Risk Reduction 2015-2030, disaster risk reduction strategies and policies should mainstream and integrate disaster risk reduction within and across all sectors, across different timescales and with targets, indicators and time frames. These strategies should be aimed at preventing the creation of disaster risk, the reduction of existing risk and the strengthening of economic, social, health and environmental resilience.  The open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (OIEWG) established by the General Assembly (resolution 69/284) has developed a set of indicators to measure global progress in the implementation of the Sendai Framework, which was endorsed by the UNGA (OIEWG [report A/71/644](http://www.preventionweb.net/publications/view/51748)). The relevant SDG indicators reflect the Sendai Framework indicators.  **Comments and limitations:**  The Hyogo Framework for Action Monitor (HFA Monitor) started in 2007 and over time, the number of countries reporting to UNISDR increased from 60 in 2007 to approximately 100 countries in 2015 undertaking voluntary self-assessment of progress in implementing the HFA. During the four reporting cycles the HFA Monitor has generated the world’s largest repository of information on national disaster risk reduction policy inter alia. In 2018 the Sendai Framework Monitor system will launch and all Member States are expected to report data of the previous year(s).  **Computation Method:**  Member States count the number of local governments that adopt and implement local DRR strategies in line with the national strategy and express it as a percentage of the total number of local governments in the country.  Local governments are determined by the reporting country for this indicator, considering sub-national public administrations with responsibility to develop local disaster risk reduction strategies. It is recommended that countries report on progress made by the lowest level of government accorded the mandate for disaster risk reduction, as the Sendai Framework promotes the adoption and implementation of local disaster risk reduction strategies in every local authority.  Each Member State will calculate the ratio of the number of local governments with local DRR strategies in line with national strategies and the total number of local governments.  Global Average will then be calculated as below through arithmetic average of the data from each Member State.  Further information of the methodology can be obtained in the Technical Guidance (see reference). | UNISDR conducted the *Sendai Framework Data Readiness Review* which 87 Member States responded between February and April in 2017. | National Sendai Framework Focal Points usually represent the coordinating lead institution chairing the National DRR platform which is comprised of special purpose agencies including national disaster agencies, civil protection agencies, and meteorological agencies. | (b) DDM, MoDMR  Administrative Data | (b) DDM, MoDMR  Administrative Data | By local government | Annual | Group 1 | 1st Round:  2019  2nd Round:  December, 2020  3rd Round:  December, 2021  4th Round:  December, 2022  5th Round:  December, 2023 | Reviewed at 6th IAEG-SDG meeting (classified as Tier II)  Sendai modification; Reviewed at 5th IAEG-SDG meeting (classified as TBD)  1.5.4 & 11.b.2 are repeated |
| Target 13.2 Integrate climate change measures into national policies, strategies and planning | | | | | | | | | | | | |
| 13.2.1 Number of countries with nationally determined contributions, long-term strategies, national adaptation plans, strategies as reported in adaptation communications and national communications |  | TBD | **Definitions:**  **NDCs**  The Paris Agreement requires each Party to prepare, communicate and maintain successive *nationally determined contributions (NDCs)* including mitigation, adaptation and support measures.  The Paris Agreement (Article 4, paragraph 2) requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.  Starting in 2023 and then every five years, governments will take stock of the implementation of the Agreement to assess the collective progress towards achieving the purpose of the Agreement and its long-term goals. The outcome of the global stocktake (GST) will inform the preparation of subsequent NDCs, in order to allow for increased ambition and climate action to achieve the    1 Suggest re-formulation of this indicator, as explained in my intervention at the last IAEG-SDGs meeting – ‘Number of countries with nationally determined contributions (NDCs), national adaptation plans (NAPs), longterm strategies, and adaptation communications, as reported to the UNFCCC secretariat’.  purpose of the Paris Agreement and its long-term goals. https://unfccc.int/process-andmeetings/the-paris-agreement/nationally-determined-contributions-ndcs  NDC interim registry https://www4.unfccc.int/sites/ndcstaging/Pages/Home.aspx    **NAPs**  The *national adaptation plan (NAP)* process was established under the Cancun Adaptation Framework (CAF). It enables Parties to formulate and implement *national adaptation plans (NAPs)* as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs. It is a continuous, progressive and iterative process which follows a country-driven, gender-sensitive, participatory and fully transparent approach supported by technical guidelines and up to USD 3 million per developing country through the Green Climate Fund Readiness and Preparatory Support Programme, intended to support the formulation of NAPs. Technical guidelines for the NAP process are available at <unfccc.int>; NAPs received by the UNFCCC secretariat are posted at <unfccc.int>.    **Long term strategies**  Under the Paris Agreement, all Parties should further strive to formulate and *communicate longterm low greenhouse gas emission development strategies* to provide a context and integrated longterm view to their NDCs.  In accordance with Article 4, paragraph 19, of the Paris Agreement, all Parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies, mindful of Article 2 taking into account their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.  The COP, by its decision 1/CP 21, paragraph 35, invited Parties to communicate, by 2020, to the secretariat mid-century, long-term low greenhouse gas emission development strategies in accordance with Article 4, paragraph 19, of the Agreement. Further information is available at <unfccc.int>      **Adaptation communications**  Also, each Party should, as appropriate, submit and update periodically an adaptation communication, which may include its priorities, implementation and support needs, plans and actions. The adaptation communications will be recorded in a public registry maintained by the secretariat, available at <unfccc.int>.    **National communications**  The Convention established several processes to foster transparency and accountability of countries’ actions to address climate change. Under Article 12, all Parties are asked to submit national inventories and national communications (NCs) to report on the implementation of the Convention.  This reporting is required at different levels of stringency and with varying frequency for different Parties. National Communications received by the UNFCCC secretariat are available at <unfccc.int>.  **Rationale and concepts, comments and limitations:**  Under the United Nations Framework Convention on Climate Change (UNFCCC), all Parties shall formulate, implement, publish and regularly update national/regional programmes containing measures to mitigate climate change and to facilitate adequate adaptation, while taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances. These policies and measures should be appropriate for the specific conditions of each Party and should be integrated with national development programmes.  The Convention established several processes to foster transparency and accountability of countries’ actions to address climate change.    The Paris Agreement2 builds upon the Convention and brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so, charting a new course in the global climate effort. The Paris Agreement’s central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above preindustrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change.  Materials are received from Parties on an ongoing basis.  **Computation Method:**  Count/status of plans annually in advance of preparation of SDG progress reports, based on most recent data. | Submission of documents to the UNFCCC Secretariat from Parties to the UNFCCC and Paris Agreement. | Parties to the UNFCCC |  | a) MoEFCC b) MoDMR  Administrative Data | Not Applicable | Triennial |  | 1st Round:  December, 2020  2nd Round:  December, 2023  3rd Round:  December, 2026  4th Round:  December, 2029  5th Round:  December, 2030 | UNSC 51 replacement included in the 2020 comprehensive review  Repeated 13.b.1 (with a slight amendment) |
| 13.2.2 Total greenhouse gas emissions per year |  | TBD | **Definition, rationale and concepts:**  The ultimate objective of the Climate Change Convention (UNFCCC) is to achieve the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Estimating the levels of greenhouse gas (GHG) emissions and removals is an important element of the efforts to achieve this objective.  In accordance with Articles 4 and 12 of the Climate Change Convention and the relevant decisions of the Conference of the Parties, countries that are Parties to the Convention submit national GHG inventories to the Climate Change secretariat. These submissions are made in accordance with the reporting requirements adopted under the Convention, such as the revised “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories” (decision 24/CP.19) for Annex I Parties and “Guidelines for the preparation of national communications for non-Annex I Parties” (decision 17/CP.8). The inventory data are provided in the annual GHG inventory submissions by Annex I Parties and in the national communications and biennial update reports by non-Annex I Parties.  The Paris Agreement adopted in 2015 marks the latest step in the evolution of the UN climate change regime and builds on the work undertaken under the Convention. Its central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. The Agreement also aims to strengthen the ability of countries to deal with the impacts of climate change.    GHG inventory reporting requirements: https://unfccc.int/process-and-meetings/transparency-andreporting/reporting-and-review-under-the-convention/greenhouse-gas-inventories-annex-iparties/reporting-requirements    **Comments and limitations:**  Data is limited to Parties that submit their GHG inventories. As the reporting requirements for non-Annex I Parties are not as rigid as those for Annex I Parties, information for these Parties are available usually only for selected years.    The annual timing of submission of updated inventory reports is very close to publication date of annual SDG progress reports.    **Computation Method:**  Total GHG emissions are calculated as the sum of emissions of direct GHGs: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3), measured in units of CO2-equivalent, by using a common weighting factor, the so-called Global Warming Potentials (GWP). In accordance with the latest reporting guidelines for Annex I Parties under the UNFCCC, the GWP values to be used are those for the  100-year time horizon listed in Table 2.14 of the IPCC Fourth Assessment Report  (https://www.ipcc.ch/report/ar4/wg1/). However, non-Annex I Parties should use the GWP provided in the IPCC Second Assessment Report (https://www.ipcc.ch/report/ipcc-second-assessment-full-report/) based on the effects of GHGs over a 100-year time. | Annex I GHG inventories are submitted through the CRF Reporter application. Information are automatically imported in the UNFCCC Data Warehouse.  Information for non-Annex I Parties are manually extracted from their NC and/or BUR and stored in the UNFCCC Data Warehouse using Excel import sheets. | Parties to the UNFCCC |  | a) DoE  b) UN Climate Change  [unfccc.int]  Administrati  ve Data | by Annex I and Non  Annex I  Parties to the  UNFCCC | Triennial |  | 1st Round:  December, 2020  2nd Round:  December, 2023  3rd Round:  December, 2026  4th Round:  December, 2029  5th Round:  December, 2030 | UNSC 51 addition included in the 2020 comprehensive review |
| Target 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning | | | | | | | | | | | | |
| 13.3.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment | UNESCO-UIS  **Partner Agencies:**  UNEP | Tier II | Definition:  Indicator 4.7.1/12.8.1/13.3.1 measures the extent to which countries mainstream Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) in their education systems. This is an indicator of characteristics of different aspects of education systems: education policies, curricula, teacher training and student assessment as reported by government officials, ideally following consultation with other government ministries, national human rights institutes, the education sector and civil society organizations. It measures what governments intend and not what is implemented in practice in schools and classrooms.    For each of the four components of the indicator (policies, curricula, teacher education, and student assessment), a number of criteria are measured, which are then combined to give a single score between zero and one for each component. (See methodology section for full details.)    The indicator and its methodology have been reviewed and endorsed by UNESCO’s Technical Cooperation Group on the Indicators for SDG 4-Education 2030 (TCG), which is responsible for the development and maintenance of the thematic indicator framework for the follow-up and review of SDG 4. The TCG also has an interest in education-related indicators in other SDGs, including global indicators 12.8.1 and 13.3.1. The TCG is composed of 38 regionally representative experts from UNESCO Member States (nominated by the respective geographic groups of UNESCO), as well as international partners, civil society, and the Co-Chair of the Education 2030 Steering Committee. The UNESCO Institute for Statistics acts as the Secretariat.  Concepts:  Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) nurture respect for all, build a sense of belonging to a common humanity, foster responsibility for a shared planet, and help learners become responsible and active global citizens and proactive contributors to a more peaceful, tolerant, inclusive, secure and sustainable world. They aim to empower learners of all ages to face and resolve local and global challenges and to take informed decisions and actions for environmental integrity, economic viability and a just society for present and future generations, while respecting cultural diversity.  Comments and limitations:  The indicator is based on self-reporting by government officials. However, countries will be asked to provide supporting evidence in the form of documents or links (e.g. education policies or laws, curricula, etc.) to back up their responses. In addition, UNESCO will compare responses with available information from alternative sources and, if appropriate, raise queries with national respondents. At the end of the reporting cycle, country responses and the supporting documents will be made publicly available.  Computation Method:    Information collected with the questionnaire for monitoring the implementation by UNESCO Member States of the 1974 *Recommendation concerning Education for International Understanding, Co-operation and Peace and Education relating to Human Rights and Fundamental Freedoms* will be used for the construction of the global indicator. For each of the four components of the indicator (policies, curricula, teacher education, and student assessment), a number of criteria are measured, which are then combined to give a single score between zero and one for each component. Only information for primary and secondary education will be used for calculation of indicator 4.7.1/12.8.1/13.3.1.    (a) Laws and policies    The following questions are used to calculate the policies component of the indicator:    *A2: Please indicate which GCED and ESD themes are covered in national or sub-national laws, legislation or legal frameworks on education.*  There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) and two levels of government (national and sub-national) = 16 responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = simple mean of the 0 and 1 scores, excluding not applicables (i.e., if eight of the 16 responses are ‘not applicable’, the sum of the 0 and 1 scores is divided by 8 to get the mean and not by 16).  A4. Please indicate which GCED and ESD themes are covered in national or sub-national education policies, frameworks or strategic objectives.  There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) = 8 responses.  Response categories are no = 0, yes = 1, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.  *A5. Please indicate whether national or sub-national education policies, frameworks or strategic objectives on education provide a mandate to integrate GCED and ESD.*    There are two levels of government (national, sub-national) and five areas of integration (curricula, learning objectives, textbooks, teacher education, and student assessment) = 10 responses. Response categories are no = 0, yes = 1, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = simple mean of the 0 and 1 scores, excluding not applicables (i.e., if five of the 10 responses are ‘not applicable’, the sum of the 0 and 1 scores is divided by 5 to get the mean and not by 10).    *E1. Based on your responses to questions in the previous section (laws and policies) please indicate to what extent global citizenship education (GCED) and education for sustainable development (ESD) are mainstreamed1 in education laws and policies in your country.*    There are two levels of government (national, sub-national) = 2 responses.  Response categories are not at all = 0, partially = 1, extensively = 2, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = half the simple mean of the 0, 1 and 2 scores, excluding not applicables (i.e., if one of the two responses is ‘not applicable’, the sum of the 0, 1 and 2 scores is divided by 2 to get half the mean and not by 4). The score is half the mean in order to ensure it lies between 0 and 1 as do the scores for the other three questions in this section.    Policy component score = simple mean of the scores for questions A2, A4, A5 and E1 (except where the component score should not be calculated because too many responses were unknown or blank).    (b) Curricula    The following questions are used to calculate the curricula component of the indicator:    *B2: Please indicate which GCED and ESD themes are taught as part of the curriculum.*    There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) = 8responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated. Note that responses to ‘other subjects, please specify’ in the question are ignored. If appropriate, during quality assurance answers in this category may be recoded to one of the other 12 subjects.    Question score = simple mean of the 0 and 1 scores.  *B4. Please indicate the approaches used to teach GCED and ESD in primary and secondary education.*    There are four teaching approaches (GCED/ESD as separate subjects, cross-curricular, integrated, whole school) = 4 responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank the component score is not calculated.  1  ities),    Question score = simple mean of the 0 and 1 scores.    *E1. Based on your responses to questions in the previous section (curricula) please indicate to what extent global citizenship education (GCED) and education for sustainable development (ESD) are mainstreamed2 in curricula in your country.*    There are two levels of government (national, sub-national) = 2 responses.  Response categories are not at all = 0, partially = 1, extensively = 2, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = half the simple mean of the 0, 1 and 2 scores, excluding not applicables (i.e., if one of the two responses is ‘not applicable’, the sum of the 0, 1 and 2 scores is divided by 2 to get half the mean and not by 4). The score is half the mean in order to ensure it lies between 0 and 1, as do the scores for the other three questions in this section.    Curricula component score = simple mean of the scores for questions B2, B3, B4 and E1 (except where the component score should not be calculated because too many responses were unknown or blank).    (c) Teacher education    The following questions are used to calculate the teacher education component of the indicator:    *C2: Please indicate whether teachers, trainers and educators are trained to teach GCED and ESD during initial or pre-service training and/or through continuing professional development.*  There are two types of training (initial/pre-service and continuing professional development) and two types of teachers (of selected subjects in which ESD/GCED are typically taught, and of other subjects) = 4 responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *C3. Please indicate on which GCED and ESD themes pre-service or in-service training is available for teachers, trainers and educators.*    There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) = 8 responses.  Response categories are no = 0, yes = 1 and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.  2  ities),    *C4. Please indicate whether teachers, trainers and educators are trained to teach the following dimensions of learning in GCED and ESD.*    There are four learning dimensions (knowledge, skills, values, and attitudes/behaviours) = 4 responses.  Response categories are no = 0, yes = 1, and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *C5. Please indicate whether teachers, trainers and educators are trained to use the following approaches to teach GCED and ESD in primary and secondary education*.    There are four teaching approaches (GCED/ESD as separate subjects, cross-curricular, integrated, whole school) = 4 responses.  Response categories are no = 0, yes = 1 and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *E1. Based on your responses to questions in the previous section (teacher education), please indicate to what extent global citizenship education (GCED) and education for sustainable development (ESD) are mainstreamed3 in teacher education in your country.*    There are two levels of government (national, sub-national) = 2 responses.  Response categories are not at all = 0, partially = 1, extensively = 2, unknown (treated as zero), and not applicable (which is ignored). Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = half the simple mean of the 0, 1 and 2 scores, excluding not applicables (i.e., if one of the two responses is ‘not applicable’, the sum of the 0, 1 and 2 scores is divided by 2 to get half the mean and not by 4). The score is half the mean in order to ensure it lies between 0 and 1, as do the scores for the other three questions in this section.    Teacher education component score = simple mean of the scores for questions C2, C3, C4, C5 and E1 (except where the component score should not be calculated because too many responses were unknown or blank).    (d) Student assessment    The following questions are used to calculate the student assessment component of the indicator:  *D2: Please indicate whether the GCED and ESD themes below are generally included in student assessments or examinations.*    There are eight GCED/ESD themes (cultural diversity and tolerance, gender equality, human rights, peace and non-violence, climate change, environmental sustainability, human survival and wellbeing, and sustainable consumption and production) = 8 responses.  Response categories are no = 0, yes = 1 and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *D3. Please indicate which of the dimensions of learning in GCED and ESD below are generally included in student assessments or examinations.*    There are four learning dimensions (knowledge, skills, values, and attitudes/behaviours) = 4 responses..  Response categories are no = 0, yes = 1 and unknown, which is treated as zero. Blanks are also treated as zeros.  If more than half of responses are unknown or blank, the component score is not calculated.    Question score = simple mean of the 0 and 1 scores.    *E1. Based on your responses to questions in the previous section (student assessment), please indicate to what extent global citizenship education (GCED) and education for sustainable development (ESD) are mainstreamed4 in student assessment in your country.*    There are two levels of government (national, sub-national) = 2 responses.  Response categories are not at all = 0, partially = 1, extensively = 2, unknown (treated as zero), and not applicable, which is ignored. Blanks are also treated as zeros.  If more than half of responses excluding not applicables are unknown or blank, the component score is not calculated.  Note that ‘not applicable’ is used where only one level of government is responsible for education.    Question score = half the simple mean of the 0, 1 and 2 scores, excluding not applicables (i.e., if one of the two responses is ‘not applicable’, the sum of the 0, 1 and 2 scores is divided by 2 to get half the mean and not by 4). The score is half the mean in order to ensure it lies between 0 and 1, as do the scores for the other three questions in this section.    Student assessment component score = simple mean of the scores for questions D2, D3 and E1 (except where the component score should not be calculated because too many responses were unknown or blank).    The component scores all lie between zero and one and are presented as a dashboard of four scores. They are not combined to create a single overall score for the indicator. The higher the score, the more GCED and ESD are mainstreamed in the given component. In this way, users can make a simple assessment in which component area more efforts may be needed. | Responses are submitted by national governments, typically by officials in Ministries of Education. Respondents are asked to consult widely across other government ministries, with national human rights institutes, the education sector and civil society organizations in compiling their responses. | national data providers and national statistical offices |  | NCBT  UGC  MoDMR  Administrative Data | * Climate Change Curricula | Triennial | Group 2 | 1st Round:  December, 2020  2nd Round:  December, 2023  3rd Round:  December, 2026  4th Round:  December, 2029  5th Round:  December, 2030 | UNSC 51 replacement included in the 2020 comprehensive review  4.7.1 & 12.8.1 are repeated. |
|  | Target 13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible | | | | | | | | | | | |
| 13.a.1 Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the $100 billion commitment through to 202 |  | TBD | **Definition:**  Under the UNFCCC process, the COP requested the Standing Committee on Finance to prepare a biennial assessment and overview of climate finance flows, drawing on the available sources of information, and including information on the geographical and thematic balance of flows. There is no agreed definition under the UNFCCC on what should count toward assessing progress toward the $100 billion commitment. Data from the UNFCCC secretariat refers to climate-specific financial support to developing country Parties, reported by Annex I Parties in their Biennial Reports. This data should not be interpreted as an indicator in relation to the achievement of the collective mobilization goal of $100 billion commitment.  One of the functions of the Standing Committee on Finance is to assist the COP with respect to the measurement, reporting and verification of the support provided to developing country Parties through activities such as the preparation of the BA. The COP requested the Standing Committee on Finance to prepare a biennial assessment and overview of climate finance flows, drawing on the available sources of information, and including information on the geographical and thematic balance of flows  (decision 2/CP.17 paragraph 121(f)). Subsequently, the COP requested the Standing Committee on Finance to consider:  • Relevant work by other bodies and entities on the MRV of support and the tracking of climate finance  (decision 1/CP.18 paragraph 71);  • Ways of strengthening methodologies for reporting climate finance (decision 5/CP.18 paragraph 11);  • Ongoing technical work on operational definitions of climate finance, including private finance mobilized by public interventions, to assess how adaptation and mitigation needs can most effectively be met by climate finance (decision 3/CP.19, paragraph 11).  The COP also requested the Ad Hoc Working Group on the Paris Agreement, when developing the modalities, procedures and guidelines for the transparency framework for action and support, to consider, inter alia, information in the biennial assessment and overview of climate finance flows and other reports of the SCF and other relevant bodies under the Convention (decision 1/CP.21, para 94(e)).    **Computation Method:**  There is no common agreement on how to measure progress towards the USD 100bn commitment.  Data provided reflects the reporting of financial support provided to developing countries by Annex I  Parties in the Convention in their Biennial Reports. The Biennial Assessment and Overview of Climate Finance Flows is a report prepared under the Standing Committee on Finance by the UNFCCC and includes a compilation of the data on financial support provided to developing countries by Annex I Parties. Each Party reports climate-specific finance provided and their underlying assumption and methodologies in accordance with the guidance linked below.  Methods and guidance available to countries for the compilation of the data at the national level:  Methodologies for the reporting of financial information by Parties included in Annex I of the Convention  (Decision 9/CP.21) http://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf#page=15 | Annex I Parties are requested to submit their Biennial Reports (BRs) to the UNFCCC secretariat every two years | National Governments of Annex I Parties to the UNFCCC |  | a) ERD b) MoEFCC  Administrative Data |  | Annual |  | 1st Round:  July, 2019  2nd Round:  July, 2020  3rd Round:  July, 2021  4th Round:  July, 2022  5th Round:  July, 2023 | UNSC 51 replacement included in the 2020 comprehensive review |
|  | Target 13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities | | | | | | | | | | | |
| 13.b.1 Number of least developed countries and small island developing States with nationally determined contributions long-term strategies, national adaptation plans, strategies as reported in adaptation communications and national communications |  | TBD | **Definitions:**    SIDS: http://unohrlls.org/about-sids/  LDCs: http://unohrlls.org/about-ldcs/          1 Consistent with the slight modification for accuracy, to be consistent with indicator 13.2.1, suggest reformulation of this indicator, as explained in my intervention at the last IAEG-SDGs meeting – ‘Number of least developed countries and small island developing states with nationally determined contributions (NDCs), national adaptation plans (NAPs), long-term strategies, and adaptation communications, as reported to the UNFCCC secretariat’.  NDCs  The Paris Agreement requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) including mitigation, adaptation and support measures. The Paris Agreement (Article 4, paragraph 2) requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.  Starting in 2023 and then every five years, governments will take stock of the implementation of the Agreement to assess the collective progress towards achieving the purpose of the Agreement and its long-term goals. The outcome of the global stocktake (GST) will inform the preparation of subsequent NDCs, in order to allow for increased ambition and climate action to achieve the purpose of the Paris Agreement and its long-term goals. https://unfccc.int/process-andmeetings/the-paris-agreement/nationally-determined-contributions-ndcs  NDC interim registry https://www4.unfccc.int/sites/ndcstaging/Pages/Home.aspx    NAPs  The national adaptation plan (NAP) process was established under the Cancun Adaptation Framework (CAF). It enables Parties to formulate and implement national adaptation plans (NAPs) as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs. It is a continuous, progressive and iterative process which follows a country-driven, gender-sensitive, participatory and fully transparent approach supported by technical guidelines and up to USD 3 million per developing country through the Green Climate Fund Readiness and Preparatory Support Programme, intended to support the formulation of NAPs. Technical guidelines for the NAP process are available at <unfccc.int>; NAPs received by the UNFCCC secretariat are posted at <unfccc.int>.    Long term strategies  Under the Paris Agreement, all Parties should further strive to formulate and communicate longterm low greenhouse gas emission development strategies to provide a context and integrated longterm view to their NDCs.  In accordance with Article 4, paragraph 19, of the Paris Agreement, all Parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies, mindful of Article 2 taking into account their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.  The COP, by its decision 1/CP 21, paragraph 35, invited Parties to communicate, by 2020, to the secretariat mid-century, long-term low greenhouse gas emission development strategies in accordance with Article 4, paragraph 19, of the Agreement. Further information is available at <unfccc.int>    Adaptation communications  Also, each Party should, as appropriate, submit and update periodically an adaptation communication, which may include its priorities, implementation and support needs, plans and actions. The adaptation communications will be recorded in a public registry maintained by the secretariat, available at <unfccc.int>.  National communications  The Convention established several processes to foster transparency and accountability of countries’ actions to address climate change. Under Article 12, all Parties are asked to submit national inventories and national communications (NCs) to report on the implementation of the Convention.  This reporting is required at different levels of stringency and with varying frequency for different Parties. National Communications received by the UNFCCC secretariat are available at <unfccc.int>.  Rationale and concepts, comments and limitations:  Under the United Nations Framework Convention on Climate Change (UNFCCC), all Parties shall formulate, implement, publish and regularly update national/regional programmes containing measures to mitigate climate change and to facilitate adequate adaptation, while taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances. These policies and measures should be appropriate for the specific conditions of each Party and should be integrated with national development programmes.  The Convention established several processes to foster transparency and accountability of countries’ actions to address climate change.    The Paris Agreement2 builds upon the Convention and brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so, charting a new course in the global climate effort. The Paris Agreement’s central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above preindustrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change.  Materials are received from Parties on an ongoing basis.  Computation Method:  Count/status of plans annually in advance of preparation of SDG progress reports, based on most recent data for SIDS and LDCs. | Submission of documents to the UNFCCC Secretariat from Parties to the UNFCCC and Paris Agreement.  1.  NAP Central and Adaptation Registries under the UNFCCC.  2.  Least Developed Countries Expert Group yearly reports | Parties to the UNFCCC |  | a) MoEFCC  b) MoDMR  Administrative Data | * Lcds/ SIDS * Sex: Male/Female * Age : 0-15, 16-24, 25-64, 65 and above * Community | Annual |  | 1st Round:  July, 2019  2nd Round:  July, 2020  3rd Round:  July, 2021  4th Round:  July, 2022  5th Round:  July, 2023 | UNSC 51 replacement included in the 2020 comprehensive review  Repeated 13.2.1 (with a slight amendment) |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

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|  | Conserve and sustainably use the oceans, seas and marine resources for sustainable development |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier**  **Classifi**  **-cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
|  | Target 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution | | | | | | | | | | | |
| 14.1.1 (a) Index of coastal eutrophication; and (b) plastic debris density | UNEP  **Partner Agencies:**  IOC-UNESCO,  IMO,  FAO | Tier II | **Definition:**  The indicator includes 14.1.1a Index of coastal eutrophication (ICEP) and 14.1.1b Plastic debris density. SDG 14.1.1a and SDG 14.1.1b will described as two indicators. Across the 14.1.1a and 14.1.1b, two levels are proposed:  Level 1: Globally available data from earth observations and modelling  Level 2: National data which will be collected from countries (through the relevant Regional Seas Programme, where applicable (i.e. for countries that are a member of a Regional Seas Programme)  Level 3: Additional indicators which are suggested that countries might consider collecting (these are not discussed in this document)  The below tables demonstrate the proposed parameters for SDG Target 14.1.1a and 14.1.1b.  *Table 1: Monitoring parameters for eutrophication to track progress against SDG Indicator 14.1.1a.*   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Monitoring parameters | Level 1 | Level 2 | Level 3 | Reporting Frequency | | Indicator for Coastal Eutrophication Potential (N and P loading) | X |  |  | Five years | | Chlorophyll-a deviations (remote sensing) | X |  |  | Annual | | Chlorophyll-a concentration (*remote sensing and in situ*) |  | X |  | 4 years (aligned with Regional Seas) | | National modelling of indicator for Coastal Eutrophication Potential (ICEP) |  | X |  | | Total Nitrogen of DIN (dissolved inorganic nitrogen) |  | X |  | | Total Phosphorus or DIP (dissolved inorganic phosphorus) |  | X |  | | Total silica |  | X |  | | Dissolved oxygen |  |  | X | NA | | Biological/chemical oxygen demand (BOD/COD) |  |  | X | NA | | Total organic carbon (TOC) |  |  | X | NA | | Turbidity (remote sensing) |  |  | X | NA | | River parameters from SDG 6.3.2 |  |  | X | NA | | Other water parameters (O2 % saturation, Secchi depth, river discharge, salinity, temperature, pH, alkalinity, organic carbon, toxic metals, persistent organic pollutants) |  |  | X | NA | | Microalgal growth, harmful algal blooms, submerged aquatic vegetation coverage, biodiversity and hypoxia |  |  | X | NA |   *Table 2: Monitoring parameters for marine plastic litter to track progress against SDG Indicator 14.1.1b.*   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Monitoring parameters (and methods)** | **Level 1** | **Level 2** | **Level 3** | **Reporting Frequency** | | Plastic patches greater than 10 meters\* | X |  |  | Annual | | Beach litter originating from national land-based sources | X |  |  | Two years | | Beach litter (beach surveys) |  | X |  | 4 years (aligned with Regional Seas) | | Floating plastics (visual observation, manta trawls) |  | X |  | | Water column plastics (demersal trawls) |  | X |  | | Seafloor litter (benthic trawls (e.g. fish survey trawls), divers, video/camera tows, submersibles, remotely operated vehicles) |  | X |  | | Beach litter microplastics (beach samples) |  |  | X |  | | Floating microplastics (manta trawls, e.g. Continuous Plankton Recorder) |  |  | X |  | | Water column microplastics (demersal plankton trawls) |  |  | X |  | | Seafloor litter microplastics (sediment samples) |  |  | X |  | | Plastic ingestion by biota (e.g. birds, turtles, fish) |  |  | X |  | | Plastic litter in nests |  |  | X |  | | Entanglement (e.g. marine mammals, birds) |  |  | X |  | | Plastic pollution potential (based on the use and landfilling of plastics) |  |  | X |  | | River litter |  |  | X |  | | Other parameters related to plastic consumption and recycling |  |  | X |  | | Health indicators (human health and ecosystem health) |  |  | X |  |   A full methodology for this indicator is available in the document entitled, “Global Manual on Ocean Statistics for Measuring SDG 14.1.1, 14.2.1 and 14.5.1”.  **Concepts:**  Eutrophication – excess nutrient loading into coastal environments from anthropogenic sources, resulting in excessive growth of plants, algae and phytoplankton.  Coastal Zone – national Exclusive Economic Zone (EEZ) (200 nautical miles from the coast) as outlined by the United Nations Convention on the Law of the Sea.  Marine litter - any persistent, manufactured or processed solid material which is lost or discarded and ends up in the marine and coastal environment.  **Comments and limitations:**  This methodology mobilizes the collection of widely available earth observation data and other data sources which will be validated by countries. The methodologies used to generate this data are technical in nature. The methodology employs internationally recognized methods, from expert communities such as the Group on Earth Observation (GEO) and international space agencies and technical experts. There is a need to provide training on these indicators over time.    The Indicator is designed in a way to generate data to allow informed decision making towards identifying the state of pollution and pollution flows in oceans. It is assumed that countries would use the data to actively make decisions, but as oceans are transboundary, it makes this decision-making complex. Additionally, there is a need to consider data on pollution generation and waste in conjunction with these indicators.  **Computation Method**  A full methodology for this indicator is available in the document entitled, “Global Manual on Ocean Statistics for Measuring SDG 14.1.1, 14.2.1 and 14.5.1”.  **For 14.1.1a:**  ***Level 1: Indicator for coastal eutrophication potential***  The indicator for coastal eutrophication potential (ICEP), is based on loads and ratios of nitrogen, phosphorus and silica delivered by rivers to coastal waters. This indicator assumes that excess nitrogen or phosphorus relative to silica will result in increased growth of potentially harmful algae (ICEP>0). This indicator is based on loads and ratios of nitrogen, phosphorous and silica delivered by rivers to coastal waters (Garnier et al. 2010) which contribute to the ICEP. The basis for these loads is collected from land-based assessments of land use including fertilizer use, population density, socioeconomic factors and other contributors to nutrient pollution runoff. Given the land-based nature of the indicator, it provides a modelled number indicating the risk of coastal eutrophication at a specific river mouthn. The indicator can be further developed by incorporating in situ monitoring to evaluate the dispersion of concentrations of nitrogen, phosphorous and silica to ground-truth the index. The indicator assumes that excess concentrations of nitrogen or phosphorus relative to silica will result in increased growth of potentially harmful algae (ICEP>0). ICEP is expressed in kilograms of carbon (from algae biomass) per square kilometre of river basin area per day (kg C km-2 day-1).  The ICEP model is calculated using one of two equations depending on whether nitrogen or phosphorus is limiting. The equations (Billen and Garnier 2007) are  ICEP (N limiting) = [NFlx/(14\*16)-SiFlx/(28\*20)]\*106\*12  ICEP (P limiting) = [PFlx/31 – SiFlx/(28\*20)]\*106\*12  Where PFlx, NFlx and SiFlx are respectively the mean specific values of total nitrogen, total phosphorus and dissolved silica delivered at the mouth of the river basin, expressed in kg P km-2 day-1, in kg N km-2 day-1 and in kg Si km-2 day-1.  ***Level 1: Chlorophyll-A deviation modelling***  Satellite-based assessments of ocean colour began in 1978 with the launch of the Coastal Zone Color Scanner (CZCS) aboard the NASA Nimbus 7 satellite. Following a decade long break in observations, there has been continuous satellite ocean colour since 1997 with SeaWiFS, followed by MERIS, MODIS (Terra, Aqua), VIIRS (NPP, N20) and now OLCI (S3-A, S3-B). Data gaps from individual sensors are common due to revisit cycles, cloud cover, and spurious retrievals resulting from a host of confounding atmospheric and aquatic conditions. This issue has been addressed by combining data from multiple sensors and creating a consistent, merged ocean colour product (e.g., chlorophyll-a). The ESA Ocean Colour CCI (OC\_CCI) project, led by the Plymouth Marine Laboratory (PML), has produced a consistent, merged chlorophyll-a product from SeaWiFS, MODIS, MERIS and VIIRS, spanning 1997 to 2018 (Sathyendranath et al., 2018). A merged multi-sensor product will be updated in both time and with data from additional sensors (e.g., OLCI) under a forthcoming EUMETSAT initiative that will continue the time series on an operational basis.    For SDG 14.1.1a, Chlorophyll-a (4 km resolution, monthly products) will be derived from the OC-CCI project is generated for each individual pixel within a country’s Coastal Zone. For generation of a climatological baseline, results are averaged by month over the time period of 2000 – 2004. The deviation will be calculated by pixel and deamed a high deviation if the magnitude is more than 50% and as an extreme deviation at more than 100%. UN Environment and GEO BluePlanet are working to produce both a high deviation and extreme deviation map. For the purpose of the SDG 14.1.1, the 50% threshold in the high deviation will be used to calculate the percentage of the national EEZ with a deviation by month. The annual average of these monthly figures will also be provided. Data on the daily anomaly rate will also be made available.  ***Level 2: In situ monitoring of nutrients***  Where national capacity to do so exists, national level measurements of Chlorophyll-a and other parameters (including nitrogen, phosphate and silica) (in situ or from remote sensing), should be used to complement and ground truth global remote sensing and modelled data and enable a more detailed assessment of eutrophication. In particular, monitoring of supplementary eutrophication parameters is advisable to determine whether an increase in Chlorophyll-a concentration is directly linked to an anthropogenic increase in nutrients. Please refer to Table 2 for parameters for monitoring eutrophication at the national level (Level 2).  ***Level 2: National ICEP modelling***  Existing ICEP modelling at the national level is limited, but could be further developed following the model of a current study analysing basin level data in Chinese rivers (Strokal et al 2016). The study utilises Global NEWS – 2 (Nutrient Export from WaterSheds) and NUtrient flows in Food chains, Environment and Resources use (NUFER) as models. The Global NEWS-2 model is basin-scale and quantifies river export of various nutrients (nitrogen, phorsphorus, carbon and silca) in multiple forms (dissolved inorganic, dissolved organic and particulate) as functions of human activities on land and basin characteristics (Strokal et al 2016). Furthermore, the model shows past and future trends.  **For 14.1.1b:**  **Level 1: Plastic patches greater than 10 meters**  Satellite-based global data products make up the statistics for this indicator. NASA and ESA both contribute satellite images to construct information on the plastic patches greater than 10 meters throughout the world’s oceans. Multi-spectral satellite remote sensing of plastic in the water column is currently only possible for larger elements (more than 10m) and under good atmospheric conditions (no clouds). This data is being produced in collaboration with ESA and NASA.  **Level 1: Beach litter originating from national land-based sources**  Modelling of litter movement through the oceans occurs through numerical models using inputs including ocean flow and marine plastic litter characteristics. UN Environment has produced a global model of marine litter using OceanParcels v2.0, a state-of-the-art Lagrangian Ocean analysis framework to create customizable particle tracking simulation using outputs from ocean circulation models.  This model was used to estimate where plastics that would be found on the coast likely originated from. As a simple example, for Kenya, based on this model, of the plastic which ends up on Kenya’s beaches, 11% likely originated from Kenya, 60% likely came from countries in Africa and 29% likely came from outside the region. This model can be produced annually and updated as better waste emissions data becomes available for countries.  **Level 2: Beach litter, plastic in the sea column and floating plastic and plastic on the sea floor (average count of plastic items per km2)**  The details for collecting data for beach litter, plastic in the sea column and floating plastic and plastic on the sea floor are in the global manual and in the GESAMP Guidelines (GESAMP 2019). Beach litter is the most available type of data at the national level. National efforts to collect data on beach litter can be supported by campaigns to engage members of the public as volunteers in beach clean-ups (see for example the Ocean Conservancy’s International Coastal Clean-up (ICC) initiative ) or citizen science programmes (see for example NOAA’s Marine Debris Monitoring and Assessment Citizen Science Project). Specific instructions on how to conduct citizen science beach surveys are included in the GESAMP Guidelines (GESAMP 2019). Beyond the tools used to conduct beach litter monitoring, it is important to consider the timing of surveys in order to properly plan effective surveys. The GESAMP Guidelines explain two main types of surveying beaches including rapid assessment surveys and routine shoreline monitoring. Rapid assessment surveys are best conducted in response to natural disasters, to build a baseline for future surveys and/or to identify beach litter hotspots. (see: <https://environmentlive.unep.org/media/docs/marine_plastics/une_science_dvision_gesamp_reports.pdf>).  The average count of plastic items can be computed for each area sampled. A geospatial model is recommended in order to estimate the density across the coastline and to establish a national average. | Regional Seas Programmes | National Statistical Systems through the Regional Seas | a) | a) DoE, MoEFCC b) MoST c) BN, MoD  Administrative Data | Geospatial  disaggragation in  Sub Basin Level | Triennial | Group 2 | 1st Round:  December,  2020  2nd Round:  December,  2023  3rd Round:  December,  2026  4th Round:  December,  2029  5th Round:  December,  2030 | Refinement of the indicator name approved by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) on 13 March and 2 April 2020. Final approval pending the 52nd session of the Statistical Commission in March 2021  UNSC 51 refinement  Reviewed at 10th IAEG-SDG meeting  (classified as Tier II)  Refinement of the indicator name approved by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) on 13 March and 2 April 2020. Final approval pending the 52nd session of the Statistical Commission in March 2021  UNSC 51 refinement  Reviewed at 10th IAEG-SDG meeting  (classified as Tier II) |
| Target 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans | | | | | | | | | | | | |
| 14.2.1 Number of countries using ecosystem-based approaches to managing marine areas | UNEP  **Partner Agencies:**  IOC-UNESCO,  FAO | Tier II | **Definition:**  Regional Seas Coordinated Indicator 22 ‘Integrated Coastal Zone Management (ICZM) is proposed as the primary indicator. For countries with Marine/Maritime Spatial Planning (MSP) in place, these plans can be helpful to assess ICZM. For other countries, it is important to identify ways to measure existing plans and to build capacity for integrated planning. All data for this indicator will be based on country submissions to the Regional Seas Programme.  In order to promote the use of the Regional Seas as part of the follow-up and review mechanism for the Regional Seas, UNEP drafted report on how Regional Seas data could be directly used for the SDGs (see <https://wedocs.unep.org/bitstream/handle/20.500.11822/27295/ocean_SDG.pdf?sequence=1&isAllowed=y>).  A full methodology for this indicator is available in the document entitled, “Global Manual on Ocean Statistics for Measuring SDG 14.1.1, 14.2.1 and 14.5.1”.  **Concepts:**  ICZM – An Integrated Coastal Zone Management (ICZM) plan covers the entire coastal zone. Marine and terrestrial areas are managed together. Plans are developed through coordination across different marine and terrestrial institutions and agencies.  Marine Spatial Planning (MSP) – Marine Spatial Planning is focused on the EEZ. It the integrates the needs and policies of multiple marine sectors in one coherent planning framework.  EEZ - national Exclusive Economic Zone (EEZ) (200 nautical miles from the coast) as outlined by the United Nations Convention on the Law of the Sea.  **Comments and limitations:**  The Indicator only measures the policy formulation and not policy implementation.  **Computation Method**  A full methodology for this indicator is available in the document entitled, “Global Manual on Ocean Statistics for Measuring SDG 14.1.1, 14.2.1 and 14.5.1”.  Regional Seas Coordinated Indicator 22 ‘Integrated Coastal Zone Management (ICZM) is proposed as the primary indicator. For countries with Marine/Maritime Spatial Planning (MSP) in place, these plans can be helpful to assess ICZM. For other countries, it is important to identify ways to measure existing plans and to build capacity for integrated planning. All data for this indicator will be based on country submissions to the Regional Seas Programme.  This indicator will measure the number of countries using ecosystem-based approaches to manage marine areas (measured through ICZM (Integrated Coastal Zone Management), marine spatial plan or other area-based, integrated planning and management in place.  Step one  Identify national authorities/agencies/organisations responsible for coastal and marine/maritime planning and management.  Step two  Identify and spatially map the boundaries of ICZM plans or other plans at national, sub-national and local level. Coordinate with the national authorities/agencies/organisations responsible for coastal and marine/maritime planning and management to complete a questionnaire on the ICZM plans (Shipman and Petit 2014)).  Step three  Determine the status of implementation of each plan, and categorise the spatial map according to implementation stages:  1) Initial plan preparation  2) Plan development  3) Plan adoption/designation  4) Implementation and adaptive management  Collect the questionnaire responses and document the answers is recommended. The spatial map showing the boundaries of relevant plans (produced in step two) could also be used to calculate the proportion of national waters, or national exclusive economic zone, covered by relevant plans. This can be done by overlaying the spatial layer of relevant plans with a spatial layer of national waters, or of the exclusive economic zone, to identify where the two layers coincide.  All countries should report on if a plan is in place. | Regional Seas Programmes | National Statistical Systems through the Regional Seas | a | a) DoF, MoFL b) BFD, MoEFCC  c) DoE, MoEFCC  Administrative Data | Geospatial | Triennial | Group 2 | 1st Round:  December,  2020  2nd Round:  December 2023  3rd Round:  December 2026  4th Round:  December 2029  5th Round:  December 2030 | UNSC 51 refinement  Reviewed at 10th IAEG-SDG meeting  (classified as Tier II) |
|  | Target 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels | | | | | | | | | | | |
| 14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations | IOC-UNESCO  **Partner Agencies:**  UNEP | Tier II | **Definition:**  Ocean acidification is the reduction in the pH of the ocean over an extended period, typically of decades or longer, which is caused primarily by the uptake of carbon dioxide from the atmosphere[[23]](#footnote-24).  This indicator is based on observations that constrain the ocean carbon system and which are required to describe the variability of ocean acidity. The carbon system in this context mainly refers to the four measureable parameters: pH (the concentration of hydrogen ions on a logarithmic scale), DIC (CT; total dissolved inorganic carbon), *p*CO2 (carbon dioxide partial pressure), and TA (AT, total alkalinity). Average, as used here, is the equally weighed annual mean.  A agreed suite of representative sampling stations are sites that have a measurement frequency that is adequate for describing variability and trends in carbonate chemistry in order to deliver critical information on the exposure of and impacts on marine systems to ocean acidification, and which provide data of sufficient quality and with comprehensive metadata information to enable integration with data from other sites in the country.  **Concepts:**  Ocean acidification is caused by an increase in the amount of dissolved atmospheric CO2 in the seawater. The average marine acidity is expressed as pH, the concentration of hydrogen ions on a logarithmic scale. In order to be able to constrain the carbonate chemistry of seawater, it is necessary to measure at least two of the four parameters, i.e. pH, *p*CO2, DIC (CT), and TA (AT). pH (the concentration of hydrogen ions on a logarithmic scale, expressed on total scale), DIC (total dissolved inorganic carbon, in μmol kg-1), *p*CO2 (carbon dioxide partial pressure, in ppt or μatm), and TA (AT, total alkalinity, in μmol kg-1).  **Comments and limitations:**  The methodology for this indicator has been developed with the technical support of experts in the field of ocean acidification. It provides globally accepted and adapted guidelines and best practices established by scientists and published in peer-reviewed literature.  As this is a highly complex indicator, the technical infrastructure necessary for the correct measurement is a potentially constraining factor. The Methodology for the indicator describes how to avoid comparability issues of the data, which have been problematic in the past, measurement errors and advises on the most appropriate technical and methodological procedures to guarantee high-quality data that can be used for the global assessment of ocean acidification. The addition of metadata to the methodology for this indicator is crucial for adding traceability and transparency to the data, by providing information on the precise equipment and methodology used, as well as specifying the location, accompanying biogeochemical variables and the person taking the measurement.  Methodology  ***Detailed information in Attachment I IOC/EC-LI/2 Annex 6***  **Computation Method:**  This indicator calls for the collection of multiple observations, in the form of individual data points, to capture the variability in ocean acidity. Individual data points for pH either are measured directly or can be calculated based on data for two of the other carbonate chemistry parameters, these being TA (AT), DIC (CT) and *p*CO2. Calculation tools developed by experts in the field are freely available, and they are introduced and linked in the methodology. Average pH is defined as the annual equally weighed mean of multiple data points at representative sampling stations. The exact number of samples and data points depends on the level of variability of ocean acidity at the site in question. The minimum number of samples should enable the characterisation of a seasonal cycle at the site. Detailed guidelines on the minimum number of observations required are provided in the Methodology. In addition to the data value, standard deviation and the total range (minimum and maximum values measured), as well as underlying data used to provide traceability and transparency (metadata information) should be reported. If historical data is available, this should be released to enable calculations about the rate of change and to compare natural variability and anthropogenic effects. | (I) Counterparts  (II) Validation and consultation process | National Statistical Offices (NSOs),  IOC national focal points  NODCs  international data centres and data providers |  | DoE  MoEFCC  Administrative Data/Survey | Not Applicable | Triennial | Group 2 | 1st Round:  December,  2019  2nd Round:  December 2022  3rd Round:  December 2025  4th Round:  December 2028  5th Round:  December 2030 | Reviewed at 8th IAEG-SDG meeting (classified as Tier II) |
| 14.4.1 Proportion of fish stocks within biologically sustainable levels | FAO | Tier I | **Definition:**  The indicator Proportion of fish stocks within biologically sustainable levels measures the sustainability of the world's marine capture fisheries by their abundance. A fish stock of which abundance is at or greater than the level, that can produce the maximum sustainable yield (MSY) is classified as biologically sustainable. In contrast, when abundance falls below the MSY level, the stock is considered biologically unsustainable.  **Concepts:**  Fish stock assessment science defines the long term sustainability of fish resources as their abundance is fished at the level that produces the maximum sustainable level. The basic benchmarks for the sustainability of fisheries are set by the UN Convention on the Law of the Sea (UNCLOS, Article 61(3)).  **Comments and limitations:**  The indicator measures the sustainability of fishery resources very well, and is an end-result measure of Target 14.2. However, its derivation is not only data hungry, but also technically demanding as it needs stock assessment. This is also the reason why there is nodata at country level.  **Computation Method:**  Fishery sustainability is defined based on stock abundance. To know stock abundance, one needs to carry out stock assessment that uses fish catch statistics, fishing effort data and biological information and fit the data to a population dynamics model. After completing stock assessment for all stocks concerned, fish stocks that have abundance at or above the level associated with the maximum sustainable yield are counted as biologically sustainable, and otherwise are considered as overfished. | Stock assessment | FAO |  | a) DoF, MOFL  b) FAO  Administrative Data/Survey | Not Applicable | Annual | Group 2 | 1st Round:  July, 2019  2nd Round:  July, 2020  3rd Round:  July, 2021  4th Round:  July, 2022  5th Round:  July, 2023 |  |
| Target 14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics | | | | | | | | | | | | |
| 14.5.1 Coverage of protected areas in relation to marine areas | UNEP-WCMC,  UNEP,  IUCN  **Partner Agencies:**  Ramsar | Tier I | **Definition:**  The indicator Coverage of protected areas in relation to marine areas shows temporal trends in the mean percentage of each important site for marine biodiversity (i.e., those that contribute significantly to the global persistence of biodiversity) that is covered by designated protected areas.  **Concepts:**  Protected areas, as defined by the International Union for Conservation of Nature (IUCN; Dudley 2008), are clearly defined geographical spaces, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. Importantly, a variety of specific management objectives are recognised within this definition, spanning conservation, restoration, and sustainable use:  - Category Ia: Strict nature reserve  - Category Ib: Wilderness area  - Category II: National park  - Category III: Natural monument or feature  - Category IV: Habitat/species management area  - Category V: Protected landscape/seascape  - Category VI: Protected area with sustainable use of natural resources  The status "designated" is attributed to a protected area when the corresponding authority, according to national legislation or common practice (e.g., by means of an executive decree or the like), officially endorses a document of designation. The designation must be made for the purpose of biodiversity conservation, not de facto protection arising because of some other activity (e.g., military).  Sites contributing significantly to the global persistence of biodiversity are identified following globally standard criteria for the identification of Key Biodiversity Areas (IUCN 2016) applied at national levels. Two variants of these standard criteria have been applied in all countries to date. The first is for the identification of Important Bird & Biodiversity Areas, that is, sites contributing significantly to the global persistence of biodiversity, identified using data on birds, of which >12,000 sites in total have been identified from all of the world’s countries (BirdLife International 2014). The second is for the identification of Alliance for Zero Extinction sites (Ricketts et al. 2005), that is, sites holding effectively the entire population of at least one species assessed as Critically Endangered or Endangered on the IUCN Red List of Threatened Species. In total, 587 Alliance for Zero Extinction sites have been identified for 920 species of mammals, birds, amphibians, reptiles, conifers, and reef-building corals. A global standard for the identification of Key Biodiversity Areas unifying these approaches along with other mechanisms for identification of important sites for other species and ecosystems was approved by IUCN (2016).  **Comments and limitations:**  Quality control criteria are applied to ensure consistency and comparability of the data in the World Database on Protected Areas. New data are validated at UNEP-WCMC through a number of tools and translated into the standard data structure of the World Database on Protected Areas. Discrepancies between the data in the World Database on Protected Areas and new data are minimised by provision of a manual (UNEP-WCMC 2016) and resolved in communication with data providers. Similar processes apply for the incorporation of data into the World Database of Key Biodiversity Areas.  The indicator does not measure the effectiveness of protected areas in reducing biodiversity loss, which ultimately depends on a range of management and enforcement factors not covered by the indicator. A number of initiatives are underway to address this limitation. Most notably, numerous mechanisms have been developed for assessment of protected area management, which can be synthesised into an indicator (Leverington et al. 2010). This is used by the Biodiversity Indicators Partnership as a complementary indicator of progress towards Aichi Biodiversity Target 11  (http://www.bipindicators.net/pamanagement). However, there may be little relationship between these measures and protected area outcomes (Nolte & Agrawal 2013). More recently, approaches to “green listing” have started to be developed, to incorporate both management effectiveness and the outcomes of protected areas, and these are likely to become progressively important as they are tested and applied more broadly.  Data and knowledge gaps can arise due to difficulties in determining whether a site conforms to the IUCN definition of a protected area, and some protected areas are not assigned management categories. Moreover, “other effective area-based conservation measures”, as specified by Aichi Biodiversity Target  11 of the Strategic Plan for Biodiversity 2011–2020, recognise that some sites beyond the formal protected area network, while not managed primarily for nature conservation, may nevertheless be managed in ways which are consistent with the persistence of the biodiversity for which they are important (Jonas et al. 2014). However, standard approaches to documentation of “other effective area-based conservation measures” are still under debate through the IUCN Task Force on Other Effective Areas Based Conservation Measures which will conclude with recommendations for a definition on OECMs. Once defined it is likely OEMCs will be documented in the World Database on Protected Areas.  Regarding important sites, the biggest limitation is that site identification to date has focused on specific subsets of biodiversity, for example birds (for Important Bird and Biodiversity Areas) and highly threatened species (for Alliance for Zero Extinction sites). While Important Bird and Biodiversity Areas have been documented to be good surrogates for biodiversity more generally (Brooks et al. 2001, Pain et al. 2005), the application of the unified standard for identification of Key Biodiversity Areas (IUCN 2016) sites across different levels of biodiversity (genes, species, ecosystems) and different taxonomic groups remains a high priority, building from efforts to date (Eken et al. 2004, Knight et al. 2007, Langhammer et al. 2007, Foster et al. 2012).  Key Biodiversity Area identification has been validated for a number of countries and regions where comprehensive biodiversity data allow formal calculation of the site importance (or “irreplaceability”) using systematic conservation planning techniques (Di Marco et al. 2016, Montesino Pouzols et al. 2014).  Future developments of the indicator will include: a) expansion of the taxonomic coverage of marine Key Biodiversity Areas through application of the Key Biodiversity Areas standard (IUCN 2016) to a wide variety of marine vertebrates, invertebrates, plants and ecosystem type; b) improvements in the data on protected areas by continuing to increase the proportion of sites with documented dates of designation and with digitised boundary polygons (rather than coordinates); and c) exploring other methods for assessing and presenting temporal trends in protected area coverage.  **Computation Method:**  This indicator is calculated from data derived from a spatial overlap between digital polygons for protected areas from the World Database on Protected Areas (IUCN & UNEP-WCMC 2017) and digital polygons for marine Key Biodiversity Areas (from the World Database of Key Biodiversity Areas, including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites, and other Key Biodiversity Areas; available through the [Integrated Biodiversity Assessment Tool](https://www.ibat-alliance.org/ibat-conservation/login)). The value of the indicator at a given point in time, based on data on the year of protected area establishment recorded in the World Database on Protected Areas, is computed as the mean percentage of each Key Biodiversity Area currently recognised that is covered by protected areas.  Year of protected area establishment is unknown for 12% of protected areas in the World Database on Protected Areas, generating uncertainty around changing protected area coverage over time. To reflect this uncertainty, a year was randomly assigned from another protected area within the same country, and then this procedure repeated 1,000 times, with the median plotted. In 2017 we slightly changed the methods described by Butchart et al. (2012, 2015) by randomly assigning a year to protected areas with no year of establishment before calculating trends in coverage. This is a computationally more efficient method and is likely to reflect more accurately changes in protected area coverage over time.  Previously the indicator was presented as the percentage of Key Biodiversity Areas completely covered by protected areas. However, it is now presented as the mean % of each Key Biodiversity Area that is covered by protected areas in order to better reflect trends in protected area coverage for countries or regions with few or no Key Biodiversity Areas that are completely covered. | UNEP-WCMC produces the UN List of Protected Areas every 5–10 years, based on information provided by national ministries/agencies. | Ministries of environment and other ministries responsible for the designation and maintenance of protected areas. | BFD, MoEFCC  Administrative Data | a) DoE, MoEFCC b) BFD, MoEFCC c) DoF, MoFL  Administrative Data | * material follow categories: biomass, fossil fuels, metal ores, non-metallic minerals at highest disaggregation level; DMC: 11 categories; DE: 44 categories * ecosystem type: marine, terrestrial, freshwater * protected area management category: categories I-VI | Triennial | Group 1 | 1st Round:  2015  2nd Round:  December,  2020  3rd Round:  December,  2023  4th Round:  December,  2026  5th Round:  December,  2029 |  |
| Target 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information | | | | | | | | | | | | |
| 14.6.1 Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing | FAO | Tier I | **Definition:**  Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing.  **Concepts:**  The definitions and concepts associated with the indicator and utilized in the methodology are defined in the FAO term portal: http://www.fao.org/faoterm/collection/fisheries/en/  This indicator is based on a country’s implementation of the different international instruments that combat illegal, unreported and unregulated fishing (IUU fishing). IUU fishing undermines national and regional efforts to conserve and manage fish stocks and, as a consequence, inhibits progress towards achieving the goals of long-term sustainability and responsibility as set forth in, inter alia, Chapter 17 of Agenda 21 and the 1995 FAO Code of Conduct for Responsible Fisheries. Moreover, IUU fishing greatly disadvantages and discriminates against those fishers that act responsibly, honestly and in accordance with the terms of their fishing authorizations. This is a compelling reason why IUU fishing must be dealt with expeditiously and in a transparent manner. If IUU fishing is not curbed, and if IUU fishers target vulnerable stocks that are subject to strict management controls or moratoria, efforts to rebuild those stocks to healthy levels will not be achieved. To efficiently curb the IUU fishing a number of different international instruments have been developed over the years that focus on the implementation of the different responsibilities of States.  The instruments covered by this indicator and their role in combatting IUU fishing are as follows:   * **The 1982 United Nations Convention on the Law of the Sea (UNCLOS)**   This instrument is the basis upon which all the subsequent instruments are built upon. UNCLOS defines the rights and responsibilities of nations with respect to their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources. It is a binding instrument, although its principles may also be applied by countries who are not party to it.   * **The Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement)**   The UN Fish Stocks Agreement entered into force on 11 December 2001, and is the most comprehensive of the binding international instruments in defining the role of Regional Fisheries Management Organisations and elaborating measures that could be taken in relation to IUU fishing activities. Although the UN Fish Stocks Agreement applies primarily to the highly migratory and straddling fish stocks on the high seas, its broad acceptance and application is evidenced by the reinforcement of other international instruments, implementation at the regional level, and to some extent by State practice within areas of national jurisdiction.   * **The International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU)**   The objective of the IPOA is to prevent, deter and eliminate IUU fishing by providing all States with comprehensive, effective and transparent measures by which to act, including through appropriate regional fisheries management organizations established in accordance with international law. This instrument covers all the aspects of a State’s responsibilities including, flag State responsibilities, coastal State measures, port State measures, internationally agreed market-related measures, research and regional fisheries management organizations.   * **The 2009 FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA)**   The FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing entered into force on the 5th of June 2016. The main purpose of the Agreement is to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing through the implementation of robust port State measures. The Agreement envisages that parties, in their capacities as port States, will apply the Agreement in an effective manner to foreign vessels when seeking entry to ports or while they are in port. The application of the measures set out in the Agreement will, inter alia, contribute to harmonized port State measures, enhanced regional and international cooperation and block the flow of IUU-caught fish into national and international markets.   * **The FAO Voluntary Guidelines for Flag State Performance (VG-FSP)**   The FAO Voluntary Guidelines for Flag State Performance spell out a range of actions that countries can take to ensure that vessels registered under their flags do not conduct IUU fishing, including monitoring, control and surveillance (MCS) activities, such as vessel monitoring systems (VMS) and observers. They promote information exchange and cooperation among countries so that flag states are in a position to refuse to register vessels that are "flag-hopping" by attempting to register with another flag state or to refuse vessels that have been reported for IUU fishing. The Guidelines also include recommendations on how countries can encourage compliance and take action against non-compliance by vessels, as well as on how to enhance international cooperation to assist developing countries to fulfil their flag state responsibilities.   * **The FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (Compliance Agreement)**   The 1993 FAO Compliance Agreement entered into force on the 24th of April 2003. Its main purpose is to encourage countries to take effective action, consistent with international law, and to deter the reflagging of vessels by their nationals as a means of avoiding compliance with applicable conservation and management rules for fishing activities on the high seas. With respect to the role of RFBs, the preamble calls upon States which do not participate in global, regional or sub regional fishery organizations or arrangements to do so, with a view to achieving compliance with international conservation and management measures.  **Comments and limitations:**  Aside from the status of a country as party or non-party to an international agreement which is available as public record, the indicator is a self-analysis by the country of their state of implementation of the various international instruments. Although questions in the questionnaire will be accompanied by pop up guides describing any technical aspects or terms, there may be a small variance in interpretation by different respondents.  Additionally, due to the fact that responses are not provided by an independent source, responses could in theory be politically influenced.  **Computation Method:**  The indicator is based upon responses by States to a certain sections of the questionnaire for monitoring the implementation of the Code of Conduct for Responsible Fisheries and related instruments (CCRF). These are sections covering the implementation of different international instruments used to combat IUU fishing. The responses will be converted using an algorithm to obtain a score for the indicator. Each instrument will be covered within a given variable, as follows:  **Variable 1** **(V1)** - Adherence and implementation of the 1982 United Nations Convention on the Law of the Sea  **Variable 2** **(V2)** - Adherence and implementation of the 1995 United Nations Fish Stocks Agreement  **Variable 3 (V3)** - Development and implementation of a national plan of action (NPOA) to combat IUU fishing in line with the IPOA-IUU  **Variable 4 (V4)** - Adherence and implementation of the 2009 FAO Agreement on Port State Measures (PSMA)  **Variable 5 (V5)** - Implementation of Flag State Responsibilities in the context of the 1993 FAO Compliance Agreement and FAO Voluntary Guidelines for Flag State Performance  Depending on responses by FAO Members on the adherence and implementation of the above-mentioned instruments, States will score an indicator value between 0 and 1. Each variable is given a weighting, which takes into consideration the importance of the instrument in combating IUU fishing as well as the overlap between the instruments. The variable weightings are as follows:   |  |  | | --- | --- | | **Variable** | **Weighting\*** | | V1 | 10% | | V2 | 10% | | V3 | 30% | | V4 | 30% | | V5 | 20% |   (\*) item on “Applicability of instruments”  For binding agreements, States will still be able to score points if they are not party to the agreement but are implementing its provisions. States will also score points if they have initiated the process to becoming party to an agreement.  This indicator is automatically computed within the web-application on which the countries will be responding to the questionnaire. Once the questionnaire is completed the respondent will be presented with a report of the indicator, describing the methodology and the score attained. The user will then be able to give a final confirmation of the indicator. The final scores from all the respondents will automatically be collected onto a database. This web-application will also allow the user to access in any the following languages: English, French, Spanish, Chinese, Arabic and Russian.  Choice of weighting per variable:  The weightings for each variable have been carefully selected. These have been determined based upon their importance of their role in combatting IUU fishing as well as in consideration of the overlap present in between the different instruments. It is also for this consideration of overlap that the VG-FSP and the Compliance Agreement have been combined into Variable 5.  Applicability of instruments:  A set of questions will be present to determine certain characteristics of States (coastal, port, flag and land-locked). This will ensure that the indicator scoring for a country is not negatively affected if an instrument is not applicable to them. In such case, the weighing of the variable that is not applicable is redistributed into the remaining variables. In cases where none of the instruments is applicable, the country will get an indicator score of “N/A”.   |  |  | | --- | --- | | **Variable** | **Cases in which Instruments are not applicable** | | **V1** | The only case where this instrument becomes not applicable, is when the State is land-locked and they are not a flag state. | | **V2** | Is not applicable if the country is land-locked and not a flag State or a coastal State but is not a flag State or Port State. | | **V3** | Same as Variable 2. | | **V4** | Same as Variable 2. | | **V5** | Is not applicable if the country is not a flag State. |   For more details regarding the list of question, scoring and applicability, please refer to Appendix 1 and 2. | Survey questionnaire | Data is typically provided by the National Fishery Ministries/departments. | aFAO  Administrative Data | a) DoF, MoFL b) BN, MoD  c) FAO  Administrative Data | Not Applicable | Triennial | Group 1 | 1st Round:  2015  2nd Rond:  June 2020  3rd Round:  June 2023  4th Round:  June 2026  5th Round:  June 2029 | Data availability reviewed in Oct. 2019  (classified as Tier I)  UNSC 50 refinement  Reviewed at 7th IAEG-SDG meeting (classified as Tier II)  Reviewed at Webex meeting in Nov. 2017 following 6th IAEG-SDG meeting: Request results of additional pilot studies |
| Target 14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation[b] | | | | | | | | | | | | |
| 14.7.1 Sustainable fisheries as a proportion of GDP in small island developing States, least developed countries and all countries | FAO,  UNEP-WCMC | Tier I | **Definitions:**  This indicator expresses the value added of sustainable marine capture fisheries as a proportion of Gross Domestic Product (GDP).  **Concepts:**  The Gross Domestic Product (GDP) is the value of all final goods and services produced in an economy in a given period, which is equivalent to the sum of the value added (VA) from all sectors in an economy.  The value added of marine capture fisheries measures the value of fish harvested from marine stocks, minus the value of goods and services that are used in the production process (such as raw materials and utilities). It includes activities that are normally integrated into the process of production and occur at sea, such as fishing vessels which process or preserve their catch on board. However, it does not include the processing or preserving of fish when it occurs in land based facilities.  A fish stock is a subset of a species (fish, crustacean, mollusc, etc.) or a population inhabiting a geographical area and participating in the same reproductive process.  Maximum sustainable yield (MSY) is the highest theoretical equilibrium yield that can be continuously taken (on average) from a stock under existing (average) environmental conditions without significantly affecting the reproduction process. A stock fished at (MSY) is referred to as biologically sustainable, as it may remain stable or grow while sustaining losses from fishing and natural sources of mortality.  FAO Fishing Areas for Statistical Purposes are arbitrary areas to facilitate comparison of data, improving the possibilities of cooperation in statistical matters.[[24]](#footnote-25)  The basic concepts associated with this indicator are part of the following international instruments and classification schemes:  The 1982 United Nations Convention on the Law of the Sea (UNCLOS)[[25]](#footnote-26)  *This instrument is the basis upon which all the subsequent instruments are built. UNCLOS defines the rights and responsibilities of nations concerning their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources. It is a binding instrument, although its principles may also be applied by countries who are not a party to it.*  The 1995 FAO Code of Conduct for Responsible Fisheries (CCRF)[[26]](#footnote-27)  *This instrument provides the necessary framework for national and international efforts to ensure sustainable exploitation of aquatic living resources in harmony with the environment by establishing principles and standards applicable to the conservation, management, and development of all fisheries.*  *The FAO Code of Conduct for Responsible Fisheries relies on the concept of MSY when setting general principles and standards for fisheries management. Article 7.2.1 details how management measures should be “based on the best scientific evidence available” and “designed to maintain or restore stocks at levels capable of producing maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing countries.”*  United Nation’s International Standard Classification of All Economic Activities (ISIC) *[[27]](#footnote-28)*  *All components of marine capture fisheries are clearly defined within section A 0311 ISIC revision*  **Comments and limitations:**  The indicator measures the value added of sustainable marine capture fisheries as a proportion of GDP. However, the vast majority of countries report only aggregated data for value added for the fisheries and aquaculture sector. To overcome this problem it is necessary to separate the value added for marine capture fisheries from the aggregated data. Preferably this would be done using the value of marine capture fisheries as a proxy. However, in the absence of value data, the quantity of marine capture fisheries as a proportion of total production is used as a proxy for the proportion of value added.  For marine capture fisheries, despite the expanded coverage of FAO’s assessments in recent years, data deficiencies may lead to uncertainty as to the level of exploitation of a stock. While data limitations exist, the methodology employed by FAO seeks to eliminate discrepancies and provide a representative assessment of marine fish stocks. The time series for which stock assessment is available starts with the first public release of FAO stock assessment, in 2011 for each FAO Major Fishing area. FAO continues to release this information biennially.[[28]](#footnote-29)  National fish stock assessments are only available for a few countries, and therefore are not globally or regionally representative. Therefore, the sustainability multiplier used in the compilation of this indicator is based on the average fish stock sustainability calculated by FAO for each Major Fishing Area. For each country, the sustainability multiplier will be the average sustainability weighted by the proportion of the quantity of marine capture for each respective fishing area in which the country performs fishing activities.  Currently, FAO aims to begin compiling country-level estimates for SDG indicator 14.4.1 (proportion of fish stocks within biologically sustainable levels) in 2020. Once these estimates become available, the computation method for the current indicator will use country-level estimates rather than estimates based on FAO Major Fishing Areas to determine the sustainability multiplier and hence estimate the value added of sustainable marine capture fisheries as a proportion of GDP.  **Quality assurance:**  In order to provide continuity of collection of data for value added for fisheries and aquaculture, and GDP across different versions of the Systems of National Accounts (SNA) and ISIC revisions, FAO Fisheries and Aquaculture Department ensures its consistency by the use of backwards and forwards linkages when collecting and validating the information.  While SDG indicator 14.7.1 is completely constructed on data already provided by countries to FAO, to the United Nations Statistics Division (UNSD) and to the Organization for Economic Cooperation and Development (OECD), countries are invited to collaborate with FAO to increase the precision of their results, by providing otherwise unavailable inputs for the calculation of the indicator.  Methodology  At a country level, the contribution of sustainable marine capture fisheries to the GDP is calculated as follows:   1. The percentage contribution of fisheries and aquaculture to GDP is estimated by simply dividing the value added of fisheries and aquaculture by national GDP. 2. In order to disaggregate for the value added of marine capture fisheries and the value added of aquaculture, the quantity of fish produced from marine capture fisheries will be divided by total quantity of national production of fish, and then multiplied by the percentage of GDP from fisheries and aquaculture. As such, the quantity of production of marine capture fisheries is used as a proxy for the value of marine capture fisheries. 3. The sustainability multiplier will be calculated based on the average sustainability published periodically for each FAO major marine fishing area.   For each country, the sustainability multiplier will be the average sustainability weighted by the proportion of the quantity of marine capture for each respective fishing area in which the country performs fishing activities. When a country fishes in  only one FAO fishing area, its sustainability multiplier will be equal to the average sustainability of stocks in that area.   * The value added of marine capture fisheries (b) will be adjusted by the sustainability multiplier (c) to get the sustainable marine capture fisheries as a percentage of GDP   In summary, the computation method for GDP from sustainable marine capture fisheries may also be expressed as: | UNSD National Accounts Official Country Data. I | National governmental agencies reporting to:  Food and Agriculture Organization of the United Nations (FAO).  United Nations Statistics Division (UNSD).  The Organization for Economic Cooperation and Development (OECD). | BBS  NAW | a.BBS  NAW  b. DoF, MoFL | Not Applicable | Annual | Group 1 | 1st Round:  2015  2nd Round:  July, 2019  3rd Round:  July, 2020  4th Round:  July, 2021  5th Round:  July, 2022 | Data availability reviewed in May 2019 (classified as Tier I)  Reviewed at 9th IAEG-SDG meeting (classified as Tier II) |
|  | Target 14.7 By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism | | | | | | | | | | | |
| 14.a.1 Proportion of total research budget allocated to research in the field of marine technology | IOC-UNESCO  **Partner Agencies:**  UNEP | Tier II | **Definition:**  Definitions and mechanisms used in the development of the SDG indicator 14.a.1 are based on the IOC Criteria and Guidelines on Transfer of Marine Technology- IOCCGTMT (originally published and endorsed by IOC Member States in 2005, these guidelines provide an internationally agreed definition of what is understood by the term marine technology. These Guidelines have been referenced in various UN General Assembly Resolutions and specifically in the formulation of SDG target 14.a). These are further explained in the Global Ocean Science Report (GOSR) referenced below.  Marine technology as defined in the IOCCGTMT refers to instruments, equipment, vessels, processes and methodologies required to produce and use knowledge to improve the study and understanding of the nature and resources of the ocean and coastal areas. Toward this end, marine technology may include any of the following components:   1. Information and data, in a user-friendly format, on marine sciences and related marine operations and services; 2. Manuals, guidelines, criteria, standards, reference materials; 3. Sampling and methodology equipment (e.g., for water, geological, biological, chemical samples); 4. Observation facilities and equipment (e.g. remote sensing equipment, buoys, tide gauges, shipboard and other means of ocean observation); 5. Equipment for in situ and laboratory observations, analysis and experimentation; 6. Computer and computer software, including models and modelling techniques; 7. Expertise, knowledge, skills, technical/scientific/legal know-how and analytical methods related to marine scientific research and observation.   Indicator 14.a.1 shows the annual national research budget allocated by governments in the field of marine technology, relative to the overall national governmental research and development budget in general.  Unit: percentage; raw data in national currency. The proportion can be calculated, and if needed, data can be converted by the international agency into USD.  **Concepts:**  The concepts used for the definition and calculation of the indicator 14.a.1 are based on similar concepts used in the UNESCO Science Report (2010, 2015).These reports present GERD data (gross domestic expenditure on research and experimental development) as a share of GDP (gross domestic product) and further provide the R&D (research and development) expenditure by sector of performance in % (Table S2 in the 2015 report). In addition UIS publishes science field specific R&D, e.g. natural science ([http://data.uis.unesco.org/).](http://data.uis.unesco.org/))  The definitions and classifications used to collect R&D data are based on the ‘Frascati Manaual: Proposed Standard Practice for Surveys on Research and Experimental Development’ (OECD).  **Comments and limitations:**  Due to the fact that no agreed mechanism to assess ocean science capacity existed untill the first edition of the Global Ocean Science Report, national reporting mechanisms are scarce and/or are not harmonised. However, with the framework of 14.a and the new reporting mechanism in place, global and regional technology and knowledge transfer can be conducted in a resource- and need-adapted manner based on global inventories and comparisons.    **Computation Method:**  Indicator 14.a.1 = National governmental research expenditure in marine technology / National governmental R&D expenditure  National governmental R&D expenditure data are assessed annually by the UNESCO Institute for Statistics (UIS).  National governmental ocean science expenditures are envisaged to be assessed biannually via the GOSR data portal (IOC-XXIX/2 Annex 10).  The development of the GOSR data repository/data portal will take place in close collaboration with UIS and IOC (at Headquarters and at the IOC Project Office for IODE, Oostende, Belgium). | National Counterparts:  Validation and consultation process by IOC Secretariat. | IOC focal points  NSOs  UIS |  | FD  MoS  Administrative Data | Not Applicable | Annual | Group 2 | 1st Round:  January, 2019  2nd Round:  June 2020  3rd Round:  June 2021  4th Round:  June 2022  5th Round:  June 2023 | FD is not responsible for data  Reviewed at 6th IAEG-SDG meeting (classified as Tier II) |
|  | Target 14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries | | | | | | | | | | | |
| 14.b.1 Degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small‐scale fisheries | **FAO** | Tier I | **Definition:**  Progress by number of countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries.  **Concepts:**  National Statistical Systems already collect fisheries-relevant data, with a focus on production, employment, and trade. Relevant concepts can be found at [CWP Handbook of Fishery Statistical Standards](http://www.fao.org/fishery/cwp/search/en) of the Coordinating Working Party on Fisheries Statistics (CWP).  **Comments and limitations:**  It should be noted that while target 14.b refers to access for small-scale artisanal fishers to marine resources and markets some landlocked countries with inland fisheries have taken the opportunity to report on this indicator.  Methodology  **Computation Method:**  The indicator is calculated using three variables, which are given respective weightings for the final calculation. There has not been a change in the calculation, nor the use of mixed sources.  **Variable 1**: Existence of laws, regulations, policies, plans or strategies that specifically target or address the small-scale fisheries sector  **Variable 2**: Ongoing specific initiatives to implement the SSF Guidelines  **Variable 3**: Existence of mechanisms enabling small-scale fishers and fish workers to contribute to decision-making processes  Performance is scored based on the country responses to the relevant portions of three questions included in the Code of Conduct for Responsible Fisheries Questionnaire (CCRF). These questions have been transformed into weighted variables for the purpose of calculating the country scores. The target has been set at a positive (‘yes’) response to all the sub-variables, resulting in a score of 1.   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | *Sub-variables* | *Weight* |  |  | *Sub-variables* | *Weight* | | ***Variable 1*** | 1.1 | 0.1 |  | ***Variable 2*** | *2.1* | 0.03 | | 1.2 | 0.1 |  | 2.2 | 0.03 | | 1.3 | 0.1 |  | 2.3 | 0.03 | | 1.4 | 0.1 |  | 2.4 | 0.03 | | 1.5 | *1* |  | 2.5 | 0.03 | |  | **Variable weight** | **0.4** |  | 2.6 | 0.03 | | *1*Sub-variable 1.5 is only weighted when a response of 'yes' is provided along with supporting details in the text form. | | |  | 2.7 | 0.03 | |  | 2.8 | 0.03 | |  | 2.9 | 0.03 | |  |  |  |  | 2.10 | 0.03 | |  |  |  |  | **Indicator weight** | **0.3** | |  |  |  |  |  | | | |  |  |  |  |  | *Sub-variables* | *Weight* | |  |  |  |  | ***Variable 3*** | 3.1 | 0.3 | |  |  |  |  | **Indicator weight** | **0.3** |   The higher weighting assigned to Variable 1 reflects the slightly greater importance of that indicator for assessing the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fishers.  Each sub-variable is scored on the basis of a ‘yes’ or ‘no’ response and any ‘blank’ or ‘unknown’ responses are scored as a ‘no’, or zero. A response of yes results in a score that corresponds with the full weighting value for that variable category. For example, a ‘yes’ response for variables 1.3, 2.1 and 3.1 are scored as 0.1, 0.03 and 0.3 respectively.  One exception is made in the case of sub-variable 1.5. This question allows a response of ‘other’ with an associated text field. A positive response in this field is only scored as a ‘yes’ in the case where the text field is also completed AND at least one of the other prior sub-variable were scored as ‘no’. This allows the indicator weighting to remain consistent in all cases.  Once the specific score has been determined for each country, countries will be classified into a number of bands, ranging from a low to a high degree of implementation, and thus effectively translate a synthetic score into a tangible and intuitive metric for countries. | Web-based system  CCRF questionnaire | Data is typically provided by the National Fishery Ministries/departments. |  | DoF, MoFL  Administrative Data | * Size Class * Framework: Legal Framework   / Regulatory Framework /Policy Framework  / Institutional Framework | Triennial | Group 2 | 1st Round:  January, 2019  2nd Round:  January 2022  3rd Round:  January 2025  4th Round:  January 2028  5th Round:  January 2030 | Data availability reviewed in Oct. 2019  (classified as Tier I)  UNSC 50 refinement  Reviewed at 7th IAEG-SDG meeting (classified as Tier II)  Reviewed at Webex meeting in Nov. 2017 following 6th IAEG-SDG meeting: Request results of additional pilot studies |
|  | Target 14.b Provide access for small-scale artisanal fishers to marine resources and markets | | | | | | | | | | | |
| 14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources | UN-DOALOS,  FAO,  UNEP,  ILO,  other UN-Oceans agencies | Tier II | **Definition:**  Sustainable Development Goal (SDG) indicator 14.c.1 measures the number of countries making progress in ratification of, accession to and implementation of ocean-related instruments that implement international law, as reflected in the United Nation Convention on the Law of the Sea (UNCLOS), for the conservation and sustainable use of the oceans and their resources.  There are two aspects to this indicator:   * the number of countries making progress in ratifying and acceding to ocean-related instruments that implement international law as reflected in UNCLOS for the conservation and sustainable use of the oceans and their resources, and * the number of countries making progress in implementing such instruments through legal, policy and institutional frameworks.   **Concepts:**  N/A.  **Comments and limitations:**  Implementation of UNCLOS and its implementing agreements through legal frameworks (for example, through national legislation or executive acts) as well as policy and institutional frameworks will be scored on the basis of a self-analysis by countries of the extent of implementation. Countries will be invited in the questionnaire to share information regarding their methods of implementation.  **Computation Method:**  The indicator measures the number of countries making progress in ratifying, accepting and implementing UNCLOS and its two implementing agreements through legal, policy and institutional frameworks.  This measurement of progress is computed on the basis of countries’ responses to the questionnaire, which contains three questions in respect to each of the three instruments.  Countries will be invited to respond to questions which relate to ratification of or accession to UNCLOS and its two implementing agreements (Questions 1.1, 2.1 and 3.1). They are coded with simple “Yes/No” answers, with a score of “1” for “Yes” and “0” for “No”. Each country’s overall score for ratification or acceptance of these instruments will therefore be a number between 0 and 3, which will be reported as a percentage (with “100” representing a score of “3”, and “0” representing a score of “0”).  Countries will also be invited to respond to questions which relate to implementation of UNCLOS and its two implementing agreements through legal frameworks (Questions 1.2, 2.2 and 3.2) by evaluating their own national implementation and assigning a score of between 1 and 9 – with “1” being “not at all” and “9” being “fully” – or indicating that the question of implementation is not applicable (“N/A”).  Countries will further be invited to indicate whether they have a national policy and/or a national institution or another mechanism, such as a national focal point or an inter-agency or inter-departmental working group, with responsibility for ensuring that the problems of ocean space (UNCLOS), matters related to the deep seabed (Part XI Agreement) and matters related to [sustainable] fisheries (UNFSA) are considered through an integrated, interdisciplinary and inter-sectoral approach (Questions 1.3, 2.3 and 3.3). These questions are coded with simple “Yes”, “No” and “N/A” answers, with a score of “1” for “Yes” and “0” for “No”.  The scoring methodology regarding implementation is the total of the scores reported by States regarding implementation through legal frameworks for UNCLOS and each of its two implementing agreements (in response to Questions 1.2, 2.2 and 3.2), added to the relevant scores achieved regarding implementation through national policy and/or national institutions for UNCLOS and each of its implementing agreements (in respect to Questions 1.3, 2.3 and 3.3). Pursuant to this scoring methodology, each State could achieve a maximum score of 30 points for implementation.  These scores which will be reported as a percentage (with 100 representing an average score of 30, 80 representing an average score of 24, and so on). “N/A” responses will not be included as part of the overall score calculation. | questionnaire through the Permanent Missions to the United Nations in New York | Data will be provided by relevant government ministries, departments and agencies. | MoFA  Administrative Data | MoFA  Administrative Data | By Region | Triennial | Group 1 | 1st Round:  2019  2nd Round:  December,  2020  3rd Round:  December,  2023  4th Round:  December,  2026  5th Round:  December,  2029 | Reviewed at Nov./Dec. 2019 WebEx meeting (classified as Tier II)  Reviewed at 10th IAEG-SDG meeting:  Needs additional work/clarification on how data will be compiled and presented in database (classified as TBD) |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

|  |  |
| --- | --- |
|  | Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier Classifi-cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
| Target 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements | | | | | | | | | | | | |
| 15.1.1 Forest area as a proportion of total land area | FAO  **Partner Agencies:**  UNEP | Tier I | **Definition:**  Forest area as a proportion of total land area  **Concepts:**  In order to provide a precise definition of the indicator, it is crucial to provide a definition of  “Forest” and “Total Land Area”.  According to the FAO definitions, Forest is defined as: “land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use”. More specifically:   * Forest is determined both by the presence of trees and the absence of other predominant land uses. The trees should be able to reach a minimum height of 5 meters. * It includes areas with young trees that have not yet reached but which are expected to reach a canopy cover of at least 10 percent and tree height of 5 meters or more. It also includes areas that are temporarily unstocked due to clear-cutting as part of a forest management practice or natural disasters, and which are expected to be regenerated within 5 years. Local conditions may, in exceptional cases, justify that a longer time frame is used. * It includes forest roads, firebreaks and other small open areas; forest in national parks, nature reserves and other protected areas such as those of specific environmental, scientific, historical, cultural or spiritual interest. * It includes windbreaks, shelterbelts and corridors of trees with an area of more than 0.5 hectares and width of more than 20 meters. * It includes abandoned shifting cultivation land with a regeneration of trees that have, or are expected to reach, a canopy cover of at least 10 percent and tree height of at least 5 meters. * It includes areas with mangroves in tidal zones, regardless whether this area is classified as land area or not. * It includes rubberwood, cork oak and Christmas tree plantations. * It includes areas with bamboo and palms provided that land use, height and canopy cover criteria are met. * It excludes tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations, olive orchards and agroforestry systems when crops are grown under tree cover. Note: Some agroforestry systems such as the “Taungya” system where crops are grown only during the first years of the forest rotation should be classified as forest.   Total land area is the total surface area of a country less the area covered by inland waters, like major rivers and lakes.  The indicator is expressed as percent.  **Comments and limitations:**  Assessment of forest area is carried out at infrequent intervals in many countries. Access to remote sensing imagery has improved in recent years, but remote sensing techniques have limitations. In particular there are limitations to assess land use (remote sensing primarily assesses land cover), and some slow changes such as forest regrowth cannot easily be observed with remote sensing techniques and require long time periods in order to detect. In addition, forest area with low canopy cover density (e.g. 10-30%) are difficult to detect with remote sensing techniques.  **Computation Method:**  Forest area (reference year) / Land area (2015) \* 100  This indicator can be aggregated to global or regional level by adding all country values globally or in a specific region | All data are provided to FAO by countries in the form of a country report following a standard format. | Officially nominated national correspondents and their teams  If no information is provided, a report is prepared by FAO using existing information and a literature search. | BFD | BFD, MoEFCC  Land Cover Map/ Big Data | Not Applicable | Five Year | Group 1 | 1st Round:  2015  2nd Round:  December,  2020  3rd Round:  December,  2025  4th Round:  December,  2030 | Forest area can be generated periodically based on availability of satellite image |
| 15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type | UNEP-WCMC,  UNEP,  IUCN  **Partner Agencies:**  **Ramsar** | Tier I | **Definition:**  This indicator Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas shows temporal trends in the mean percentage of each important site for terrestrial and freshwater biodiversity (i.e., those that contribute significantly to the global persistence of biodiversity) that is covered by designated protected areas.  **Concepts:**  Protected areas, as defined by the International Union for Conservation of Nature (IUCN; Dudley 2008), are clearly defined geographical spaces, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. Importantly, a variety of specific management objectives are recognised within this definition, spanning conservation, restoration, and sustainable use:   * Category Ia: Strict nature reserve * Category Ib: Wilderness area * Category II: National park * Category III: Natural monument or feature * Category IV: Habitat/species management area * Category V: Protected landscape/seascape * Category VI: Protected area with sustainable use of natural resources   The status "designated" is attributed to a protected area when the corresponding authority, according to national legislation or common practice (e.g., by means of an executive decree or the like), officially endorses a document of designation. The designation must be made for the purpose of biodiversity conservation, not de facto protection arising because of some other activity (e.g., military).  Sites contributing significantly to the global persistence of biodiversity are identified following globally standard criteria for the identification of Key Biodiversity Areas (IUCN 2016) applied at national levels. Two variants of these standard criteria have been applied in all countries to date. The first is for the identification of Important Bird & Biodiversity Areas, that is, sites contributing significantly to the global persistence of biodiversity, identified using data on birds, of which >12,000 sites in total have been identified from all of the world’s countries (BirdLife International 2014). The second is for the identification of Alliance for Zero Extinction sites (Ricketts et al. 2005), that is, sites holding effectively the entire population of at least one species assessed as Critically Endangered or Endangered on The IUCN Red List of Threatened Species. In total, 587 Alliance for Zero Extinction sites have been identified for 920 species of mammals, birds, amphibians, reptiles, conifers, and reef-building corals. A global standard for the identification of Key Biodiversity Areas unifying these approaches along with other mechanisms for identification of important sites for other species and ecosystems was approved by IUCN (2016).  **Comments and limitations:**  Quality control criteria are applied to ensure consistency and comparability of the data in the World Database on Protected Areas. New data are validated at UNEP-WCMC through a number of tools and translated into the standard data structure of the World Database on Protected Areas. Discrepancies between the data in the World Database on Protected Areas and new data are minimised by provision of a manual (UNEP-WCMC 2016) and resolved in communication with data providers. Similar processes apply for the incorporation of data into the World Database of Key Biodiversity Areas.  The indicator does not measure the effectiveness of protected areas in reducing biodiversity loss, which ultimately depends on a range of management and enforcement factors not covered by the indicator. A number of initiatives are underway to address this limitation. Most notably, numerous mechanisms have been developed for assessment of protected area management, which can be synthesised into an indicator (Leverington et al. 2010). This is used by the Biodiversity Indicators Partnership as a complementary indicator of progress towards Aichi Biodiversity Target 11  (http://www.bipindicators.net/pamanagement). However, there may be little relationship between these measures and protected area outcomes (Nolte & Agrawal 2013). More recently, approaches to “green listing” have started to be developed, to incorporate both management effectiveness and the outcomes of protected areas, and these are likely to become progressively important as they are tested and applied more broadly.  Data and knowledge gaps can arise due to difficulties in determining whether a site conforms to the IUCN definition of a protected area, and some protected areas are not assigned management categories. Moreover, “other effective area-based conservation measures”, as specified by Aichi Biodiversity Target  11 of the Strategic Plan for Biodiversity 2011–2020, recognise that some sites beyond the formal protected area network, while not managed primarily for nature conservation, may nevertheless be managed in ways which are consistent with the persistence of the biodiversity for which they are important (Jonas et al. 2014). However, standard approaches to documentation of “other effective area-based conservation measures” are still under debate through the IUCN Task Force on Other Effective Areas Based Conservation Measures which will conclude with recommendations for a definition on OECMs. Once defined it is likely OEMCs will be documented in the World Database on Protected Areas.  Regarding important sites, the biggest limitation is that site identification to date has focused on specific subsets of biodiversity, for example birds (for Important Bird and Biodiversity Areas) and highly threatened species (for Alliance for Zero Extinction sites). While Important Bird and Biodiversity Areas have been documented to be good surrogates for biodiversity more generally (Brooks et al. 2001, Pain et al. 2005), the application of the unified standard for identification of Key Biodiversity Areas (IUCN 2016) sites across different levels of biodiversity (genes, species, ecosystems) and different taxonomic groups remains a high priority, building from efforts to date (Eken et al. 2004, Knight et al. 2007, Langhammer et al. 2007, Foster et al. 2012).  Key Biodiversity Area identification has been validated for a number of countries and regions where comprehensive biodiversity data allow formal calculation of the site importance (or “irreplaceability”) using systematic conservation planning techniques (Di Marco et al. 2016, Montesino Pouzols et al. 2014).  Future developments of the indicator will include: a) expansion of the taxonomic coverage of terrestrial and freshwater Key Biodiversity Areas through application of the Key Biodiversity Areas standard (IUCN 2016) to a wide variety of terrestrial and freshwater vertebrates, invertebrates, plants and ecosystem type; b) improvements in the data on protected areas by continuing to increase the proportion of sites with documented dates of designation and with digitised boundary polygons (rather than coordinates); and c) exploring other methods for assessing and presenting temporal trends in protected area coverage.  **Computation Method:**  This indicator is calculated from data derived from a spatial overlap between digital polygons for protected areas from the World Database on Protected Areas (IUCN & UNEP-WCMC 2017) and digital polygons for terrestrial and freshwater Key Biodiversity Areas (from the World Database of Key  Biodiversity Areas, including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites, and other Key Biodiversity Areas; available through the [Integrated Biodiversity Assessment Tool](https://www.ibat-alliance.org/ibat-conservation/login)). The value of the indicator at a given point in time, based on data on the year of protected area establishment recorded in the World Database on Protected Areas, is computed as the mean percentage of each Key Biodiversity Area currently recognised that it covered by protected areas.  Year of protected area establishment is unknown for 12% of protected areas in the World Database on Protected Areas, generating uncertainty around changing protected area coverage over time. To reflect this uncertainty, a year was randomly assigned from another protected area within the same country, and then this procedure repeated 1,000 times, with the median plotted. In 2017 we slightly changed the methods described by Butchart et al. (2012, 2015) by randomly assigning a year to protected areas with no year of establishment before calculating trends in coverage. This is a computationally more efficient method and is likely to reflect more accurately changes in protected area coverage over time.  Previously the indicator was presented as the percentage of Key Biodiversity Areas completely covered by protected areas. However, it is now presented as the mean % of each Key Biodiversity Area that is covered by protected areas in order to better reflect trends in protected area coverage for countries or regions with few or no Key Biodiversity Areas that are completely covered. | Multi-stakeholder processes, following standard criteria and thresholds. | Ministries of environment | a) MoEFCC  b) MoEFCC  Administrative Data | a) DoE, MoEFCC b) DoF, MoFL  c) BFD, MoEFCC  Administrative Data | * division * protected area management categories: categories I–VI * ecosystem type: marine, terrestrial, freshwater | Annual | Group 1 | 1st Round:  2015  2nd Round:  December,  2018  3rd Round:  December,  2019  4th Round:  December,  2020  5th Round:  December,  2021 | Data already has been provided. |
| Target 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally | | | | | | | | | | | | |
| 15.2.1 Progress towards sustainable forest management | FAO  **Partner Agencies:**  UNEP,  UNFCCC | Tier I | **Definition:**  “Sustainable forest management” (SFM) is a central concept for Goal 15 and target 15.1 as well as for target 15.2. It has been formally defined, by the UN General Assembly, as follows:  *[a] dynamic and evolving concept [that] aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations*” (Resolution A/RES/62/98)  The indicator is composed of five sub-indicators that measure progress towards all dimensions of sustainable forest management. The environmental values of forests are covered by three sub-indicators focused on the extension of forest area, biomass within the forest area and protection and maintenance of biological diversity, and of natural and associated cultural resources. Social and economic values of forests are reconciled with environmental values through sustainable management plans. The sub-indicator provides further qualification to management of forest areas, by assessing areas which are independently verified for compliance with a set of national or international standards.  The sub-indicators are:   * Forest area annual net change rate * Above-ground biomass stock in forest * Proportion of forest area located within legally established protect areas * Proportion of forest area under a long term forest management plan * Forest area under an independently verified forest management certification scheme   A dashboard is used to assess progress related to the five sub-indicators. The adoption of the dashboard approach provides for clear view of areas where progress towards sustainable development goals has been achieved.  **Concepts:**  See Annex 1 with Terms and Definitions.  **Comments and limitations:**  The five sub-indicators chosen to illustrate progress towards sustainable forest management do not fully cover all aspects of sustainable forest management. In particular, social and economic aspects are poorly reflected in the current set of sub-indicators. Furthermore, there are some data gaps, and the trends of some of the sub-indicators reflect different sets of countries. While the dashboard illustrates the progress on the individual sub-indicators, there is no weighting of the relative importance of the sub-indicators.  **Computation Method:**  At national level, forest area, biomass stock, forest area within protected areas, forest area under management plan and forest area under an independently verified forest management certification scheme are reported directly to FAO for pre-established reference years. Based on the country reported data, FAO then makes country-level estimates of the forest area net change rate using the compound interest formula, and also the proportion of forest area within protected area and under management plan.  No dashboard traffic lights are made at country level. | Data are collected periodically (until now every 5 years) by FAO’s Global Forest Resources Assessment (FRA) programme. | National Forest Authorities, through officially nominated National Correspondents to FRA. | National forest inventory 2016-2019 for the country  Gazettes for protected areas and land cover map 2015  Existing management plans and land cover map 2015 of Forest Department | BFD, MoEFCC  Administrative Data | Not Applicable | Five Year | Group 1 | 1st Round:  2019  2nd Round:  December,  2023  3rd Round:  December,  2028  4th Round:  December,  2030 | Data can be generated periodically based field inventory. Data on carbon stock is not available prior to 2018. Hence, here we are providing only total stock instead of percentage change.  Data availability reviewed in Nov. 2017 (classified as Tier I)  IAEG-SDG 4th meeting: There is agreement on the components of the indicator, with limited data availability for some components (classified as Tier II) |
|  | Target 15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world | | | | | | | | | | | |
| 15.3.1 Proportion of land that is degraded over total land area | UNCCD  **Partner Agencies:**  FAO,  UNEP | Tier I | **Definitions:**  ***Land degradation*** is defined as the reduction or loss of the biological or economic productivity and complexity of rain fed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from a combination of pressures, including land use and management practices. This definition was adopted by and is used by the 196 countries that are Party to the UNCCD.[[29]](#footnote-30) (see also Figure 1)  ***Land Degradation Neutrality*** (LDN) is defined as a state whereby the amount and quality of land resources necessary to support ecosystem functions and services and enhance food security remain stable or increase within specified temporal and spatial scales and ecosystems (decision 3/COP12).[[30]](#footnote-31)  ***Total land area*** is the total surface area of a country excluding the area covered by inland waters, like major rivers and lakes.[[31]](#footnote-32)  ***The******measurement unit*** for this indicator is the spatial extent (hectares or km2) expressed as the proportion (percentage or %) of land that is degraded over total land area.  ***SDG indicator 15.3.1*** is a binary - degraded/not degraded - quantification based on the analysis of available data for three sub-indicators to be validated and reported by national authorities. The sub-indicators (Trends in Land Cover, Land Productivity and Carbon Stocks) were adopted by the UNCCD’s governing body in 2013 as part of its monitoring and evaluation approach.[[32]](#footnote-33)  ***The method of computation*** for this indicator follows the “One Out, All Out” statistical principle and is based on the baseline assessment and evaluation of change in the sub-indicators to determine the extent of land that is degraded over total land area.  ***The One Out, All Out (1OAO)****[[33]](#footnote-34)* principle is applied taking into account changes in the sub-indicators which are depicted as (i) positive or improving, (ii) negative or declining, or (iii) stable or unchanging. If one of the sub-indicators is negative (or stable when degraded in the baseline or previous monitoring year) for a particular land unit, then it would be considered as degraded subject to validation by national authorities.  **Concepts:**  The assessment and quantification of land degradation is generally regarded as context-specific, making it difficult for a single indicator to fully capture the state or condition of the land. While necessary but not sufficient, the sub-indicators address changes in different yet highly relevant ways: for example, land cover or productivity trends can capture relatively fast changes while changes in carbon stocks reflect slower changes that suggest a trajectory or proximity to thresholds.[[34]](#footnote-35)  As proxies to monitor the key factors and driving variables that reflect the capacity to deliver land-based ecosystem services, the sub-indicators are globally agreed upon in definition and methodology of calculation, and deemed both technically and economically feasible for systematic observation under both the Global Climate Observation System (GCOS) and the integrated measurement framework of the System of Environmental-Economic Accounting (SEEA). The ultimate determination of the extent of degraded land made by national authorities should be contextualized with other indicators, data and ground-based information.  An operational definition of land degradation along with a description of the linkages among the sub-indicators is given in Figure 1.  **Figure 1: Operational definition of land degradation and linkage with the sub-indicators.**    ***Land cover*** refers to the observed physical cover of the Earth’s surface which describes the distribution of vegetation types, water bodies and human-made infrastructure.[[35]](#footnote-36) It also reflects the use of land resources (i.e., soil, water and biodiversity) for agriculture, forestry, human settlements and other purposes.[[36]](#footnote-37) This sub-indicator serves two functions for SDG indicator 15.3.1: (1) changes in land cover may point to land degradation when there is a loss of ecosystem services that are considered desirable in a local or national context; and (2) a land cover classification system can be used to disaggregate the other two sub-indicators, thus increasing the indicator’s policy relevance. This sub-indicator is also expected to be used for reporting on SDG indicators 6.6.1, 11.3.1 and 15.1.1.  There is an international standard for the sub-indicator on land cover[[37]](#footnote-38) which includes the Land Cover Meta Language (LCML), a common reference structure (statistical standard) for the comparison and integration of data for any generic land cover classification system. LCML is also used for defining land cover and ecosystem functional units used in the SEEA, and closely linked to the Intergovernmental Panel on Climate Change (IPCC) classification on land cover/land use.  ***Land productivity*** refers to the total above-ground net primary production (NPP) defined as the energy fixed by plants minus their respiration which translates into the rate of biomass accumulation that delivers a suite of ecosystem services.[[38]](#footnote-39) This sub-indicator points to changes in the health and productive capacity of the land and reflects the net effects of changes in ecosystem functioning on plant and biomass growth, where declining trends are often a defining characteristic of land degradation.[[39]](#footnote-40)  The international standard for calculating NPP (gC/m²/day) from remotely-sensed, multi-temporal surface reflectance data, accounting for the global range of climate and vegetation types, was established in 1999 by the U.S. National Aeronautics and Space Administration (NASA) in anticipation of the launch of the Moderate Resolution Imaging Spectroradiometer (MODIS) sensor.[[40]](#footnote-41) The Land Productivity Dynamics (LPD) methodology and dataset, developed by the Joint Research Centre of the European Commission[[41]](#footnote-42) and used in the UNCCD pilot programme, employs this international standard to calculate NPP time series trends and change analyses.   ***Carbon stock*** is the quantity of carbon in a “pool”: a reservoir which has the capacity to accumulate or release carbon and is comprised of above- and below-ground biomass, dead organic matter, and soil organic carbon.[[42]](#footnote-43) In UNCCD decision 22/COP.11, *soil organic carbon (SOC) stock* was adopted as the metric to be used with the understanding that this metric will be replaced by *total terrestrial system carbon stocks*, once operational. SOC is an indicator of overall soil quality associated with nutrient cycling and its aggregate stability and structure with direct implications for water infiltration, soil biodiversity, vulnerability to erosion, and ultimately the productivity of vegetation, and in agricultural contexts, yields. SOC stocks reflect the balance between organic matter gains, dependent on plant productivity and management practices, and losses due to decomposition through the action of soil organisms and physical export through leaching and erosion.[[43]](#footnote-44)  For carbon stocks, IPCC (2006) contains the most relevant definitions and standards, especially with regard to reference values applicable for Tier 2 and 3 GHG reporting.[[44]](#footnote-45) In this regard, the technical soil infrastructure, data transfer and provision of national reporting data is also standards-based.[[45]](#footnote-46)  **Comments and limitations:**  SDG indicator 15.3.1 is a binary -- degraded/not degraded -- quantification based on the analysis of available data that is validated and reported by national authorities. Reporting on the sub-indicators should be based primarily, and to the largest extent possible, on comparable and standardized national official data sources. To a certain extent, national data on the three sub-indicators is and can be collected through existing sources (e.g., databases, maps, reports), including participatory inventories on land management systems as well as remote sensing data collected at the national level.  Regional and global datasets derived from Earth observation and geospatial information can play an important role in the absence of, to complement, or to enhance national official data sources. These datasets can help validate and improve national statistics for greater accuracy by ensuring that the data are spatially-explicit. Recognizing that the sub-indicators cannot fully capture the complexity of land degradation (i.e., its degree and drivers), countries are strongly encouraged to use other relevant national or sub-national indicators, data and information to strengthen their interpretation.  As regards slow changing variables, such as soil organic carbon stocks, reporting every four years may not be practical or offer reliable change detection for many countries. Nevertheless, this sub-indicator captures important data and information that will become more available in the future via improved measurements at the national level, such as those being facilitated by the FAO’s Global Soil Partnership and others.  While access to remote sensing imagery has improved dramatically in recent years, there is still a need for essential historical time series that is currently only available at coarse to medium resolution. The expectation is that the availability of high-resolution, locally-calibrated datasets will increase rapidly in the near future. National capacities to process, interpret and validate geospatial data still need to be enhanced in many countries; good practice guidance for the monitoring and the reporting of the sub-indicators in other processes will assist in this regard.  Methodology  **Computation Method:**  By analysing changes in the sub-indicators in the context of local assessments of climate, soil, land use and any other factors influencing land conditions, national authorities can determine which land units are to be classified as degraded, sum the total, and report on the indicator. A conceptual framework, endorsed by the UNCCD’s governing body in September 2017,[[46]](#footnote-47) underpins a universal methodology for deriving the indicator. The methodology helps countries to select the most appropriate datasets for the sub-indicators and determine national methods for estimating the indicator. In order to assist countries with monitoring and reporting, Good Practice Guidance for SDG Indicator 15.3.1[[47]](#footnote-48) has been developed by the UNCCD and its partners.  The indicator is derived from a binary classification of land condition (i.e., degraded or not degraded) based primarily, and to the largest extent possible, on comparable and standardized national official data sources. However, due to the nature of the indicator, Earth observation and geospatial information from regional and global data sources can play an important role in its derivation, subject to validation by national authorities.  Quantifying the indicator is based on the evaluation of changes in the sub-indicators in order to determine the extent of land that is degraded over total land area. The sub-indicators are few in number, complementary and non-additive components of land-based natural capital and sensitive to different degradation factors. As a result, the 1OAO principle is applied in the method of computation where changes in the sub-indicators are depicted as (i) positive or improving, (ii) negative or declining, or (iii) stable or unchanging. If one of the sub-indicators is negative (or stable when degraded in the baseline or previous monitoring year) for a particular land unit, then normally it would be considered as degraded subject to validation by national authorities.  The baseline year for the indicator is 2015 and its value (t0) is derived from an initial quantification and assessment of time series data for the sub-indicators for each land unit during the period 2000-2015. Subsequent values for the indicator during each monitoring period (t1-n) are derived from the quantification and assessment of changes in the sub-indicators as to whether there are has been positive, negative or no change for each land unit relative to the baseline value. Although the indicator will be reported as a single figure quantifying the area of land that is degraded as a proportion of land area, it can be spatially disaggregated by land cover class or other policy‐relevant units.  As detailed in the Good Practice Guidance for SDG indicator 15.3.1, deriving the indicator for the baseline and subsequent monitoring years is done by summing all those areas where any changes in the sub-indicators are considered negative (or stable when degraded in the baseline or previous monitoring year) by national authorities. This involves the:  (1) assessment and evaluation of **land cover and land cover changes**; (2) analysis of **land productivity** status and trends based on net primary production; and  (3) determination of **carbon stock** values and changes, with an initial assessment of soil organic carbon as the proxy.  It is good practice to assess change for interim and final reporting years in relation to the baseline year for each sub-indicator and then the indicator. This facilitates the spatial aggregation of the results from the sub-indicators for each land unit to determine the proportion of land that is degraded for the baseline and each monitoring year. Furthermore, it ensures that land classified as degraded will retain that status unless it has improved relative to the baseline or previous monitoring year.  Land degradation (or improvement) as compared to the baseline may be identified with reference to parameters describing the slope and confidence limits around the trends in the sub-indicators, or to the level or distribution of conditions in space and/or time as shown during the baseline period. The evaluation of changes in the sub-indicators may be determined using statistical significance tests or by interpretation of results in the context of local indicators, data and information. The method of computation for SDG indicator 15.3.1 is illustrated in Figure 2.  **Figure 2: Steps to derive the indicator from the sub-indicators, where ND is not degraded and D is degraded.**  The area degraded in the monitoring period *tn* within land cover class *i* is estimated by summing all the area units within the land cover class determined to be degraded plus all area units that had previously been defined as degraded and that remain degraded:    (1)  Where:  is the total area degraded in the land cover class *i* in the year of monitoring *n* (ha);  is the area defined as degraded in the current monitoring year following 1OAO assessment of the sub-indicators (ha);  is the area previously defined as degraded which remains degraded in the monitoring year following the 1OAO assessment of the sub-indicators (ha).  The proportion of land cover type *i* that is degraded is then given by:  (2)  Where  is the proportion of degraded land in that land cover type *i* in the monitoring period *n*;  is the total area degraded in the land cover type *i* in the year of monitoring *n* (ha);  is the total area of land cover type *i* within the national boundary (ha).  The total area of land that is degraded over total land area is the accumulation across the *m* land cover classes within the monitoring period *n* is given by:  (3)  Where  is the total area degraded in the year of monitoring *n* (ha);  is the total area degraded in the land cover type *i* in the year of monitoring *n*.  The total proportion of land that is degraded over total land area is given by:  (4)  Where  is the proportion of land that is degraded over total land area;  is the total area degraded in the year of monitoring *n* (ha)*;*  is the total area within the national boundary (ha).  The proportion is converted to a percentage value by multiplying by 100. | Data will be provided by national authorities (“main reporting entity”) to the UNCCD in their national reports following a standard format every four years beginning in 2018 or through other national data platforms and mechanisms endorsed by the UN Statistical Commission. | The ministries or agencies (“main reporting entity”) that host the UNCCD National Focal Points, in conjunction with National Statistical Offices and specialized agencies |  | a) DoE, MOEFCC  b) MoL  c) FAO  Big Data | * land cover class * spatially explicit land unit | Bi-annual | Group 2 | 1st Round:  July, 2020  2nd Round:  July, 2022  3rd Round:  July, 2024  4th Round:  July, 2026  5th Round:  July, 2028 | Data availability reviewed in Oct. 2019  (classified as Tier I)  Reviewed at 6th IAEG-SDG meeting (classified as Tier II)  Fast Track; Reviewed at 5th IAEG-SDG meeting: Request finalised methodology development with metadata (classified as TBD) |
|  | Target 15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development | | | | | | | | | | | |
| 15.4.1 Coverage by protected areas of important sites for mountain biodiversity | UNEP-WCMC,  UNEP,  IUCN | Tier I | **Definition:**  This indicator Coverage by protected areas of important sites for mountain biodiversity shows temporal trends in the mean percentage of each important site for mountain biodiversity (i.e., those that contribute significantly to the global persistence of biodiversity) that is covered by designated protected areas.  **Rationale:**  The safeguard of important sites is vital for stemming the decline in biodiversity and ensuring long term and sustainable use of mountain natural resources. The establishment of protected areas is an important mechanism for achieving this aim, and this indicator serves as a means of measuring progress toward the conservation, restoration and sustainable use of mountain ecosystems and their services, in line with obligations under international agreements. Importantly, while it can be disaggregated to report on any given single ecosystem of interest, it is not restricted to any single ecosystem type, and so faithfully reflects the intent of SDG target 15.1.  Levels of access to protected areas vary among the protected area management categories. Some areas, such as scientific reserves, are maintained in their natural state and closed to any other use. Others are used for recreation or tourism, or even open for the sustainable extraction of natural resources. In addition to protecting biodiversity, protected areas have high social and economic value: supporting local livelihoods; protecting watersheds from erosion; harbouring an untold wealth of genetic resources; supporting thriving recreation and tourism industries; providing for science, research and education; and forming a basis for cultural and other non-material values.  This indicator adds meaningful information to, complements and builds from traditionally reported simple statistics of mountain area covered by protected areas, computed by dividing the total protected area within a country by the total territorial area of the country and multiplying by 100 (e.g., Chape et al.  2005). Such percentage area coverage statistics do not recognise the extreme variation of biodiversity importance over space (Rodrigues et al. 2004), and so risk generating perverse outcomes through the protection of areas which are large at the expense of those which require protection.  The indicator is used to track progress towards the 2011–2020 Strategic Plan for Biodiversity (CBD 2014, Tittensor et al. 2014), and was used as an indicator towards the Convention on Biological Diversity’s 2010  Target (Butchart et al. 2010).  **Concepts:**  Protected areas, as defined by the International Union for Conservation of Nature (IUCN; Dudley 2008), are clearly defined geographical spaces, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. Importantly, a variety of specific management objectives are recognised within this definition, spanning conservation, restoration, and sustainable use:   * Category Ia: Strict nature reserve * Category Ib: Wilderness area * Category II: National park * Category III: Natural monument or feature * Category IV: Habitat/species management area * Category V: Protected landscape/seascape * Category VI: Protected area with sustainable use of natural resources   The status "designated" is attributed to a protected area when the corresponding authority, according to national legislation or common practice (e.g., by means of an executive decree or the like), officially endorses a document of designation. The designation must be made for the purpose of biodiversity conservation, not de facto protection arising because of some other activity (e.g., military).  Sites contributing significantly to the global persistence of biodiversity are identified following globally standard criteria for the identification of Key Biodiversity Areas (IUCN 2016) applied at national levels. Two variants of these standard criteria have been applied in all countries to date. The first is for the identification of Important Bird & Biodiversity Areas, that is, sites contributing significantly to the global persistence of biodiversity, identified using data on birds, of which >12,000 sites in total have been identified from all of the world’s countries (BirdLife International 2014). The second is for the identification of Alliance for Zero Extinction sites (Ricketts et al. 2005), that is, sites holding effectively the entire population of at least one species assessed as Critically Endangered or Endangered on The IUCN Red List of Threatened Species. In total, 587 Alliance for Zero Extinction sites have been identified for 920 species of mammals, birds, amphibians, reptiles, conifers, and reef-building corals. A global standard for the identification of Key Biodiversity Areas unifying these approaches along with other mechanisms for identification of important sites for other species and ecosystems was approved by IUCN (2016).  **Comments and limitations:**  Quality control criteria are applied to ensure consistency and comparability of the data in the World Database on Protected Areas. New data are validated at UNEP-WCMC through a number of tools and translated into the standard data structure of the World Database on Protected Areas. Discrepancies between the data in the World Database on Protected Areas and new data are minimised by provision of a manual (UNEP-WCMC 2016) and resolved in communication with data providers. Similar processes apply for the incorporation of data into the World Database of Key Biodiversity Areas.  The indicator does not measure the effectiveness of protected areas in reducing biodiversity loss, which ultimately depends on a range of management and enforcement factors not covered by the indicator. A number of initiatives are underway to address this limitation. Most notably, numerous mechanisms have been developed for assessment of protected area management, which can be synthesised into an indicator (Leverington et al. 2010). This is used by the Biodiversity Indicators Partnership as a complementary indicator of progress towards Aichi Biodiversity Target 11  (http://www.bipindicators.net/pamanagement). However, there may be little relationship between these measures and protected area outcomes (Nolte & Agrawal 2013). More recently, approaches to “green listing” have started to be developed, to incorporate both management effectiveness and the outcomes of protected areas, and these are likely to become progressively important as they are tested and applied more broadly.  Data and knowledge gaps can arise due to difficulties in determining whether a site conforms to the IUCN definition of a protected area, and some protected areas are not assigned management categories. Moreover, “other effective area-based conservation measures”, as specified by Aichi Biodiversity Target  11 of the Strategic Plan for Biodiversity 2011–2020, recognise that some sites beyond the formal protected area network, while not managed primarily for nature conservation, may nevertheless be managed in ways which are consistent with the persistence of the biodiversity for which they are important (Jonas et al. 2014). However, standard approaches to documentation of “other effective area-based conservation measures” are still under debate through the IUCN Task Force on Other Effective Areas Based Conservation Measures which will conclude with recommendations for a definition on OECMs. Once defined it is likely OEMCs will be documented in the World Database on Protected Areas.  Regarding important sites, the biggest limitation is that site identification to date has focused on specific subsets of biodiversity, for example birds (for Important Bird and Biodiversity Areas) and highly threatened species (for Alliance for Zero Extinction sites). While Important Bird and Biodiversity Areas have been documented to be good surrogates for biodiversity more generally (Brooks et al. 2001, Pain et al. 2005), the application of the unified standard for identification of Key Biodiversity Areas (IUCN 2016) sites across different levels of biodiversity (genes, species, ecosystems) and different taxonomic groups remains a high priority, building from efforts to date (Eken et al. 2004, Knight et al. 2007, Langhammer et al. 2007, Foster et al. 2012).  Key Biodiversity Area identification has been validated for a number of countries and regions where comprehensive biodiversity data allow formal calculation of the site importance (or “irreplaceability”) using systematic conservation planning techniques (Di Marco et al. 2016, Montesino Pouzols et al. 2014).  Future developments of the indicator will include: a) expansion of the taxonomic coverage of mountain Key Biodiversity Areas through application of the Key Biodiversity Areas standard (IUCN 2016) to a wide variety of mountain vertebrates, invertebrates, plants and ecosystem type; b) improvements in the data on protected areas by continuing to increase the proportion of sites with documented dates of designation and with digitised boundary polygons (rather than coordinates); and c) exploring other methods for assessing and presenting temporal trends in protected area coverage.  **Computation Method:**  This indicator is calculated from data derived from a spatial overlap between digital polygons for protected areas from the World Database on Protected Areas (IUCN & UNEP-WCMC 2017), Key Biodiversity Areas (from the World Database of Key Biodiversity Areas, including Important Bird and  Biodiversity Areas, Alliance for Zero Extinction sites, and other Key Biodiversity Areas; available through the [Integrated Biodiversity Assessment Tool](https://www.ibat-alliance.org/ibat-conservation/login)), and mountains (UNEP-WCMC 2002). The value of the indicator at a given point in time, based on data on the year of protected area establishment recorded in the World Database on Protected Areas, is computed as the mean percentage of each Key Biodiversity Area currently recognised that is covered by protected areas.  Year of protected area establishment is unknown for 12% of protected areas in the World Database on Protected Areas, generating uncertainty around changing protected area coverage over time. To reflect this uncertainty, a year was randomly assigned from another protected area within the same country, and then this procedure repeated 1,000 times, with the median plotted. In 2017 we slightly changed the methods described by Butchart et al. (2012, 2015) by randomly assigning a year to protected areas with no year of establishment before calculating trends in coverage. This is a computationally more efficient method and is likely to reflect more accurately changes in protected area coverage over time.  Previously the indicator was presented as the percentage of Key Biodiversity Areas completely covered by protected areas. However, it is now presented as the mean % of each Key Biodiversity Area that is covered by protected areas in order to better reflect trends in protected area coverage for countries or regions with few or no Key Biodiversity Areas that are completely covered. | Multi-stakeholder processes, following standard criteria and thresholds. | Ministries of environment | Gazettes for protected areas, BFD | BFD, MoEFCC  Big Data | * division * protected area management category: categories I–VI * ecosystem type: marine, terrestrial, freshwater | Bi-annual | Group 1 | 1st Round:  2019  2nd Round:  December,  2020  3rd Round:  December,  2022  4th Round:  December,  2024  5th Round:  December,  2026 | Data can be generated periodically based field inventory  Data availability reviewed in Nov. 2017 (classified as Tier I)  IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II) |
| 15.4.2 Mountain Green Cover Index | FAO  **Partner Agencies:**  UNEP | Tier I | **Definition:**  The Green Cover Index is meant to measure the changes of the green vegetation in mountain areas - i.e. forest, shrubs, trees, pasture land, crop land, etc. – in order to monitor progress on the mountain target.  The index, will provide information on the changes in the vegetation cover and, as such, will provide an indication of the status of the conservation of mountain environments.  **Concepts:**  Mountains are defined according to the UNEP-WCMC classification that identifies them according to altitude, slope and local elevation range as described by Kapos et al. 2000:  Class 1: elevation > 4,500 meters  Class 2: elevation 3,500–4,500 meters  Class 3: elevation 2,500–3,500 meters  Class 4: elevation 1,500–2,500 meters and slope > 2  Class 5: elevation 1,000–1,500 meters and slope > 5 or local elevation range (LER 7 kilometer radius) > 300 meters  Class 6: elevation 300–1,000 meters and local elevation range (7 kilometer radius) > 300 meters  **Comments and limitations:**  The indicator is based on Collect Earth, the most modern technology available. Its user friendliness and smooth learning curve make it a perfect tool for performing fast, accurate and cost-effective assessments. It is free, open source and highly customizable for the specific data collection needs and methodologies. It builds upon very high resolution multi-temporal images from Google Earth and Bing Maps and Landsat 7 and 8 datasets from Google Earth Engine. Data and images are stored and globally available for any year from 2000, making possible the monitoring of the change over time.  The indicator has a global accuracy of 99%, but at national level for small countries the degree of accuracy is lower. This will be improved over time as more countries expand the data collection within their territory.  Data on mountain coverage are provided by the 2015 FAO/MPS global map of mountains.  **Computation Method:**  The indicator results from the juxtaposition of land cover data extracted from FAO Collect Earth tool and the global map of mountains produced by FAO/MPS in 2015 based on the UNEP-WMCM mountain classification.  Collect Earth (<http://www.openforis.org/tools/collect-earth.html>) is a free and open source tool that enables data collection through Google Earth for a wide variety of purposes, including:   * Support multi-phase National Forest Inventories * Land Use, Land Use Change and Forestry (LULUCF) assessments * Monitoring agricultural land and urban areas * Validation of existing maps * Collection of spatially explicit socio-economic data * Quantifying deforestation, reforestation and desertification | Regional assessment | MPS/FAO | Land cover map 2015 and mountainous protected area based on digital elevation models, BFD | BFD, MoEFCC  Big Data | * mountain elevation class | Annual | Group 1 | 1st Round:  2015  2nd Round:  December,  2019  3rd Round:  December,  2020  4th Round:  December,  2021  5th Round:  December,  2022 | BFD should confirm the data provided  Data availability reviewed in Nov. 2017 (classified as Tier I) |
|  | Target 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species | | | | | | | | | | | |
| 15.5.1 Red List Index | IUCN  **Partner Agencies:**  UNEP,  CITES | Tier I | **Definition:**  The Red List Index measures change in aggregate extinction risk across groups of species. It is based on genuine changes in the number of species in each category of extinction risk on The IUCN Red List of Threatened Species (IUCN 2015) is expressed as changes in an index ranging from 0 to 1.  **Concepts:**  Threatened species are those listed on The IUCN Red List of Threatened Species in the categories Vulnerable, Endangered, or Critically Endangered (i.e., species that are facing a high, very high, or extremely high risk of extinction in the wild in the medium-term future). Changes over time in the proportion of species threatened with extinction are largely driven by improvements in knowledge and changing taxonomy. The indicator excludes such changes to yield a more informative indicator than the simple proportion of threatened species. It therefore measures change in aggregate extinction risk across groups of species over time, resulting from genuine improvements or deteriorations in the status of individual species. It can be calculated for any representative set of species that have been assessed for The IUCN Red List of Threatened Species at least twice (Butchart et al. 2004, 2005, 2007).  **Comments and limitations:**  There are four main sources of uncertainty associated with Red List Index values and trends.   1. Inadequate, incomplete or inaccurate knowledge of a species’ status. This uncertainty is minimized by assigning estimates of extinction risk to categories that are broad in magnitude and timing. 2. Delays in knowledge about a species becoming available for assessment. Such delays apply to a small (and diminishing) proportion of status changes, and can be overcome in the Red List Index through back-casting. 3. Inconsistency between species assessments. These can be minimized by the requirement to provide supporting documentation detailing the best available data, with justifications, sources, and estimates of uncertainty and data quality, which are checked and standardized by IUCN through Red List Authorities, a Red List Technical Working Group and an independent Standards and Petitions Sub-committee. Further, detailed Guidelines on the Application of the Categories and Criteria are maintained (IUCN SPSC 2016), as is an online training course (in English, Spanish and French). 4. Species that are too poorly known for the Red List Criteria to be applied are assigned to the Data Deficient category, and excluded from the calculation of the Red List Index. For birds, only 0.8% of extant species are evaluated as Data Deficient, compared with 24% of amphibians. If Data Deficient species differ in the rate at which their extinction risk is changing, the Red List Index may give a biased picture of the changing extinction risk of the overall set of species. The degree of uncertainty this introduces is estimated through a bootstrapping procedure that randomly assigns each Data Deficient species a category based on the numbers of non-Data Deficient species in each Red List category for the set of species under consideration, and repeats this for 1,000 iterations, plotting the 2.5 and 97.5 percentiles as lower and upper confidence intervals for the median.   The main limitation of the Red List Index is related to the fact that the Red List Categories are relatively broad measures of status, and thus the Red List Index for any individual taxonomic group can practically be updated at intervals of at least four years. As the overall index is aggregated across multiple taxonomic groups, it can be updated typically annually. In addition, the Red List Index does not capture particularly well the deteriorating status of common species that remain abundant and widespread but are declining slowly.  **Computation Method:**  The Red List Index is calculated at a point in time by first multiplying the number of species in each Red List Category by a weight (ranging from 1 for ‘Near Threatened’ to 5 for ‘Extinct’ and ‘Extinct in the Wild’) and summing these values. This is then divided by a maximum threat score which is the total number of species multiplied by the weight assigned to the ‘Extinct’ category. This final value is subtracted from 1 to give the Red List Index value.  Mathematically this calculation is expressed as:  RLIt = 1 – [(Ss Wc(t,s) / (WEX \* N)]  Where Wc(t,s) is the weight for category (c) at time (t) for species (s) (the weight for ‘Critically Endangered’ = 4, ‘Endangered’ = 3, ‘Vulnerable’ = 2, ‘Near Threatened’ = 1, ‘Least Concern’ = 0. ‘Critically Endangered’ species tagged as ‘Possibly Extinct’ or ‘Possibly Extinct in the Wild’ are assigned a weight of 5); WEX = 5, the weight assigned to ‘Extinct’ or ‘Extinct in the Wild’ species; and N is the total number of assessed species, excluding those assessed as Data Deficient in the current time period, and those considered to be ‘Extinct’ in the year the set of species was first assessed.  The formula requires that:   * Exactly the same set of species is included in all time periods, and * The only Red List Category changes are those resulting from genuine improvement or deterioration in status (i.e., excluding changes resulting from improved knowledge or taxonomic revisions), and * Data Deficient species are excluded.   In many cases, species lists will change slightly from one assessment to the next (e.g., owing to taxonomic revisions). The conditions can therefore be met by retrospectively adjusting earlier Red List categorizations using current information and taxonomy. This is achieved by assuming that the current Red List Categories for the taxa have applied since the set of species was first assessed for the Red List, unless there is information to the contrary that genuine status changes have occurred. Such information is often contextual (e.g., relating to the known history of habitat loss within the range of the species). If there is insufficient information available for a newly added species, it is not incorporated into the Red List Index until it is assessed for a second time, at which point earlier assessments are retrospectively corrected by extrapolating recent trends in population, range, habitat and threats, supported by additional information. To avoid spurious results from biased selection of species, Red List Indices are typically calculated only for taxonomic groups in which all species worldwide have been assessed for the Red List, or for samples of species that have been systematically or randomly selected.  The methods and scientific basis for the Red List Index were described by Butchart et al. (2004, 2005, 2007, 2010).  Butchart et al. (2010) also described the methods by which Red List Indices for different taxonomic groups are aggregated to produce a single multi-taxon Red List Index. Specifically, aggregated Red List Indices are calculated as the arithmetic mean of modelled Red List Indices. Red List Indices for each taxonomic group are interpolated linearly for years between data points and extrapolated linearly (with a slope equal to that between the two closest assessed points) to align them with years for which Red List Indices for other taxa are available. The Red List Indices for each taxonomic group for each year are modelled to take into account various sources of uncertainty:   1. Data Deficiency: Red List categories (from Least Concern to Extinct) are assigned to all Data Deficient species, with a probability proportional to the number of species in non-Data Deficient categories for that taxonomic group; 2. Extrapolation uncertainty: although RLIs were extrapolated linearly based on the slope of the closest two assessed point, there is uncertainty about how accurate this slope may be. To incorporate this uncertainty, rather than extrapolating deterministically, the slope used for extrapolation is selected from a normal distribution with a probability equal to the slope of the closest two assessed points, and standard deviation equal to 60% of this slope (i.e., the CV is 60%); 3. Temporal variability: the ‘true’ Red List Index likely changes from year to year, but because assessments are repeated only at multi-year intervals, the precise value for any particular year is uncertain.   To make this uncertainty explicit, the Red List Index value for a given taxonomic group in a given year is assigned from a moving window of five years, centred on the focal year (with the window set as 3-4 years for the first two and last two years in the series). Note that assessment uncertainty cannot yet be incorporated into the index. Practically, these uncertainties are incorporated into the aggregated Red List Indices as follows: Data Deficient species were allotted a category as described above, and a Red List Index for each taxonomic group was calculated interpolating and extrapolating as described above. A final Red List Index value was assigned to each taxonomic group for each year from a window of years as described above. Each such ‘run’ produced a Red List Index for the complete time period for each taxonomic group, incorporating the various sources of uncertainty. Ten thousand such runs are generated for each taxonomic group, and the mean is calculated.  Methods for generating national disaggregations of the Red List Index are described below. | Data are gathered from published and unpublished sources, species experts, scientists, and conservationists through correspondence, workshops, and electronic fora. | National agencies | IUCN | a) BFD, MoEFCC  Administrative Data | * division * political division * taxonomic subsets * suites of species relevant to particular international treaties or legislation * by suites of species exposed to particular threatening processes * by suites of species that deliver particular ecosystem services, or have particular biological or life-history traits * species * ecosystem type * habitat * geographic division | Annual | Group 1 | 1st Round:  2015  2nd Round:  December,  2020  3rd Round:  December,  2021  4th Round:  December,  2022  5th Round:  December,  2023 | Data can be generated after another doing field survey  Data availability reviewed in Nov. 2017 (classified as Tier I)  IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II) |
|  | Target 15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed | | | | | | | | | | | |
| 15.6.1 Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits | CBD-Secretariat  **Partner Agencies:**  FAO,  UNEP | Tier I | **Definition**  The indicator is defined as the number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits. It refers to the efforts by countries to implement the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity(2010) and the International Treaty on Plant Genetic Resources for Food and Agriculture (2001).  The Nagoya Protocol covers genetic resources and traditional knowledge associated with genetic resources, as well as the benefits arising from their utilization by setting out core obligations for its contracting Parties to take measures in relation to access, benefit-sharing and compliance. The objectives of the International Treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity.  The Protocol provides greater legal certainty and transparency for both providers and users of genetic resources and associated traditional knowledge, and therefore, encourages the advancement of research on genetic resources which could lead to new discoveries for the benefit of all.  The Nagoya Protocol also creates incentives to conserve and sustainably use genetic resources, and thereby enhances the contribution of biodiversity to development and human well-being. In addition, Parties to the Protocol are to encourage users and providers to direct benefits arising from the utilization of genetic resources towards the conservation of biological diversity and the sustainable use of its components.  The International Treaty has established the Multilateral System of Access and Benefit-sharing, which facilitates exchanges of plant genetic resources for purposes of agricultural research and breeding, by providing a transparent and reliable framework for the exchange of crop genetic resources. The Multilateral System is instrumental to achieving the conservation and sustainable use of plant genetic resources as well as the fair and equitable sharing of benefits arising from their use.  **Comments and limitations**  This indicator can be used to measure progress in adopting ABS legislative, administrative and policy frameworks over time.  This indicator does not assess the scope or effectiveness of ABS legislative, administrative and policy frameworks.  The notion of framework suggests that there is a complete set of rules established on access and benefit-sharing. However, it is difficult to have a predefined idea of what constitutes an ABS framework. In the context of this indicator, the publication by a country of one or more ABS legislative, administrative and policy measure in the ABS Clearing-House would be considered progress by that country on having an ABS legislative, administrative and policy framework, and through the Online Reporting System on Compliance of the International Treaty in relation to plant genetic resources for food and agriculture.  **Computation Method**  Summation of information made available by each Party to the Convention on Biological Diversity and to the International Treaty related to:   * ABS legislative, administrative or policy measures made available to the ABS Clearing-House and to the Online Reporting System on Compliance of the International Treaty in relation to plant genetic resources for food and agriculture (y/n); | Convention on Biological Diversity. | ABS focal points |  | MoEFCC  Administrative Data | * framework: legal framework/ administrative framework/policy framework * regional group * membership to a specific regional organization * status as Parties or non-Parties to the Protocol | Triennial | Group 2 | 1st Round:  December,  2019  2nd Round:  December,  2022  3rd Round:  December,  2025  4th Round:  December,  2028  5th Round:  December,  2030 | Data availability reviewed in Nov. 2017 (classified as Tier I)  IAEG-SDG 4th meeting: There is an agreed methodology, but low data availability (classified as Tier II) |
|  | Target 15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products | | | | | | | | | | | |
| 15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked | UNODC,  CITES  **Partner Agencies:**  UNEP | Tier II | **Definition:**  The share of all trade in wildlife detected as being illegal  **Concepts:**  “All trade in wildlife” is the sum of the values of legal and illegal trade  “Legal trade” is the sum of the value of all shipments made in compliance with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), using valid CITES permits and certificates.  “Illegal trade” is the sum of the value of all CITES/listed specimens seized.  **Comments and limitations:**  Seizures are an incomplete indicator of trafficking, and subject to considerable volatility. Universal coverage is not presently available, although 120 countries are represented in the present database. Since the indicator looks at the relationship between two values, changes in the relationship could be due to changes in either value.  **Computation Method:**  The value of a species-product unit is derived from the weighted average of prices declared for legal imports of analogous species product units, as acquired from United States Law Enforcement Monitoring and Information System of the Fish and Wildlife Service.  The value of legal trade is the sum of all species-product units documented in CITES export permits as reported in the CITES Annual Reports times the species-product unit prices as specified above.  The value of illegal trade is the sum of all species-product units documented in the World WISE seizure database times the species-product unit prices as specified above.  The indicator is value of illegal trade/(value of legal trade + value of illegal trade) | The legal trade data are reported annually by Parties to CITES and stored in the CITES Trade Database, managed by the UNEP World Conservation Monitoring Centre in Cambridge. | The CITES Management Authority of each country |  | BFD, MoEFCC  Administrative Data | * Form of trade | Annual | Group 2 | 1st Round:  December,  2019  2nd Round:  December,  2020  3rd Round:  December,  2021  4th Round:  December,  2022  5th Round:  December,  2023 | Data on traded wildlife not available  IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II)  Repeated 15.c.1 |
|  | Target 15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species | | | | | | | | | | | |
| 15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species | IUCN  **Partner Agencies:**  UNEP | Tier II | **Definition:**  This indicator aims to quantify trends in:  Part A: Commitment by countries to relevant multinational agreements, specifically:  (1) National adoption of invasive alien species-relevant international policy.  (2) Percentage of countries with  (a) national strategies for preventing and controlling invasive alien species; and  (b) national legislation and policy relevant to invasive alien species.  Part B: The translation of policy arrangements into action by countries to implement policy and actively prevent and control invasive alien species IAS and the resourcing of this action, specifically:  (3) National allocation of resources towards the prevention or control of invasive alien species.  **Concepts:**  An “Alien” species is described as one which has been introduced outside its natural distribution range because of intentional or accidental dispersion by human activity. An alien species which has become established in a natural or semi-natural ecosystem or habitat, is an agent of change, and threatens native biological diversity is known as an “Invasive alien species” (Convention on Biological Diversity 2016).  The introduction of an alien species can be intentional or unintentional /accidental. Alien species have been introduced intentionally for forestry, ornamental purposes, for aquaculture/mariculture, hunting, fisheries etc. Examples of unintentional or accidental introductions include: alien species that have escaped from gardens, aquaculture containment facilities, forestry, horticulture; pets and aquarium species that are released in the wild; transport contaminants and stowaways including in ballast water or as hull fouling organisms, and seeds carried in soil, equipment, vehicles etc.  Mechanisms of impact of invasive species include competition, predation, hybridisation, and disease transmission, parasitism, herbivory and trampling and rooting. The outcomes of these impacts lead to biodiversity loss, habitat degradation, and loss of ecosystem services.  **Comments and limitations:**  The adoption of legislation does not necessarily indicate the existence of regulations or policy to implement the legislation or how successful such implementation has been on the ground. There remains a need for further indicator development to make this link clearer. Legislation does not necessarily capture all efforts against invasive alien species that are happening at the national level.  Allocation of resources to facilitate the implementation of IAS management action is difficult to measure, particularly in a way that is comparable across countries. Proxies used to measure allocation of resources included- allocation of a budget line to invasive species management activities (including prevention, rapid response and active management); appointed staff to carry out any IAS related activities; active programmes/ projects etc.  **Computation Method:**  This indicator is calculated from data derived from four annually updated datasets.  Part A (1) Countries’ commitments to global conventions/ international agreements relevant to invasive alien species.  Ten Multinational Environmental Agreements (MEAs) were used to quantify the trend of countries commitment to global conventions that were relevant to invasive alien species issues. The year of Accession and Ratification were noted. The ten MEAs are:   * Convention on Biological Diversity (CBD) * OIE- World Organization for Animal Health * The *Convention on International Trade in Endangered Species* of Wild Fauna and Flora (*CITES*) * International Plant Protection Convention (*IPPC*) * The *Ramsar* Convention on Wetlands of International Importance * The Convention on Migratory *Species of Wild Animals* * The *Cartagena Protocol* on Biosafety * The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM) * WTO Sanitary and Phytosanitary or *SPS* measure * World Heritage Convention (WHC)   Part A (2)(a) National Legislation considered relevant to the prevention of introduction of invasive alien species and control.  Any National Legislation, Act or regulation that had any relevance to alien and invasive alien species was recorded including annotations of relevant text of the Legislation, key words, and date of enactment. 196 countries were included. Legislation was considered relevant if it applied to alien and invasive alien species rather than solely on weeds, pests and diseases of agriculture. If more than one relevant piece of Legislation was enacted the date of the most recent one was recorded.  Part A (2)(b) National Biodiversity Strategy and Action Plan (NBSAP) targets alignment to Aichi Biodiversity target 9 set out in the Strategic Plan for Biodiversity 2011-2020.  Aichi Biodiversity Target 9 is focused on invasive alien species, it states that “By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment”. The Aichi Targets are timebound and measurable. The CBD encourages all its member states to revise their NBSAPS and integrate the Aichi Targets into their strategies. The NBSAP of all CBD member were studied and numbers of countries that had integrated the Aichi Biodiversity Target 9 into their NBSAP targets was noted  Part B (3) Results of online survey on Policy responses, mandate, legal authority and resourcing to manage the threat of invasive alien species.  An online survey was developed and submitted to all CBD nodes and focal points to obtain an insight into the allocation of resources to the management of invasive alien species. Experts from 79 of the 196 countries completed the survey. Considering the difficulty in obtaining information on the level of national investment on invasive alien species issues, proxy indicators were used to measure the allocation of resources by individual countries, such as “does the country have a dedicated and staffed program for invasive alien species management”, “has the country applied for and obtained any funding from global funding mechanisms such as the GEF for projects related to alien and invasive alien species”, etc.  Part A and Part B Indicators were calculated as follows:  Part A Indicator: Commitment by countries to relevant multinational agreements, and National strategies for preventing and controlling invasive alien species, underpinned by national policy and legislation for effective management of biological invasions.  The components of this sub-indicator are calculated as, (1) the number of countries demonstrating adoption of invasive alien species-relevant international policy divided by the total number of countries (196 to date) for which data are available; (2) the number of countries with (a) national legislation and policy relevant to Invasive alien species concerns; and (b) national strategies for preventing and controlling invasive alien species, each divided by the total number of countries (196 to date) for which data are available. The first data point for components (1) and (2)(a) of this sub-indicator is 2010; the first data point for component (2)(b) is 2017.  Part B Indicator: (3) The translation of policy arrangements into action by countries to implement policy and actively prevent and control invasive alien species and the resourcing of this action.  This sub-indicator is calculated as the number of national respondents to the annual survey on invasive alien species response financing reporting availability of sufficient resources, divided by the total number of countries (79 to date) for which data are available. The first data point for this sub-indicator is 2017. | survey of relevant national agencies | National Ministries of Environment or similar agencies. |  | MoEFCC  Administrative Data | Not Applicable | Triennial | Group 2 | 1st Round:  June 2020  2nd Round:  June 2023  3rd Round:  June 2026  4th Round:  June 2029  5th Round:  June 2030 | Reviewed at 6th IAEG-SDG meeting (classified as Tier II) |
|  | Target 15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts | | | | | | | | | | | |
| 15.9.1 (a) Number of countries that have established national targets in accordance with or similar to Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020 in their national biodiversity strategy and action plans and the progress reported towards these targets; and (b) integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting | CBD-Secretariat,  UNEP | Tier II | **Definition:**  This indicator aims to quantify progress towards national targets established in accordance with Aichi Target 2.    Aichi Biodiversity Target 2 states *“By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems”.* As part of Strategic Goal A, Target 2 helps to *“Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society”.*    This indicator is composed of two parts:     * Part A: Number of countries that established national targets in accordance with Aichi   Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020 in their National Biodiversity  Strategy and Action Plans (NBSAP) and the progress reported towards these targets   * Part B: Integration of biodiversity values into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting (SEEA).     **Concepts:**  According to the Convention for Biological Diversity, biological diversity, or biodiversity, means “*the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems*” (CBD, 1992). Thus, biodiversity consists of variability between ecosystems, between species and within species. In addition, an ecosystem is designated as “a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit” (CBD, 1992).    Part A:  National Biodiversity Strategies and Action Plans are described in Article 6 of the Convention on General Measures for Conservation and Sustainable Use. The article states that:    *Each Contracting Party to the Convention shall, in accordance with its particular conditions and capabilities:*   1. *Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for the purpose existing strategies, plans or programmes which shall reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned; and* 2. *Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.*     Article 6 creates an obligation for national biodiversity planning. A national strategy will reflect how the country intends to fulfil the objectives of the Convention in light of specific national circumstances, and the related action plans will constitute the sequence of steps to be taken to meet these goals. Current NBSAPs are made available here: <https://www.cbd.int/nbsap/>    National reports are described in Article 26 of the Convention on reports which states that”    *Each Contracting Party shall, at intervals to be determined by the Conference of the Parties, present to the Conference of the Parties, reports on measures which it has taken for the*  *implementation of the provisions of this Convention and their effectiveness in meeting the objectives of this Convention.*    There have been sixth rounds of national reporting to date. The most recent round of national reporting had a deadline of 31 December 2018. The format for the sixth national reports requested that Parties, among other things, provide an assessment of their progress towards their national targets and/or the Aichi Biodiversity Targets. The progress assessment for Aichi Biodiversity Target 2 would thus provide critical information for indicator 15.9.2.    The sixth national reports are accessible fro[m https://chm.cbd.int/search/reporting-map?filter=nr6](https://chm.cbd.int/search/reporting-map?filter=nr6)    Part B:  There are two parts to the SEEA—the SEEA Central Framework (SEEA CF) and the SEEA Experimental  Ecosystem Accounting (SEEA EEA). The SEEA CF was adopted by the United Nations Statistical  Commission as the first and only international standard for environmental-economic accounting in 2012.  It was produced and released under the auspices of the United Nations, the European Commission, the Food and Agriculture Organization of the United Nations, the Organisation for Economic Co-operation and Development, the International Monetary Fund and the World Bank Group. The SEEA CF describes the interactions between the economy and the environment, and the stocks and changes in stocks of individual environmental assets, such as water, energy, forests and fisheries resources. The SEEA CF also includes environmental activity accounts, which cover the areas of environmental protection expenditures, environmental goods and services and taxes and subsidies.    The SEEA EEA complements the SEEA CF and represents international efforts toward a coherent accounting approach to the measurement of ecosystems. The SEEA EEA provides a framework which integrates measures of ecosystem extent, ecosystem condition and the flows of ecosystem services with measures of economic and other human activity. The SEEA EEA framework also contains species accounts. In March 2013, the United Nations Statistical Commission endorsed the SEEA EEA as the basis for commencing testing and further development of ecosystem accounting. The SEEA EEA was formally published in 2014 under the auspices of the United Nations, the European Commission, the Food and Agriculture Organization of the United Nations, the Organisation for Economic Co-operation and  Development, the International Monetary Fund and the World Bank Group. Following the decision of the United Nations Statistical Commission in March 2017, a revision of the SEEA EEA is now taking place, with the intention to reach agreement on as many aspects of ecosystem accounting as possible by 2020.    **Comments and limitations:**  Part A:  The national targets reflected in countries’ NBSAPs have various levels of alignment to Aichi Biodiversity Target. As such, a degree of interpretation may be required to determine to what extent the progress being reported nationally contributes to the global Aichi Biodiversity Target. Further, while the deadline for submitting the sixth national reports was 31 December 2018, not all Parties to the Convention have submitted their reports as of yet. .    Part B:  The SEEA covers the measurement of the relationship between the environment and economy according to a multitude of dimensions, including individual environmental assets, various aspects of ecosystems and their services and environmental activities. Thus, depending which modules of the SEEA CF or SEEA EEA a country has implemented, the specific biodiversity values being integrated into national accounting and reporting systems will vary.    In addition, the degree of SEEA implementation varies between countries. While some countries, particularly developing countries, are just beginning to integrate biodiversity values into their national accounting and reporting systems through pilot SEEA accounts, other countries have established SEEA programmes and have regularly produced both SEEA CF and SEEA EEA accounts for several years.    **Computation Method:**    Part A: National commitments (a target or targets) reflecting Aichi biodiversity Target 2 are identified within each submitted NBSAP and mapped against the components of this Aichi Biodiversity target. Parties in their national reports then provide an assessment of progress towards their national targets corresponding to Aichi Biodiversity Target 2 or to the Aichi Biodiversity Target itself. Parties are accessed to assess their progress using one of five categories::       * On track to exceed target * On track to achieve target * Progress towards target but at an insufficient rate * No significant change * Moving away from target * No information     The indicator provides aggregate numbers under these six categories.    Part B: The number of countries implementing either the SEEA CF or SEEA EEA, where implementation can be in the form of compilation of pilot accounts or official accounts. Implementation includes compilation of accounts that have not yet been published. | Data are regularly collected from the submission of NBSAPs by the Secretariat of the CBD. | Ministries of environment or similar agencies |  | a) MoEFCC b) BFD, MoEFCC  Administrative Data |  | Triennial | Group 2 | 1st Round:  December,  2020  2nd Round:  December,  2023  3rd Rou December,  2026  4th Round:  December,  2029  5th Round:  December,  2030 | UNSC 51 revision included in the 2020 comprehensive review  Reviewed at 10th IAEG-SDG meeting  (classified as Tier II) |
|  | Target 15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems | | | | | | | | | | | |
| 15.a.1 (a) Official development assistance on conservation and sustainable use of biodiversity; and (b) revenue generated and finance mobilized from biodiversity-relevant economic instruments |  | TBD | **Definition:**  This is a twin indicator consisting of:  a) Official development assistance on conservation and sustainable use of biodiversity, defined as gross disbursements of total Official Development Assistance (ODA) from all donors for biodiversity.  b) revenue generated and finance mobilised from biodiversity-relevant economic instruments, defined as revenue generated and finance mobilised from biodiversity-relevant economic instruments, covering biodiversity-relevant taxes, fees and charges, and positive subsidies. (New on-going work is underway to collect data on payments for ecosystem services and biodiversity offsets -- including the finance they mobilise for biodiversity).  **Concepts:**  a) The Development Assistance Committee (DAC) defines ODA as those flows to countries and territories on the DAC list of ODA recipients and multilateral institutions which are:   1. Provided by official agencies, including state and local governments, or by their executive agencies; and 2. Each transaction of which: 3. is administered with the promotion of the economic development and welfare of developing countries as its main objective; and 4. is concessional in character.   (See <http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm>).  b) The Environmental Policy Committee (EPOC) collects data on Policy Instruments for the Environment, including biodiversity-relevant economic instruments. Currently more than 110 countries are contributing data. For 2018 data, see [Tracking Economic Instruments and Finance for Biodiversity](https://www.oecd.org/environment/resources/Tracking-Economic-Instruments-and-Finance-for-Biodiversity.pdf).  **Comments and limitations:**  a) OECD CRS data are available since 1973. However, the data coverage at an activity level is considered complete from 1995 for commitments and 2002 for disbursements. The Rio biodiversity marker was introduced in 2002.  b) The database tracks the biodiversity-relevant economic instruments that countries have put in place, and countries are encouraged to also provide information on the revenue and finance channelled via each of the instruments. The comprehensiveness of data provided currently varies across the biodiversity-relevant economic instruments. The data on revenue generated by biodiversity-relevant taxes is currently the most comprehensive. For the data on biodiversity-relevant fees and charges, for example, of the total number of these instruments currently reported to the PINE database, 42% also include data on the finance they generate.  Like all data provided by a diffuse set of respondents, the data is subject to missing values, human error, and differences in interpretation of the provided definitions. However, all possible efforts have been made to ensure that the data is complete, accurate, and comparable across countries.  **Computation Method:**  a) This indicator is calculated as the sum of all ODA flows from all donors to developing countries that have biodiversity as a principal or significant objective, thus marked with the Rio marker for biodiversity.  b) Countries are requested to report on when the policy instrument was introduced, what it applies to, the geographical coverage, the environmental domain, the industries concerned; the revenues, costs or rates; whether the revenue is earmarked; and exemptions. | Via and annual questionnaire | Ministries of Finance and Environment, statistical institutes |  | a) ERD b) MoEFCC c) MoA  d)  UNSTATS  Administrative Data | * donor country * recipient country (region) * type of finance * type of aid * sector * by policy marker (gender) | Annual |  | 1st Round:  2015  2nd Round:  December,  2020  3rd Round:  December,  2021  4th Round:  December,  2022  5th Round:  December,  2023 | UNSC 51 replacement included in the 2020 comprehensive review  Repeated  15.b.1 |
|  | Target 15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation | | | | | | | | | | | |
| 15.b.1 (a) Official development assistance on conservation and sustainable use of biodiversity; and (b) revenue generated and finance mobilized from biodiversity-relevant economic instruments |  | TBD | **Definition:**  This is a twin indicator consisting of:  a) Official development assistance on conservation and sustainable use of biodiversity, defined as gross disbursements of total Official Development Assistance (ODA) from all donors for biodiversity.  b) revenue generated and finance mobilised from biodiversity-relevant economic instruments, defined as revenue generated and finance mobilised from biodiversity-relevant economic instruments, covering biodiversity-relevant taxes, fees and charges, and positive subsidies. (New on-going work is underway to collect data on payments for ecosystem services and biodiversity offsets -- including the finance they mobilise for biodiversity).  **Concepts:**  a) The Development Assistance Committee (DAC) defines ODA as those flows to countries and territories on the DAC list of ODA recipients and multilateral institutions which are:   1. Provided by official agencies, including state and local governments, or by their executive agencies; and 2. Each transaction of which: 3. is administered with the promotion of the economic development and welfare of developing countries as its main objective; and 4. is concessional in character.   (See <http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm>).  b) The Environmental Policy Committee (EPOC) collects data on Policy Instruments for the Environment, including biodiversity-relevant economic instruments. Currently more than 110 countries are contributing data. For 2018 data, see [Tracking Economic Instruments and Finance for Biodiversity](https://www.oecd.org/environment/resources/Tracking-Economic-Instruments-and-Finance-for-Biodiversity.pdf).  **Comments and limitations:**  a) OECD CRS data are available since 1973. However, the data coverage at an activity level is considered complete from 1995 for commitments and 2002 for disbursements. The Rio biodiversity marker was introduced in 2002.  b) The database tracks the biodiversity-relevant economic instruments that countries have put in place, and countries are encouraged to also provide information on the revenue and finance channelled via each of the instruments. The comprehensiveness of data provided currently varies across the biodiversity-relevant economic instruments. The data on revenue generated by biodiversity-relevant taxes is currently the most comprehensive. For the data on biodiversity-relevant fees and charges, for example, of the total number of these instruments currently reported to the PINE database, 42% also include data on the finance they generate.  Like all data provided by a diffuse set of respondents, the data is subject to missing values, human error, and differences in interpretation of the provided definitions. However, all possible efforts have been made to ensure that the data is complete, accurate, and comparable across countries.  **Computation Method:**  a) This indicator is calculated as the sum of all ODA flows from all donors to developing countries that have biodiversity as a principal or significant objective, thus marked with the Rio marker for biodiversity.  b) Countries are requested to report on when the policy instrument was introduced, what it applies to, the geographical coverage, the environmental domain, the industries concerned; the revenues | Via and annual questionnaire | Ministries of Finance and Environment, statistical institutes |  | a) ERD b) MoEFCC c) MoA  d) UNSTATS  e) FD  Administrative Data | * donor country * recipient country (region) * type of finance * type of aid * sector * by policy marker (gender) | Annual |  | 1st Round:  2015  2nd Round:  July, 2019  3rd Round:  July, 2020  4th Round:  July, 2021  5th Round:  July, 2022 | UNSC 51 replacement included in the 2020 comprehensive review  Repeated  15.a.1 |
|  | Target 15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities | | | | | | | | | | | |
| 15.c.1 Proportion of traded wildlife that was poached or illicitly trafficked | UNODC,  CITES  **Partner Agencies:**  UNEP | Tier II | **Definition:**  The share of all trade in wildlife detected as being illegal  **Concepts:**  “All trade in wildlife” is the sum of the values of legal and illegal trade  “Legal trade” is the sum of the value of all shipments made in compliance with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), using valid CITES permits and certificates.  “Illegal trade” is the sum of the value of all CITES/listed specimens seized.  **Comments and limitations:**  Seizures are an incomplete indicator of trafficking, and subject to considerable volatility. Universal coverage is not presently available, although 120 countries are represented in the present database. Since the indicator looks at the relationship between two values, changes in the relationship could be due to changes in either value.  **Computation Method:**  The value of a species-product unit is derived from the weighted average of prices declared for legal imports of analogous species product units, as acquired from United States Law Enforcement Monitoring and Information System of the Fish and Wildlife Service.  The value of legal trade is the sum of all species-product units documented in CITES export permits as reported in the CITES Annual Reports times the species-product unit prices as specified above.  The value of illegal trade is the sum of all species-product units documented in the World WISE seizure database times the species-product unit prices as specified above.  The indicator is value of illegal trade/(value of legal trade + value of illegal trade) | adjustment/validation with  standardized codes | The CITES Management Authority of each country |  | BFD, MoEFCC Administrative Data | Form of trade | Annual | Group 2 | 1st Round:  December, 2020  2nd Round:  December, 2021  3rd Round:  December, 2022  4th Round:  December, 2023  5th Round:  December, 2024 | IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II)  Repeated 15.7.1 |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

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| A close up of a sign  Description automatically generated | Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier**  **Classifi-**  **cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
|  | Target 16.1 Significantly reduce all forms of violence and related death rates everywhere | | | | | | | | | | | |
| 16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age | UNODC,  WHO  **Partner Agencies:**  DESA Population Division,  UNICEF | Tier I | Definition:  The indicator is defined as the total count of victims of intentional homicide divided by the total population, expressed per 100,000 population.  Intentional homicide is defined as the unlawful death inflicted upon a person with the intent to cause death or serious injury (Source: International Classification of Crime for Statistical Purposes, ICCS 2015); population refers to total resident population in a given country in a given year.  **Concepts:**  In the ICCS intentional homicide is defined as the ‘‘Unlawful death inflicted upon a person with the intent to cause death or serious injury”. This definition contains three elements characterizing the killing of a person as intentional homicide:  1. The killing of a person by another person (objective element);  2. The intent of the perpetrator to kill or seriously injure the victim (subjective element);  3. The unlawfulness of the killing, which means that the law considers the perpetrator liable for the unlawful death (legal element).  This definition states that, for statistical purposes, all killings corresponding to the three criteria above should be considered as intentional homicides, irrespective of definitions provided by national legislations or practices.  Comments and limitations:  The ICCS provides important clarifications on the definition of intentional homicide. In particular, it states that the following killings are included in the count of homicide:  - Murder  - Honour killing  - Serious assault leading to death  - Death as a result of terrorist activities  - Dowry-related killings  - Femicide  - Infanticide  - Voluntary manslaughter  - Extrajudicial killings  - Killings caused by excessive force by law enforcement/state officials  Furthermore, the ICCS provides indications on how to distinguish between intentional homicides, killings directly related to war/conflict and other killings that amount to war crimes.  The fact that homicide data are typically produced by two separate and independent sources at national level (criminal justice and public health) represents a specific asset of this indicator, as the comparison of the two sources is a tool to assess accuracy of national data. Usually, for countries where data from both sources exist, a good level of matching between the sources is recorded (see UNODC Global Study on Homicide, 2013).  Data on homicides produced by public health authorities are guided by the International classification of diseases (ICD-10), which provides a definition of ‘Death by assault’ that is very close to the definition of intentional homicide of the ICCS.  **Computation Method:**  The indicator is calculated as the total number of victims of intentional homicide recorded in a given year divided by the total resident population in the same year, multiplied by 100,000.  In several countries, two separate sets of data on intentional homicide are produced, respectively from criminal justice and public health/civil registration systems. When existing, figures from both data sources are reported. Population data are derived from annual estimates produced by the UN Population Division. | National institutions responsible for data production in the area of crime and criminal justice (National Statistical Offices, Ministry of Interior, Ministry of Justice, etc.). | Data on intentional homicide are sent to UNODC by member states, usually through national UN-CTS Focal Points which in most cases are national institutions responsible for data production in the area of crime and criminal justice (National Statistical Offices, Ministry of Interior, Ministry of Justice, etc.). The primary source on intentional homicide is usually an institution of the criminal justice system (Police, Ministry of Interior, general Prosecutor Office, etc.). Data produced by public health/civil registration system are sent to WHO through national health authorities. | BP  Administrative Data | BP,PSD  Administrative Data | * Sex: male/female * Age: 0-14 yrs/15-24 yrs/25-64 yrs/ 64+ years * Relationship of victim and perpetrator: Spouse/Siblings/Spouse’ family member/ other family member/ security force/acquaintance * Means of perpetration: firearm/ Sharp object/blunt object/manual attack/poison * Situational context/motivation: organized crime/ domestic violence/gun fight with security force | Annual | Group 1 | 1st Round:  2015  2nd Round:  December, 2018  3rd Round:  December, 2019  4th Round:  December, 2020  5th Round:  December, 2021 | BP has recalculated the values with BBS Population data.  Projected values for 2019 is: 2.28 |
| 16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause | OHCHR  **Partner Agencies:**  UNMAS,  DESA Population Division | Tier II | **Definition:**  This indicator is defined as the total count of conflict-related deaths divided by the total population, expressed per 100,000 population.  *‘Conflict’* is defined as *‘armed conflict’* in reference to a terminology enshrined in International Humanitarian Law (IHL), and applied to situations based on the assessment of the United Nations (UN) and other internationally mandated entities. *‘Conflict-related deaths’* refers to direct and indirect deaths associated to armed conflict. *‘Population’* refers to total resident population in a given situation of armed conflict included in the indicator, in a given year. Population data are derived from annual estimates produced by the UN Population Division.  **Concepts:**  *‘Conflict’*  According to IHL, the branch of international law, which specifically focuses on armed conflicts, two types of armed conflicts exist: international armed conflicts (IAC) and non-international armed conflicts (NIAC).  IAC exist whenever there is resort to armed force between two or more States. An IAC does not exist in cases in which use of force is the result of an error (e.g. involuntary incursion into foreign territory, wrongly identifying the target); and when the territorial State has given its consent to an intervention.  NIAC are protracted armed confrontations occurring between governmental armed forces and the forces of one or more armed groups, or between such groups arising on the territory of a State. The armed confrontation must reach a “minimum level of intensity” and the parties involved in the conflict must show a “minimum of organisation”.  *‘Conflict-related deaths’*  Direct deaths are deaths where there are reasonable grounds to believe that they resulted directly from war operations and that the acts, decisions and/or purposes that caused these deaths were in furtherance of or under the guise of armed conflict.  These deaths may have been caused by (i) the use of weapons or (ii) other means and methods. Deaths caused by the use of weapons, include but are not limited to those inflicted by firearms, missiles, mines, and bladed weapons. It may also include deaths resulting from aerial attacks and bombardments (e.g. of military bases, cities and villages), crossfire, explosive remnants of war, targeted killings or assassinations, force protection incidents. Deaths caused by other means and methods may include deaths from torture or sexual and gender-based violence, intentional killing using starvation, depriving prisoners of access to health care or denying access to essential goods and services (e.g. an ambulance stopped at a check point).  Indirect deaths are deaths resulting from a loss of access to essential goods and services (e.g. economic slowdown, shortages of medicines or reduced farming capacity that result in lack of access to adequate food, water, sanitation, health care and safe conditions of work) that are caused or aggravated by the situation of armed conflict.  By definition, these deaths should be separated from other violent deaths which are, in principle, not connected to the situation of armed conflict (e.g. intentional and non-intentional homicides, self-defence, self-inflicted), but are still relevant to the implementation and measurement of SDG target 16.1. The International Classification of Crime for Statistical Purposes (ICCS) provides definitional elements and classification of violent deaths both related and not related to armed conflict. The ICCS provides indications on how to distinguish between intentional homicides, killings directly related to war/armed conflict and killings that amount to war crimes.  *‘Cause’* refers to the weapons, means and methods that caused the conflict-related deaths. The categories for the disaggregation of the ‘c*ause of death*’ for direct deaths build on the WHO International Classification of Diseases (ICD-11), ICCS, the International Committee of the Red Cross (ICRC) overview of weapons regulated by IHL, UN practice and OHCHR casualty recording.  **Comments and limitations:**  In situations of armed conflict, a large share of deaths may not be reported. Often, normal registration systems are heavily affected by the presence of armed conflict. Additionally, actors on both sides of an armed conflict may have incentives for misreporting, deflating or inflating casualties. In most instances, the number of cases reported will depend on access to conflict zones, access to information, motivation and perseverance of both international and national actors, such as UN peace missions and other internationally mandated entities, national institutions (e.g. national statistical offices, national human rights institutions) and relevant civil society organizations.  **Computation Method:**  The indicator is calculated as the total count of conflict-related deaths divided by the total resident population in a given situation of armed conflict for the year, expressed per 100,000 population, occurring within the preceding 12 months.  The total count of conflict-related deaths includes first the total number of documented direct deaths, using all potentially relevant data sources (e.g. UN peace missions, national statistical offices, national human rights institutions, civil society organisations). Documented cases provide verified information on each direct conflict-related death.  Depending on the magnitude of conflict-related deaths, capacity of data providers, and other contextual and practical considerations, the methodology will seek to produce statistical estimates of undocumented deaths directly linked to the armed conflict. Further work will be needed to cover deaths indirectly linked to the armed conflict, e.g. loss of access to essential goods and services. Existing data must be updated regularly and retrospectively reflecting the emergence of new data over time. | Data will be compiled from data providers that have been systematically assessed by OHCHR | Peacekeeping operations, commissions of inquiry, humanitarian operations and human rights offices,  National human rights institutions,  National statistical offices and relevant civil society organizations. | BP  Administrative Data | BP, PSD  Administrative Data | * Geographic Location: rural/ peri-rural/ urban/peri-urban * Gender: Male/female * Disability: Disable/Non-disable | Annual | Group 1 | 1st Round:  2015  2nd Round:  December, 2020  3rd Round:  December, 2021  4th Round:  December, 2022  5th Round:  December, 2023 |  |
| 16.1.3 Proportion of population subjected to (a) physical violence, (b) psychological violence and (c) sexual violence in the previous 12 months | UNODC  **Partner Agencies:**  UN Women, UNFPA,  WHO,  UNICEF | Tier II | **Definition:**  The total number of persons who have been victim of physical, psychological or sexual violence in the previous 12 months, as a share of the total population.  **Concepts:**  This indicator measures the prevalence of victimization from physical, psychological or sexual violence  Physical violence: This concept is equivalent to the concept of physical assault, as defined in the International Classification of Crime for Statistical Purposes (ICCS): the intentional or reckless application of physical force inflicted upon the body of a person. This includes serious and minor bodily injuries and serious and minor physical force. According to the ICCS, these are defined as:  Serious bodily injury, at minimum, includes gunshot or bullet wounds; knife or stab wounds; severed limbs; broken bones or teeth knocked out; internal injuries; being knocked unconscious; and other severe or critical injuries.  Serious physical force, at minimum, includes being shot; stabbed or cut; hit by an object; hit by a thrown object; poisoning and other applications of force with the potential to cause serious bodily injury.  Minor bodily injury, at minimum, includes bruises, cuts, scratches, chipped teeth, swelling, black eye and other minor injuries.  Minor physical force, at minimum, includes hitting, slapping, pushing, tripping, knocking down and other applications of force with the potential to cause minor bodily injury.  Sexual violence (ICCS): Unwanted sexual act, attempt to obtain a sexual act, or contact or communication with unwanted sexual attention without valid consent or with consent as a result of intimidation, force, fraud, coercion, threat, deception, use of drugs or alcohol, or abuse of power or of a position of vulnerability. This includes rape and other forms of sexual assault.  Psychological violence: There is as yet no consensus at the international level of the precise definition of psychological violence and there is as yet no generally well-established methodology to measure psychological violence.  **Comments and limitations:**  Crime victimization surveys are able to capture experience of violence suffered by adult population of both sexes; however, due to the complexity of collecting information on experiences of violence, it is likely that not all experiences of violence are duly covered by these surveys, which aim to cover several types of crime experience. Other dedicated surveys on violence usually focus on selected population groups (typically women, children or the elderly) or in specific contexts (domestic violence, schools, prisons, etc.), but they are not able to portray levels and trends of violence in the entire population.  While there are already international standards on measuring physical and sexual violence through survey instruments, there is currently no international standard on the measurement of psychological violence. One practical option could be to limit psychological violence to threatening behaviour, which does have an established methodology of measurement in victimization surveys. Threatening behaviour, at minimum, is an intentional behaviour that causes fear of injury or harm.  Finally, indicators on prevalence of physical and sexual violence are usually produced and reported separately; the production of data on the prevalence of physical or sexual violence requires ad-hoc data collection.  Victimization surveys (as dedicated surveys or as modules of household surveys) are usually restricted to the general population living in households above a certain age (typically 15 or 18 years of age), while sometimes an upper age limit is also applied (typically 65, 70 or 75 years of age).  **Computation Method:**  Number of survey respondents who have been victim of physical, psychological or sexual violence in the previous 12 months, divided by the total number of survey respondents. | There is a consolidated system of annual data collection on crime and criminal justice (UN- Crime Trends Survey, UN-CTS) which represents the basis of data on intentional homicide. The UN-CTS data collection is largely based on the network of national Focal Points, which are institutions/officials appointed by countries and having the technical capacity and role to produce data on crime and criminal justice (around 130 appointed Focal Points as of 2016).    The UN-CTS collects data on reporting rate by victims of “physical assault” and “sexual assault”. The current data collection will be reviewed to collect more precise data on this indicator.    Data for SDG monitoring will be sent to countries for consultation prior to publication. | National Statistical Offices, Police, Ministry of Justice, Ministry of Interior, Prosecutor’s Office | BBS  VAWS | BBS  VAW Survey/GBVS | * Male, Female, Transgender * Age 0-15 yrs, 16-24 yrs, 25-64 yrs, 64+ yrs * Income level: High/Medium/Low * Education: Illiterate/Primary/Secondary/Higher * Citizenship: Citizen/Non Citizen * Ethnicity: Ethnic/ Non Ethnic | Triennial | Group 1 | 1st Round:  2015  2nd Round:  July, 2020  3rd Round:  July, 2023  4th Round:  July, 2026  5th Round:  July, 2029 |  |
| 16.1.4 Proportion of population that feel safe walking alone around the area they live | UNODC | Tier II | **Definition:**  This indicator refers to the proportion of the population (adults) who feel safe walking alone in their neighbourhood.  **Concepts:**  The question measures the feeling of fear of crime in a context outside the house and refers to the immediate experience of this fear by the respondent by limiting the area in question to the “neighbourhood” or “your area” (various formulations depending on cultural, physical and language context).  **Comments and limitations:**  While the measurement of fear of crime is widely applied in crime victimization surveys around the world, different practices exist in the operationalization of this indicator – for example, by not requiring the person to “walk alone” or limiting the walking to “at night”. Further guidance on measuring the indicator are currently elaborated by UNODC in collaboration with victimization survey experts.  In 2010 UNODC-UNECE published a Manual on Victimization Surveys that provides technical guidance on the implementation of such surveys, on the basis of good practices developed at country level. UNODC-UNECE Manual on Victimization Surveys (2010), available at: https://www.unodc.org/documents/data-and-analysis/Crime-statistics/Manual\_on\_Victimization\_surveys\_2009\_web.pdf  Victimization surveys (as dedicated surveys or as modules of household surveys) are usually restricted to the general population living in households above a certain age (typically 15 or 18 years of age), while sometimes an upper age limit is also applied (typically 65, 70 or 75 years of age).  **Computation Method:**  The question used in victimization surveys is: How safe do you feel walking alone in your area/neighbourhood? Answer: Very safe/fairly safe/bit unsafe/very unsafe/ I never walk alone after dark/don’t know. The proportion of population that feel safe is calculated by summing up the number of respondents who feel “very safe” and “fairly safe” and dividing the total by the total number of respondents. | There is a consolidated system of annual data collection on crime and criminal justice (UN- Crime Trends Survey, UN-CTS) managed by UNODC. The UN-CTS data collection is largely based on the network of national Focal Points, which are institutions/officials appointed by countries and having the technical capacity and role to produce data on crime and criminal justice (around 130 appointed Focal Points as of 2016). As decided in a recent meeting of Focal Points, the UN-CTS will be reviewed to include indicator 16.1.4 | Data are collected through sample surveys among the general population, most often through crime victimization surveys. UNODC collects data on crime and criminal justice through its annual data collection (UN-CTS). The data collection through the UN-CTS is facilitated by a network of over 130 national Focal Points appointed by responsible authorities. Data on ‘fear of crime’ are not yet collected in the UN-CTS, however, it is expected that data collection on this indicator can be included in the next major revision of the UN-CTS planned for 2017. | BBS  CPHS | BBS  CPHS | * Sex: male/female * Location: Rural/Urban | Triennial | Group 1 | 1st Round:  2018  2nd Round:  July, 2021  3rd Round:  July, 2024  4th Round:  July, 2027  5th Round:  July, 2030 |  |
|  | Target 16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children | | | | | | | | | | | |
| 16.2.1 Proportion of children aged 1–17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month | UNICEF | Tier II | **Definition:**  Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month is currently being measured by the Proportion of children aged 1-14 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month.  **Concepts:**  In Multiple Indicator Cluster Surveys (MICS), psychological aggression refers to the action of shouting, yelling or screaming at a child, as well as calling a child offensive names, such as ‘dumb’ or ‘lazy’. Physical (or corporal) punishment is an action intended to cause physical pain or discomfort, but not injuries. Physical punishment is defined as shaking the child, hitting or slapping him/her on the hand/arm/leg, hitting him/her on the bottom or elsewhere on the body with a hard object, spanking or hitting him/her on the bottom with a bare hand, hitting or slapping him/her on the face, head or ears, and beating him/her over and over as hard as possible.  **Comments and limitations:**  There is an existing, standardized and validated measurement tool (the Parent-Child version of the Conflict Tactics Scale, or CTSPC) that is widely accepted and has been implemented in a large number of countries, including high-income countries.  Definitions of both physical punishment and psychological aggression will need to be very clearly defined for countries but this should not be a problem as there is a wealth of available literature and research on the violent punishment of children and General Comment No.13 on the Convention of the Rights of the Child (CRC) also provides a definition for “corporal” or “physical” punishment as well as "mental violence".  **Computation Method:**  Number of children aged 1-17 years who are reported to have experienced any physical punishment and/or psychological aggression by caregivers in the past month divided by the total number of children aged 1-17 in the population multiplied by 100 | UNICEF undertakes an annual process to update its global databases, called Country Reporting on Indicators for the Goals (CRING). This exercise is done in close collaboration with UNICEF country offices with the purpose of ensuring that UNICEF global databases contain updated and internationally comparable data. UNICEF Country Offices are invited to submit, through an online system, any updated data for a number of key indicators on the well-being of women and children. Updates sent by the country offices are then reviewed by sector specialists at UNICEF headquarters to check for consistency and overall data quality of the submitted estimates. This review is based on a set of objective criteria to ensure that only the most recent and reliable information is included in the databases. Once reviewed, feedback is made available on whether or not specific data points are accepted, and if not, the reasons why. New data points that are accepted are then entered into UNICEF’s global databases and published in the State of the World’s Children statistical tables, as well as in all other data-driven publications/material. The updated databases are also posted online at data.unicef.org. UNICEF also searches throughout the year for additional sources of data that are vetted by the UNICEF country office before they are included in the global databases. | National Statistical Offices (for the most part) | BBS  MICS | BBS  GBVS/MICS | * Age: 1-17 * Sex: male/female * Income High/Medium/Low * Place of residence: Urban/Rural * Geographic location: Division | Triennial | Group 1 | 1st Round:  2013  2nd Round:  July, 2019  3rd Round:  July, 2022  4th Round:  July, 2025  5th Round:  July, 2028 | Fully compliant with the Paris Principles: 79  Partially compliant with the Paris Principles: 33 (including Bangladesh)  Non-compliance with the Paris Principles: 10 |
| 16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation | UNODC  **Partner Agencies:**  UNICEF | Tier II | **Definition:**  The indicator is defined as the ratio between the total number of victims of trafficking in persons detected or living in a country and the population resident in the country, expressed per 100,000 populations.  According to Article 3, paragraph (a) of the UN Trafficking in Persons Protocol, trafficking in persons is defined as “the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs”.  Article 3, (b) states “the consent of a victim of trafficking in persons to the intended exploitation set forth in subparagraph (a) of this article shall be irrelevant where any of the means set forth in subparagraph (a) have been used”;  Article 3, (c) states “the recruitment, transportation, transfer, harbouring or receipt of a child for the purpose of exploitation shall be considered trafficking in persons even if this does not involve any of the means set forth in subparagraph (a);"  **Concepts:**  According to the definition given in the Trafficking in Persons Protocol, trafficking in persons has three constituent elements; The Act (Recruitment, transportation, transfer, harbouring or receipt of persons), the Means  (Threat or use of force, coercion, abduction, fraud, deception, abuse of power or of a position of vulnerability, or giving payments or benefits to a person in control over another person) and the Purpose (at minimum exploiting the prostitution of others, sexual exploitation, forced labour, slavery or similar practices and the removal of organs).  The definition implies that the exploitation does not need to be in place, as the intention by traffickers to exploit the victim is sufficient to define a trafficking offence. Furthermore, the list of exploitative forms is not limited, which means that other forms of exploitation may emerge and they could be considered to represent additional forms of trafficking offences.  **Comments and limitations:**  The count of detected victims of trafficking has the benefit of referring to victims as defined by the UN Protocol where the act, the mean and the purpose of trafficking have been identified by the national authorities. However it does not cover the dark number of crime, i.e. the number of victims non detected by the authorities. While information on detected victims can provide valuable information to monitor sex and age profile of detected victims, as well as on forms of exploitation ,trafficking flows, the number of detected victims per se doesn’t monitor the level of trafficking of persons so interpretation of trends should be done with caution, as changes in detected victims of trafficking can be due to multiple factors such as intensity of trafficking flows but also to changes of law enforcement practices, changes in legislation, or changes in victims attitudes,.  **Computation Method:**  This numerator of this indicator is composed of two parts: detected and undetected victims of trafficking in persons. The detected part of trafficking victims, as resulting from investigation and prosecution activities of criminal justice system, is counted and reported by national law enforcement authorities.  Methodology to estimate the number of undetected victims of trafficking in persons is under development: some methods have been identified , but further testing is needed to produce a consolidated and agreed upon approach. The method to estimate undetected victims will have to allow the estimation of victims characteristics (sex and age) and the forms of exploitation suffered.  The indicator will be calculated as the ratio between the sum of detected and undetected victims of trafficking and the population resident in the country, multiplied by 100,000 | UNODC collects data from national authorities competent in detecting victims of trafficking through a common questionnaire. Once consolidated, before publication data are shared with countries to check their accuracy. | UNODC collects data from national authorities (normally designated by the Ministry of Foreign Affairs) competent in detecting victims of trafficking, either law enforcement institutions or national agencies responsible for assisting victims of trafficking | BP  Administrative Data | BP, PSD  Administrative Data | * sex: male/female * age: 0-15 yrs, 16-24 yrs, 25-64 yrs, 64+ yrs * form of exploitation | Annual | Group 1 | 1st Round:  2015  2nd Round:  December,  2018  3rd Round:  December,  2019  4th Round:  December,  2020  5th Round:  December,  2021 | IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II) |
| 16.2.3 Proportion of young women and men aged 18–29 years who experienced sexual violence by age 18 | UNICEF  **Partner Agencies:**  UNSD,  UNODC | Tier II | **Definition:**  Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18  **Concepts:**  Definition from General Comment No. 13 on the Convention of the Rights of the Child (CRC):  Sexual violence comprises any sexual activities imposed by an adult on a child against which the child is entitled to protection by criminal law. This includes: (a) The inducement or coercion of a child to engage in any unlawful or psychologically harmful sexual activity; (b) The use of children in commercial sexual exploitation; (c) The use of children in audio or visual images of child sexual abuse; and (d) Child prostitution, sexual slavery, sexual exploitation in travel and tourism, trafficking for purposes of sexual exploitation (within and between countries), sale of children for sexual purposes and forced marriage. Sexual activities are also considered as abuse when committed against a child by another child if the offender is significantly older than the victim or uses power, threat or other means of pressure. Consensual sexual activities between children are not considered as sexual abuse if the children are older than the age limit defined by the State Party.  **Comments and limitations:**  The availability of comparable data remains a serious challenge in this area as many data collection efforts have relied on different study methodologies and designs, definitions of sexual violence, samples and questions to elicit information. A further challenge in this field is underreporting, especially when it comes to reporting on experiences of sexual violence among boys and men.  **Computation Method:**  Number of young women and men aged 18-29 years who report having experienced any sexual violence by age 18 divided by the total number of young women and men aged 18-29 years, respectively, in the population multiplied by 100. | UNICEF undertakes an annual process to update its global databases, called Country Reporting on Indicators for the Goals (CRING). This exercise is done in close collaboration with UNICEF country offices with the purpose of ensuring that UNICEF global databases contain updated and internationally comparable data. UNICEF Country Offices are invited to submit, through an online system, any updated data for a number of key indicators on the well-being of women and children. Updates sent by the country offices are then reviewed by sector specialists at UNICEF headquarters to check for consistency and overall data quality of the submitted estimates. This review is based on a set of objective criteria to ensure that only the most recent and reliable information is included in the databases. Once reviewed, feedback is made available on whether or not specific data points are accepted, and if not, the reasons why. New data points that are accepted are then entered into UNICEF’s global databases and published in the State of the World’s Children statistical tables, as well as in all other data-driven publications/material. The updated databases are also posted online at data.unicef.org. UNICEF also searches throughout the year for additional sources of data that are vetted by the UNICEF country office before they are included in the global databases. | National Statistical Offices (for the most part) or line ministries/other government agencies that have conducted national surveys on sexual violence against women and men. | BBS  VAW  Survey | BBS  VAW survey  /GBVS | * Sex: female, male, both * Age: 18 - 29 * Income: High/ Medium/ Low * Place of residence : Urban/Rural * Geographic location: Division * Marital status: Married/ Unmarried * Education: illiterate/Primary/Secondary/ Higher | Triennial | Group 1 | 1st Round:  2015  2nd Round:  June, 2020  3rd Round:  June, 2023  4th Round:  June, 2026  5th Round:  June, 2029 |  |
|  | Target 16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all | | | | | | | | | | | |
| 16.3.1 Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms | UNODC | Tier II | **Definition:**  Number of victims of violent crime in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms, as a percentage of all victims of violent crime in the previous 12 months  **Concepts:**  Competent authorities includes police, prosecutors or other authorities with competencies to investigate relevant crimes, while ‘other officially recognized conflict resolution mechanisms´ may include a variety of institutions with a role in the informal justice or dispute resolution process (e.g. tribal or religious leaders, village elders, community leaders), provided their role is officially recognized by state authorities  **Comments and limitations:**  The target relates to the multidimensional concepts of rule of law and access to justice and at least two indicators are required to cover the main elements of access to justice and efficiency of the justice system. The indicator 16.3.1 covers an important aspect of victim’s access to criminal justice, while it doesn´t cover civil or administrative disputes. The indicator as formulated is a standard indicator widely published when a victimization survey is undertaken, but further work is required to enhance a consistent interpretation and application of this indicator. In particular, some important elements of this indicator needs methodological guidance, such as the type of violent crime to include beyond physical assault; counting rules regarding reporting rates (e.g. prevalence-based, incidence-based, based on last victimization experience) and the type of competent authorities to consider.  Methodological guidance on these issues is currently under development.  **Computation Method:**  Number of victims of violent crime in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms, divided by the number of all victims of violent crime in the previous 12 months (also called the ‘crime reporting rate’)  Both the number of victims of violent crime as well as the number of all victims of violent crime are measured through sample surveys of the general population, most often dedicated crime victimization surveys. | There is a consolidated system of annual data collection on crime and criminal justice (UN- Crime Trends Survey, UN-CTS) which represents the basis of data on intentional homicide, criminal justice outputs, penitentiary statistics and prevalence of victimization. The UN-CTS data collection is largely based on the network of national Focal Points, which are institutions/officials appointed by countries and have the technical capacity and role to produce data on crime and criminal justice (around 130 appointed Focal Points as of 2016). The UN-CTS collects data on reporting rate by victims respectively of “physical assault” and “sexual assault”. The current data collection is currently reviewed to collect data on this indicator. Data for SDG monitoring will be sent to countries for consultation prior to publication | National Statistical Offices, Police, Ministry of Justice, Ministry of Interior, Prosecutor’s Office | BBS  GBVS/VAW Survey | BBS  VAWS | * Sex: Male, Female, Transgender * type of crime * ethnicity: Ethnic/Non Ethnic * migration background   citizenship | Triennial | Group 1 | 1st Round:  2015  2nd Round:  December,  2019  3rd Round:  December,  2022  4th Round:  December,  2025  5th Round:  December,  2028 |  |
| 16.3.2 Unsentenced detainees as a proportion of overall prison population | UNODC | Tier I | **Definition:**  The total number of persons held in detention who have not yet been sentenced, as a percentage of the total number of persons held in detention, on a specified date.  **Concepts:**  ‘Sentenced’ refers to persons subject to criminal proceedings who have received a decision from a competent authority regarding their conviction or acquittal. For the purposes of the indicator, persons who have received a ‘non-final’ decision (such as where a conviction is subject to appeal) are considered to be ‘sentenced’.  **Comments and limitations:**  The target relates to the multidimensional concepts of rule of law and access to justice and at least two indicators are required to cover the main elements of access to justice and efficiency of the justice system. The proposed indicator 16.3.2 covers the efficiency of the justice system.  **Computation Method:**  The total number of unsentenced persons held in detention divided by the total number of persons held in detention, on a specified date. | There is a consolidated system of annual data collection on crime and criminal justice (UN- Crime Trends Survey, UN-CTS) which represents the basis of data on unsentenced detainees. The UN-CTS data collection is largely based on the network of national Focal Points, which are institutions/officials appointed by countries and having the technical capacity and role to produce data on crime and criminal justice (around 130 appointed Focal Points as of 2016). In addition, these data are supplemented for countries with missing values with official data collected by the Institute for Criminal Policy Research (World Prison Brief), which collects data directly from national prison administrations or from the websites of Ministries of Justice or other official agencies. For future SDG reporting data will be sent to countries for consultation prior to publication. | National prison authority, through UN-CTS Focal Point | DoP, SSD  Administrative Data | DoP, SSD  Administrative Data | * Age: 0-4 yrs/5-17 yrs/18-29 yrs/30-59 yrs/60+ yrs * Sex: male/female/transgender * Length of pre-trial (unsentenced) detention: 0-6 days/7-29 days/1-5 months/6-11 months/12 months and more | Annual | Group 1 | 1st Round:  2016  2nd Round:  July,  2019  3rd Round:  July,  2020  4th Round:  July,  2021  5th Round:  July,  2022 |  |
| 16.3.3 Proportion of the population who have experienced a dispute in the past two years and who accessed a formal or informal dispute resolution mechanism, by type of mechanism |  | TBD | **Definition**  Number of persons who experienced a dispute during the past two years who accessed a formal or informal dispute resolution mechanism, as a percentage of all those who experienced a dispute in the past two years, by type of mechanism.  **Concepts**  A dispute can be understood as a justiciable problem between individuals or between individual(s) and an entity. Justiciable problems can be seen as the ones giving rise to legal issues, whether or not the problems are perceived as being “legal” by those who face them, and whether or not any legal action was taken as a result of the problem.[[48]](#footnote-49)  Categories of disputes can vary between countries depending on social, economic, political, legal, institutional and cultural factors. There are, however, a number of categories that have broad applicability across countries, such as problems or disputes related to:[[49]](#footnote-50)   * Land or buying and selling property * Family and relationship break ups * Injuries caused by an intentional or unintentional act or omission of another person or entity * Occupation/employment * Commercial transactions (including defective or undelivered goods or services) * Government and public services (including abuse by public officials) * Government payments * Housing (Tenancy and landlord) * Debt, damage compensation, and other financial matters   Dispute resolution mechanisms can vary across countries around the world. While in many countries courts represent the main institution dealing with disputes of civil nature, the same may not be true in countries or societies where the first point of reference in such cases are informal systems, traditional or religious leaders. The formulation of the indicator, and the formulation of the questions in the survey, have to account for these differences and make sure to include all relevant institutions or mechanisms that are generally recognized and used. A list of dispute resolution mechanisms could include[[50]](#footnote-51):   * Lawyer or third-party mediation * Community or religious leaders or other customary law mechanisms * A court or tribunal * The police * A government office or other formal designated authority or agency * Other formal complaints or appeal procedure   To improve the accuracy of the indicator it is important to define precisely the denominator (the population at ‘risk’ of experiencing the event of interest, i.e. accessing a dispute-resolution mechanism) by identifying the ‘demand’ of dispute resolution mechanisms. This demand is composed of those who use dispute resolution mechanisms (users) and those who - despite needing them - do not have “access” to such mechanisms for various reasons such as lack of knowledge on how to access them, lack of trust in institutions, lack of legal advice/assistance, lack of awareness about justice mechanisms, geographical distance or financial costs, to mention a few. It is important to exclude from the demand those who experience disputes and do not turn to dispute resolution mechanisms because they do not need them (voluntarily self-excluded). This refers to cases where the dispute is simple or when respondents solve the issue with the other party through direct negotiation.    **Comments and limitations**  A major challenge is that the concept of dispute (justiciable problem) is subject to different interpretations and the propensity to consider a disagreement or conflict in terms of a justiciable problem can vary greatly across individuals and between societies. A way to address this issue is to focus on a number of possible disputes that can be considered of justiciable nature across most countries, as for example the one listed in the section above[[51]](#footnote-52). Standardised descriptions of the most common types of disputes are also to be used in surveys in order to maximise comparability across different legal systems and countries.  In order to identify the group of people in demand of dispute resolution mechanism it is necessary to identify the group of people voluntarily self-excluded. A way to identify this group is by including an additional question about the reasons why people did not use a dispute resolution mechanism. This question would allow to differentiate cases of voluntary and involuntary exclusion and define the denominator as the population who experienced a problem minus the voluntarily self-excluded.  Another challenge refers to identifying possible dispute resolution mechanisms as they vary considerably in different countries around the world. The formulation of the questions in the survey has to take into account these different possibilities and make sure to include all relevant institutions generally recognized in the community. This proposed list of dispute resolution mechanisms identifies those that are common in most countries in the world but it can be adapted to the country context.  The share of population experiencing the disputes under investigation can be of relatively small size and this can influence the statistical significance of results. A way to address this is to increase the survey’s reference period, recognizing that respondents’ ability to recall specific issues becomes increasingly unreliable the further back in time it extends. For these reasons, this proposal follows the recommendation from the Legal Needs Surveys and Access to Justice methodological guidance and suggests a reference interval of two years. With such reference period resulting data would be suitable for monitoring recent changes in contexts/policies while being based on a sufficient number of cases to ensure statistical significance of analyses .[[52]](#footnote-53) Possible telescoping effects (the effect of misplacement in time of events taking place in the past) need to be addressed properly by bounding in clear terms the time interval of reference in relevant questions.    **Computation method:**  Number of persons who experienced a dispute during the past two years who accessed a formal or informal dispute resolution mechanism (numerator), divided by the number of those who experienced a dispute in the past two years minus those who are voluntarily self-excluded (denominator). The result would be multiplied by 100.    This is a survey-based indicator that emphasizes citizens’ experiences over general perceptions. Both numerator and denominator are measured through sample surveys of the general population.  The computation of this indicator requires the inclusion of a short module of four questions in a representative population survey. The following table illustrates the content of the four questions needed to compute the indicator.   |  |  | | --- | --- | | **Content of question** | **Instruction** | | 1. Experience of a dispute over past 2 years, by type of dispute | If no dispute was experienced, skip to END, otherwise go to 2. | | 2. Most recent dispute experienced, by type of dispute | Continue with 3. | | 3. Access to dispute resolution mechanism, by type of mechanism | If no DRM was accessed go to 4., otherwise skip to END | | 4. Reason why no dispute resolution mechanism was accessed | Go to END. | | household survey | National Statistical Offices (NSOs  other national institutions or other entities | CPHS, BBS | CPHS, BBS | - type of dispute  resolution mechanism  - sex: Male/Female  - disability status:  Disable/ Non Disable  - ethnicity: Ethnic/ Non Ethnic  - migration background  - citizenship |  |  | 1st Round:  2018  2nd Round:  June 2020  3rd Round:  June 2023  4th Round:  June 2026  5th Round:  June 2029 | UNSC 51 addition included in the 2020 comprehensive review |
|  | Target 16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime | | | | | | | | | | | |
| 16.4.1 Total value of inward and outward illicit financial flows (in current United States dollars) | UNODC,  UNCTAD | Tier II | **Definition:**  The indicator measures the total value of inward and outward illicit financial flows (IFFs) in current United States dollars. IFFs are financial flows that are illicitly generated (e.g., originating in criminal activities or tax evasion), illicitly transferred (e.g., violating currency controls) or illicitly used (e.g., for financing terrorism).  **Concepts:**  Illicit financial flows refer to activities that are considered as criminal offences and to a series of behaviours in the area of tax and commercial practices. The International Classification of Crime for Statistical Purposes (ICCS) provides definitions of relevant offences[[53]](#footnote-54).  There are four main types of activities that can generate IFFs:   * *Tax and commercial IFFs*: These include illegal practices such as tariff, duty and revenue offences, tax evasion, corporate offences and market manipulation, and other selected practices. Some activities that are non-observed, hidden or informal or part of the so-called shadow, underground or grey economy may generate IFFs. The practices are typically motivated by increasing profits and avoiding taxes. Related activities included in the ICCS comprise tax evasion, tariff, duty and revenue offences, competition offences, import/export offences, acts against trade regulations, restrictions or embargoes and investment or stack/shares offences. In addition, tax avoidance includes transfer mispricing, debt shifting, relocation of intellectual property, tax treaty shopping, tax deferral and changing corporate structures and head quarter locations and other tax avoidance practices. When these activities directly or indirectly generate flows crossing country borders, they generate IFFs. * *IFFs from corruption*: The United Nations Convention against Corruption (UNCAC) defines acts considered as corruption, and they are consistently defined in the ICCS, such as bribery, embezzlement, abuse of functions, trading in influence, illicit enrichment and other acts of corruption in the scope. When these acts – directly or indirectly - generate cross-border flows, they generate IFFs. * *Theft-type activities and financing of crime and terrorism:* Theft-type activities are non-productive activities that entail a forced, involuntary and illicit transfer of economic resources between two actors. Terrorism financing and financing of crime are illicit, voluntary transfers of funds between two actors. Examples of theft-type activities are theft, extortion, illicit enrichment, and kidnapping. When the related financial flows cross country borders, they constitute IFFs. * *IFFs from illegal markets*: Domestic and international trade in illicit goods and services. Such processes often involve a degree of criminal organization and are aimed at creating profit. They include any type of trafficking in goods such as drugs, firearms, or services such as smuggling of migrants. IFFs are generated by the flows related to international trade of illicit goods and services, as well as by cross-border flows from managing the illicit income from such activities.   *The UNODC (2015) International Classification of Crime for Statistical Purposes* (ICCS) provides definitions of a number of behaviours, events and activities which may generate IFFs such as theft-type activities and terrorism, illicit trafficking and corruption, as well as many activities related to tax and commercial practices.[[54]](#footnote-55)  Other relevant concepts include:   * *Inward IFFs*: Illicit financial flows entering a country. * *Outward IFFs*: Illicit financial flows leaving a country. * *Illicit income generation*: This refers to the set of transactions that either directly generate illicit income for an actor during a productive or non-productive illicit activity, or that are performed in the context of the production of illicit goods and services. A transaction constitutes an IFF when it crosses country borders. * *Illicit income management*: These transactions use illicit income to invest in (legal or illegal) financial and non-financial assets or to consume (legal or illegal) goods and services. A transaction constitutes an IFFs when it crosses country borders. * *Illicit markets* comprise all transactions related to the production and the trade with a certain illicit good or service. Regardless of the illicit nature, these market activities are considered as being economically productive, because value added is generated at each transaction. The value added describes the net increase in value (price times quantity) of the product at each transaction.   Bottom-up and direct measurement  A bottom-up and direct measurement approach is proposed for constructing the indicator. Bottom-up methods estimate IFFs directly in relation to the four main activities and build them up departing from the overall economic income that illicit activities generate.  Direct refer to the fact that data referring to the various stages of the economic processes generating IFFs are individually measured (via surveys, administrative data or other transparent methods) and are not the exclusive result of model-based procedures. The measurement approach is in line with the “Eurostat Handbook on the compilation of statistics on illegal economic activities in national accounts and balance of payments”[[55]](#footnote-56) for the estimation of the contribution of illegal activities to the GDP. [[56]](#footnote-57)  **Computation Method:**  The proposed computation method follows the principles developed in economic measurement frameworks such as the National Accounts and the Balance of Payments.  A two-step process was developed that aids member states in calculating the indicator 16.4.1. The methodology has been tested in 5 countries.  The methodology foresees:   1. A risk assessment that identifies the major and most relevant sources of IFF in a country. This risk assessment can follow and build on existing risk assessments, e.g. the ones mandated by the Financial Action Task Force (FATF).   2) Once the activities that generate the most important flows are identified, the flows are estimated in a disaggregated manner.  Given the broad scope of activities generating IFF, each type of flow needs to be treated in a separate manner.  As a first step in constructing the IFF indicator is to focus, for each IFF type, on IFF generated during the Illicit income generation: this refers to the set of transactions – such as those related to international trade of illicit goods - that either directly generate illicit income for an actor during a productive or non-productive illicit activity, or that are performed in the context of the illicit production of goods and services.  Examples of IFFs related to selected illegal activities  IFF from drug trafficking  In a drug producing country, the method to estimate IFFs derived from drug trafficking can be broadly described as follows:  All drug produced in the country is either consumed domestically (C), seized by law enforcement (S), exported (E) or lost (L).  With that P=C+S+E+L.  Countries with extended illicit drug cultivation, normally collect data on P, C, and S. (losses cannot be estimated and are excluded from the calculations) and annual exports of drugs can be estimated.  The value of exports can be measured by the wholesale value of the relevant drug in countries of destination of the drug produced in the country. These data can be retrieved from international data on seizures reported by other member states (which provide information on the country of origin) and price data, which is as well reported annually through the mandated Annual Report Questionnaire (ARQ) submitted to UNODC (see https://dataunodc.un.org/)  This methodology has been applied in Peru and in Afghanistan where certain portions of the income generated from drug production and trafficking are accounted for in the NA.  IFFs from smuggling of migrants  Following the Eurostat manual “Handbook on the compilation of statistics on illegal economic activities in national accounts and balance of payments” four types of smuggling transactions can be distinguished, two of which create IFF:  Type I: Resident smugglers and resident migrants does not cover transnationality and illegal entry and does not create IFF    Type II: Resident smugglers and non-resident migrants  Constitutes an export of services and does incur an inward IFF:  Export of transportation services = number of non-resident migrants smuggled by resident smugglers \* prices  Type III: Non-resident smugglers and resident migrants  Estimations recorded as import of illegal services and constitute and outward IFF:  Import of illegal transportation services = number of residents smuggled by non-resident smugglers \*  prices  Type IV: Non-resident smugglers and non-resident migrants  No estimations recorded  The pilot studies found the methodology to be feasible, however, limitations on data exist, in particular on pricing.  At a second stage, IFFs in relation to Illicit income management are estimated. These refer to IFFs generated when income generated from illegal activities is invested abroad (e.g., into property). To assess these flows, quantitative and qualitative information held by financial authorities, central banks and other entities concerned with money laundering and financial crimes can be used. | The official counterparts at the country level assign designated Focal Points that are in charge of coordinating the data collection among different national institutions | Data providers include statistical offices, central banks, tax authorities, customs, law enforcement agencies, including police, military, etc |  | BB, FID  Administrative Data | 1.payment method (cash / trade flows  / crypto currencies)  2.resulting assets  (offshore wealth  / real estate etc.)  3.actors (characters  of individuals  / types of businesses  etc.) | Annual | Group 2 | 1st Round:  June 2020  2nd Round:  June 2021  3rd Round:  June 2022  4th Round:  June 2023  5th Round:  June 2024 | Reviewed at 10th IAEG-SDG meeting  (classified as Tier II) |
| 16.4.2 Proportion of seized, found or surrendered arms whose illicit origin or context has been traced or established by a competent authority in line with international instruments | **UNODC,**  **UNODA** | Tier II | **Definition:**  Proportion of seized, found or surrendered arms whose illicit origin or context has been traced or established by a competent authority in line with international instruments  **Concepts:**  *Arms:* arms refer to ‘small arms and light weapons’, defined as any portable lethal weapon that expels or launches, is designed to expel or launch, or may be readily converted to expel or launch a shot, bullet or projectile by the action of an explosive, excluding antique small arms and light weapons or their replicas. Antique small arms and light weapons and their replicas will be defined in accordance with domestic law, and in no case will they include those manufactured after 1899. Arms include all firearms, as defined in the “Protocol against the illicit manufacturing of and trafficking in firearms, their parts and components and ammunition”.  In particular, ‘small arms’ are, broadly speaking, weapons for individual use, including revolvers, pistols, rifles and carbines, shotguns, sub-machine guns and light machine guns. ‘Light weapons’ are, broadly speaking, weapons designed for use by two or three persons serving as a crew, although some may be carried and used by a single person. They include, heavy machine guns, hand-held under-barrel and mounted grenade launchers, portable anti-aircraft guns, portable anti-tank guns, recoilless rifles, portable launchers of anti-tank missile and rocket systems, portable launchers of anti-aircraft missile systems, and mortars of a calibre of less than 100 millimetres.  *Seized*: arms that have been physically apprehended during the reported period by a competent authority, whether temporarily or not, in relation to a suspected criminal offence or administrative violation related to these arms. For the purpose of the calculation of indicator 16.4.2, only arms that were seized due to criminal offences are considered.  *Found*: arms apprehended by authorities that are not linked to an intentional or planned investigation or inspection, neither attributable to any apparent holder or owner, regardless of whether the items were reported lost or stolen.  *Surrendered*: arms willingly handed over to authorities that are not linked to a planned investigation or inspection. The surrender may occur as a personal initiative of a citizen in the context of a voluntary surrender campaign and disarmament, demobilisation and reintegration processes, inter alia.  *Illicit origin*: Earliest point in time in the life of an arm where it was of an illicit nature. In order to establish the illicit origin, it is necessary to identify the point of diversion of the arm and the circumstances around it.  *Point of diversion*: the point in space and time and/or circumstances when arms left the licit circuit and entered the illicit one. If identified through tracing, the last legal record needs to be found. For arms illicitly manufactured, the point of diversion is the manufacture itself.  *Last legal record*: last recorded information available about the item, its status (deactivated, stolen, lost, seized, found, surrendered, sent for destruction, confiscated, in transit, etc.) and its legal end-user. The identification of the last legal record may require the initiation of several individual tracing requests.  *Tracing*: the systematic tracking of weapons and, where possible, their parts and components, and ammunition, at the national and/or international level for the purpose of assisting the competent authorities of States parties in detecting, investigating and analysing illicit manufacturing and illicit trafficking.  *Illicit origin established by a competent authority in line with international instruments*: illicit origin established through means other than tracing, e.g. through intelligence. In the case of arms that are not traceable, this is the only mean to establishing the illicit origin.  **Comments and limitations:**  There are certain limitations to the methodology used in the calculation of indicator 16.4.2:   * The pilot study and consultations with Member States revealed that countries could not properly provide information on the circumstances of illicit manufacture or altered / erased markings for arms nor uniquely identifiable. Therefore, information on the establishment of the illicit origin for these arms is not available. * The values for indicator 16.4.2 may be affected by whether the country has a significant proportion of apprehended arms that are traceable, which is usually a consequence of the context of illicit arms trafficking in the country and is not related to its Law Enforcement efforts. * The process of tracing firearms can be notably long, especially if several requests are involved. Therefore, the information on tracing results provided on the questionnaire for the reference year may be incomplete. While the fact that countries are requested to review the figures reported during the previous data collection cycle may partially correct for this, there may still be a bias in the calculation.   In addition to indicator 16.4.2 as defined in this document, other non-official indicators may be of assistance when interpreting the reporting values. In particular, information is collected on the number of international tracing requests placed and responded to, and the total number of arms seized, found and surrendered by whether they are uniquely marked or not, the total number of arms that have been marked, recorded or destroyed. In addition, data on the number of individuals in contact with the police, prosecuted and convicted, in relation to illicit trafficking of arms is available. All these indicators could help complete the picture regarding the extent of Law Enforcement activities at the national level to counter illicit trafficking in arms.  **Computation Method:**  The indicator is calculated as a proportion.  The denominator of the proportion is the total number of arms seized, found and surrendered.  The numerator will include all those arms for which the point of diversion was established / identified, either through tracing or by a competent authority (e.g. through intelligence). | The official counterparts at the country level are designated Focal Points that are in charge of coordinating the data collection among different national institutions. | Most of the data providers are Law Enforcement Agencies, including National Police, Regional/State Police, Customs, Military, etc. Focal Points at the national level are responsible for compiling the data and submitting it. |  | a) BP, MoHA  b) MoD  Administrative Data | * Means of recovery: arms seized/arms found /arms surrendered * Levels of tracing: still pending/ no attempt of trace * Illicit Origin: Local/international | Annual | Group 2 | 1st Round:  September,  2019  2nd Round:  September,  2020  3rd Round:  September,  2021  4th Round:  September,  2022  5th Round:  September,  2023 | Data should follow the tables 5.1 to 5.3 of the IAFQ report to UNODC.  Reviewed at 8th IAEG-SDG meeting (classified as Tier II)  UNSC 48 refinement; Reviewed at 5th IAEG-SDG meeting (classified as TBD) |
|  | Target 16.5 Substantially reduce corruption and bribery in all their forms | | | | | | | | | | | |
| 16.5.1 Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months | UNODC | Tier II | **Definition:**  This indicator is defined as the percentage of persons who paid at least one bribe (gave a public official money, a gift or counter favour) to a public official, or were asked for a bribe by these public officials, in the last 12 months, as a percentage of persons who had at least one contact with a public official in the same period.  **Concepts:**  In the International Classification of Crime for Statistical Purposes (ICCS), bribery is defined as: ‘Promising, offering, giving, soliciting, or accepting an undue advantage to or from a public official or a person who directs or works in a private sector entity, directly or indirectly, in order that the person act or refrain from acting in the exercise of his or her official duties’. This definition is based on definitions of bribery of national public officials, bribery of foreign public officials and official of international organisations and bribery in the private sector that are contained in the United Nations Convention against Corruption (articles 15, 16, and 21).  While the concept of bribery is broader, as it includes also actions such as promising or offering, and it covers both public and private sector, this indicator focuses on specific forms of bribery that are more measurable (the giving and/or requesting of bribes) and it limits the scope to the public sector.  The concept of undue advantage is operationalized by reference to giving of money, gifts or provision of a service requested/offered by/to a public official in exchange for a special treatment.  This indicator captures the often called ‘administrative bribery’, which is often intended as the type of bribery affecting citizens in their dealings with public administrations and/or civil servants.  For this indicator, public official refers to persons holding a legislative, executive, administrative or judicial office. In the operationalization of the indicator, a list of selected officials and civil servants is used.  **Comments and limitations:**  In the experience of several surveys conducted at national and international level, the so-called bribery prevalence rate is defined as the percentage of persons who paid at least one bribe (gave a public official money, a gift or counter favour) to a public official in the last 12 months, as a percentage of persons who had at least one contact with a public official in the same period. In this formulation the share of population who was asked a bribe but did not give it is not included. Available data at national and international level usually refers to this formulation, while the collection of data according to the formulation included in the SDG framework will depend on the adaptation of relevant survey tools and the calculation by national authorities. It is expected that data according to the current definition will become available gradually.  On a more general level, it should be noted that this indicator provides solid information on the experience of bribery occurring in the interaction between citizens and the public sector in the context of service delivery/transactions, while it does not cover other forms of corruption, such as ´grand corruption´, trading in influence or abuse of power  **Computation Method:**  The indicator is calculated as the total number of persons who paid at least one bribe to a public official in the last 12 months, or were asked for a bribe in the same period, over the total number of persons who had at least one contact with a public official in the same period, multiplied by 100. | At international level, data are collected by UNODC through the annual UN-CTS data collection. Data are on bribery indicator are sent to UNODC by member states, usually through national UN-CTS Focal Points (around 130 appointed Focal Points as of 2016) which in most cases are national institutions responsible for data production in the area of crime and criminal justice (National Statistical Offices, Ministry of Interior, Ministry of Justice, etc.). When necessary, other data sources are used, including from websites, publications, other forms of communication. | Data on bribery are sent to UNODC by member states, usually through national UN-CTS Focal Points which in most cases are national institutions responsible for data production in the area of crime and criminal justice (National Statistical Offices, Ministry of Interior, Ministry of Justice, etc.). The primary source of data on the indicator of bribery experience is usually the institution responsible for surveys on corruption/victimisation surveys (National Statistical Office, Anti-Corruption Agency, etc.). | BBS  CPHS | BBS  CPHS | * Age of bribe givers: 15-24 yrs/25-59 yrs/60 and above * Sex of bribe givers: Male/Female * Income level of bribe givers: Upper/middle/lower * Education attainment of bribe givers: Illiterate/primary completed/completed HSC/Bachelor and above * Type of official: Officer/Staff * Sector: Education/Police/Court/Passport/Income tax/customs/land administration/district-upazila administration, etc. | Triennial | Group 1 | 1st Round:  2018  2nd Round:  July, 2020  3rd Round:  July, 2023  4th Round:  July, 2026  5th Round:  July, 2029 |  |
| 16.5.2 Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months | World Bank,  UNODC | Tier I | **Definition:**  Proportion of firms asked for a gift or informal payment when meeting with tax officials.  In every Enterprise Survey (www.enterprisesurveys.org), there is a standard question which asks the survey respondent if they were inspected by or required to meet with tax officials. If the respondent indicates ‘yes’, then there is a follow-up question which asks if the respondent was expected to provide a gift or an informal payment during these inspections/meetings. The response options include “yes”, “no”, “don’t know”, and “refuse”.  Enterprise Surveys are firm-level surveys conducted in World Bank client countries. The survey focuses on various aspects of the business environment as well as firm’s outcome measures such as annual sales, productivity, etc. The surveys are conducted via face-to-face interviews with the top manager or business owner. For each country, the survey is conducted approximately every 4-5 years.  **Concepts:**  The respondents to the Enterprise Survey are firms- either manufacturing or services establishments. These are registered (formal) firms with 5+ employees. The firms are either fully or partially private (100% state-owned firms are ineligible for the Enterprise Survey). More information on the survey methodology can be found on the Methodology page of the website: www.enterprisesurveys.org/methodology  A gift or an informal payment is considered a ‘bribe’.  **Comments and limitations:**  The key strength of the Enterprise Survey is that most of the questions in the survey pertain to the actual, day-to-day experiences of the firm; this question regarding corruption during tax inspections/meetings is not an opinion-based question but rather a question grounded in the firm’s reality.  The limitations include that some countries’ data is almost 10 years old (e.g. South Africa and Brazil). This is due to the fact that these face-to-face survey projects can be expensive in some countries and hence due to budget limitations, the World Bank hasn’t been able to update some of the Enterprise Surveys data in a subset of countries. Another limitation is that the surveys are done mostly in World Bank client countries and hence most high-income countries are not covered by the surveys (US, Canada, Western European countries, Japan, GCC countries, etc.).  Another limitation may be the sensitive nature of corruption. In some countries/cultures, firms may not be comfortable answering questions on corruption. Although the data is collected under the context of confidentiality, firms may refuse to answer the question if they have been subject to bribery solicitations. Hence, in some countries, the actual incidence of this particular type of corruption may be higher than the calculated indicator value.  **Computation Method:**  The indicator is calculated for each country, by looking at the proportion of firms which answered ‘yes’ to the survey question. For all Enterprise Survey projects conducted since 2006, the resulting dataset has sampling weights. Hence the indicator value, which is computed using Stata, incorporates these sampling weights as well as the design strata. | The World Bank conducts the Enterprise Surveys in client countries. The surveys are comparable as the survey methodology is applied in a consistent manner across countries: obtaining suitable sample frames, eligibility criteria for respondent firms, survey sample design, core questionnaire elements across every country, standardized QC checks on the received data, standardized computation of sampling weights, etc. | The indicator is derived from Enterprise Surveys which are conducted by the World Bank. The World Bank usually hires a private contractor (typically a market research company) to conduct the survey fieldwork. | ES, WB  Enterprise Survey | ES, WB  Enterprise Survey | * Gender: Male, Female, Transgender * Primary Business Activity of The Firm * Sub-National Location of The Firm * Exporting Status * Number of Employees * Degree of Foreign Ownership | Triennial | Group 1 | 1st Round:  2013  2nd Round:  December,  2020  3rd Round:  December,  2023  4th Round:  December,  2026  5th Round:  December,  2029 | Globally WB is responsible to provide data  Data availability reviewed in Oct. 2019  (classified as Tier I)  IAEG-SDG 3rd meeting: Lack of sufficient data coverage (classified as Tier II) |
|  | Target 16.6 Develop effective, accountable and transparent institutions at all levels | | | | | | | | | | | |
| 16.6.1 Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar) | World Bank | Tier II | **Definition:**  Primary government expenditures as a proportion of original approved budget  This indicator measures the extent to which aggregate budget expenditure outturn reflects the amount originally approved, as defined in government budget documentation and fiscal reports. The coverage is budgetary central government (BCG) and the time period covered is the last three completed fiscal years.  **Concepts:**  Aggregate expenditure includes actual expenditures incorporating those incurred as a result of unplanned or exceptional events—for example, armed conflicts or natural disasters. Expenditures financed by windfall revenues, including privatization, should be included and noted in the supporting fiscal tables and narrative. Expenditures financed externally by loans or grants should be included, if covered by the budget, along with contingency vote(s) and interest on debt. Expenditure assigned to suspense accounts is not included in the aggregate. However, if amounts are held in suspense accounts at the end of any year that could affect the scores if included in the calculations, they can be included. In such cases the reason(s) for inclusion must be clearly stated.  Actual expenditure outturns can deviate from the originally approved budget for reasons unrelated to the accuracy of forecasts—for example, as a result of a major macroeconomic shock. The calibration of this indicator accommodates one unusual or “outlier” year and focuses on deviations from the forecast which occur in two of the three years covered by the assessment.  Very detailed resources are available at: http://www.pefa.org/en/content/pefa-2016-framework. The document “Framework for assessing public financial management” is extremely useful (https://www.pefa.org/sites/pefa.org/files/attachments/PEFA%20Framework\_English.pdf). There are seven Public Expenditure and Financial Accountability (PEFA) Performance pillars containing a total of 31 indicators. The pillar containing this indicator is part of Pillar I which measures Budget reliability.  **Comments and limitations:**  Although not all countries have used the methodology on an annual basis for this indicator, the methodology relies on standard data sets for approved and final budget outturns which are commonly produced at least annually in every country. The countries that have not used the methodology to date are primarily highly developed countries which would have less difficulty in providing the necessary data than those in the lower and middle income categories that have been primary users of Public Expenditure and Financial Accountability (PEFA) to date.  One limitation of the indicator is that it is an aggregate indicator of budget reliability. While it can be disaggregated across regions, it is not disaggregated across various budget subcomponents. Different indicators are used for assessing changes in expenditure composition in the PEFA framework. Also, while this indicator is intended to measure budget reliability it should be understood that actual expenditure outturns can deviate from the originally approved budget for reasons unrelated to the accuracy of forecasts—for example, as a result of a major macroeconomic shock. However, the calibration of this indicator accommodates one unusual or “outlier” year and focuses on deviations from the forecast which occur in two of the three years covered by the assessment. Therefore, single year shocks are discounted allowing a more balanced assessment.  The broader context in which the indicator was developed is as follows. PEFA is a tool for assessing the status of public financial management and reporting on the strengths and weaknesses of Public Financial Management (PFM). A PEFA assessment provides a thorough, consistent and evidence-based analysis of PFM performance at a specific point in time and can be reapplied in successive assessments to track changes over time. The PEFA framework provides the foundation for evidence-based measurement of countries’ PFM systems using 31 performance indicators that are further disaggregated into 94 dimensions. A PEFA assessment measures the extent to which PFM systems, processes and institutions contribute to the achievement of desirable budget outcomes: aggregate fiscal discipline, strategic allocation of resources, and efficient service delivery.  **Computation Method:**  The methodology for calculating this indicator is provided in a spreadsheet (titled “En PI-1 and PI-2 Exp Calculation-Feb 1 2016 (xls)”) on the PEFA website (http://www.pefa.org/en/content/pefa-2016-framework). It is also detailed in part 2 of the document “Framework for assessing public financial management” (https://www.pefa.org/sites/pefa.org/files/attachments/PEFA%20Framework\_English.pdf).  Scoring is at the heart of the indicator. A country is scored separately on a four-point ordinal scale: A, B, C, or D, according to precise criteria:  (A) Aggregate expenditure outturn was between 95% and 105% of the approved aggregate budgeted expenditure in at least two of the last three years.  (B) Aggregate expenditure outturn was between 90% and 110% of the approved aggregate budgeted expenditure in at least two of the last three years.  (C Aggregate expenditure outturn was between 85% and 115% of the approved aggregate budgeted expenditure in at least two of the last three years.  (D) Performance is less than required for a C score.  In order to justify a particular score, every aspect specified in the scoring requirements must be fulfilled. If the requirements are only partly met, the criteria are not satisfied and a lower score should be given that coincides with achievement of all requirements for the lower performance rating. A score of C reflects the basic level of performance for each indicator and dimension, consistent with good international practices. A score of D means that the feature being measured is present at less than the basic level of performance or is absent altogether, or that there is insufficient information to score the dimension.  The D score indicates performance that falls below the basic level. ‘D’ is applied if the performance observed is less than required for any higher score. For this reason, a D score is warranted when sufficient information is not available to establish the actual level of performance. A score of D due to insufficient information is distinguished from D scores for low-level performance by the use of an asterisk—that is, D\* at the dimension level. The asterisk is not included at the indicator level.  The coverage is budgetary central government (BCG) and requires data for three consecutive years as a basis for assessment. The data would cover the most recent completed fiscal year for which data is available and the two immediately preceding years. | Not applicable. | Ministry of Finances of countries | FD  Administrative Data | FD  Administrative Data | * Budget code: * Sector: Education/Agriculture/Health/ SSNP/ICT/ Gender /etc. | Annual | Group 1 | 1st Round:  2015  2nd Round:  June 2020  3rd Round:  June 2021  4th Round:  June 2022  5th Round:  June 2023 | Data should be provided as per SDG Metadata  Data availability reviewed in Oct. 2019 (classified as Tier II) |
| 16.6.2 Proportion of population satisfied with their last experience of public services | UNDP | Tier II | **Definition:**  This indicator measures levels of public satisfaction with people’s last experience with public services, in the three service areas of healthcare, education and government services (i.e. services to obtain government-issued identification documents and services for the civil registration of life events such as births, marriages and deaths)[[57]](#footnote-58). This is a survey-based indicator which emphasizes citizens’ *experiences* over general perceptions, with an eye on measuring the availability and quality of services *as they were actually delivered to survey respondents*.  Respondents are asked to reflect on their last experience with each service, and to provide a rating on five ‘attributes’, or service-specific standards, of healthcare, education and government services (such as access, affordability, quality of facilities, etc.). A final question asks respondents for their overall satisfaction level with each service.  It is recommended that survey results, at a minimum, be disaggregated by sex, income and place of residence (urban/rural, administrative regions). To the extent possible, all efforts should be made to also disaggregate results by disability status and by ‘nationally relevant population groups’.  **Concepts:**   * **Public services:** As stated by the United Nations High Commissioner for Human Rights, “States are responsible for delivering a variety of services to their populations, including education, health and social welfare services. The provision of these services is essential to the protection of human rights such as the right to housing, health, education and food. The role of the public sector as service provider or regulator of the private provision of services is crucial for the realization of all human rights, particularly social and economic rights.”[[58]](#footnote-59)   While several definitions of ‘public services’ exist, they tend to have in common a focus on ‘common interest' and on ‘government responsibility’. For instance, the European Commission defines such services as “Services that public authorities of the Member States clarify as being of general interest and, therefore, subject to specific public service obligations.”[[59]](#footnote-60) Similarly, the African Charter on Values and Principles of Public Service and Administration (African Union, 2011) defines a public service as “Any service or public-interest activity that is under the authority of the government administration”.   * **Public services *‘of general interest’:*** The methodology for SDG 16.6.2 carefully defines the scope of healthcare and education services to ensure that the focus is placed on services that are truly *of general interest*. In the case of healthcare services, for instance, preventive and primary healthcare services can be said to be truly ‘of general interest’: these services are relevant to everyone and they are most commonly found in both urban and rural areas. This might not be the case for hospitals that provide tertiary care, and as such hospital and specialist care is excluded from the questions on healthcare services. Likewise, in the case of education services, primary and lower secondary education services can be said to be truly ‘of general interest’, given their universality. University education, however, is excluded from the questions on education services. * **‘Last experience’ of public services in the past 12 months:** Indicator 16.6.2 focuses on respondents’ ‘last experience of public services’, and specifies a reference period of “the past 12 months” to avoid telescoping effects and to minimize memory bias effects. This means that only respondents who will have used healthcare, education and government services in the past 12 months will proceed to answer the survey questions. * **Service-specific standards – or ‘attributes’:** The United Nations High Commissioner for Human Rights explains that “A human rights-based approach to public services is integral to the design, delivery, implementation and monitoring of all public service provision. Firstly, the normative human rights framework provides an important legal yardstick for measuring how well public service is designed and delivered and whether the benefits reach rights-holders”[[60]](#footnote-61). For instance, the Committee on Economic, Social and Cultural Rights specifies that “The availability, accessibility, acceptability and quality of health-related services should be facilitated and controlled by States. This duty extends to a variety of health-related services ranging from controlling the spread of infectious diseases to ensuring maternal health and adequate facilities for children.”[[61]](#footnote-62) Similarly, with respect to education services, the same Committee underlines that “States should adopt a human rights approach to ensure that [education services are] of an adequate standard and do not exclude any child on the basis of race, religion, geographical location or any other defining characteristic.”[[62]](#footnote-63) * **Healthcare services:** The questions on healthcare services focus on respondents’ experiences (or that of a child in their household who needed treatment and was accompanied by the respondent) with *primary* healthcare services (over the past 12 months) – that is, basic health care services provided by a government/public health clinic, or covered by a public health system. It can include health care services provided by private institutions, as long as such services are provided at reduced (or no) cost to beneficiaries, under a public health system. Respondents are specifically asked *not* to include in their answers any experience they might have had with hospital or specialist medical care services (for example, if they had a surgery), or with dental care and teeth exams (because in many countries, dental care is not covered by publicly funded healthcare systems). Attributes-based questions on healthcare services focus on 1) Accessibility (related to geographic proximity, delay in getting appointment, waiting time to see doctor on day of appointment); 2) Affordability; 3) Quality of facilities; 4) Equal treatment for everyone; and 5) Courtesy and treatment (attitude of healthcare staff). * **Education services:** The questions on education services focuses on respondents’ experience with the *public school system* over the past 12 months, that is, if there are children in their household whose age falls within the age range spanning primary and secondary education in the country. Public schools are defined as “those for which no private tuition fees or major payments must be paid by the parent or guardian of the child who is attending the school; they are state-funded schools.” Respondents are asked to respond separately for primary and secondary schools if children in their household attend school at different levels. Attributes-based questions on education services focus on 1) Accessibility (with a focus on geographic proximity); 2) Affordability; 3) Quality of facilities; 4) Equal treatment for everyone; and 5) Effective delivery of service (Quality of teaching). * **Government services:** The battery on government services focuses exclusively on two types of government services: 1) Services to obtain government-issued identification documents (such as national identity cards, passports, driver’s licenses and voter’s cards) and 2) services for the civil registration of life events such as births, marriages and deaths. This particular focus on these two types of services arises from the high frequency of use of these services. Attributes-based questions on government services focus on 1) Accessibility; 2) Affordability; 3) Equal treatment for everyone; 4) Effective delivery of service (delivery process is simple and easy to understand); and 5) Timeliness.   **Comments and limitations:**  **Recommended set of complementary questions to address selection 16.6.2 bias towards ‘*users’* of public services**   * Since SDG 16.6.2 refers to people’s ‘last experience’ with public services, the indicator needs to focus on user experiences rather than on non-user perceptions. The experience of users is important, but it is equally important to understand the experiences and perceptions of those who turn elsewhere for services, or who do not access services altogether. * For each service area, NSOs are therefore strongly encouraged to administer three complementary questions (see Methodology section) *prior* to the two ‘priority questions’ to be used for global 16.6.2 reporting. These additional questions will help capture the experience of *both* users *and* non-users of public services. They will help identify which population sub-groups who needed healthcare, education and government services did *not* access the services they needed, and what barriers prevented them from doing so. While the information generated by these additional questions is critical for policymakers to design service provision programmes that ‘leave no one behind’, it is left to the discretion of each country to integrate them or not, as some may already be collecting similar information through existing surveys.   Otherwise, the selection bias inherent in SDG 16.6.2, with its focus on users, can result in mismeasurement due to underlying inequalities in the propensity of various groups to interact with state institutions. In other words, a focus on ‘the last experience with public services’ implicitly means that this indicator includes only those respondents who were privileged enough to access public services in the past year. This means that those (such as ethnic minorities, migrants, the elderly, undocumented workers) who have *not* been able – or willing – to access the healthcare, education or government services they needed in the past 12 months, often as a consequence of multiple social and economic barriers arising from overlapping forms of marginalization will be undercounted by this indicator. There is a risk therefore that overall satisfaction levels reported on 16.6.2 will over-represent the experience of more privileged groups for whom access to public services is easier, because they have the financial, logistical and intellectual means to do so, and they trust that it is in their interest to do so.  **Answer scales:**   * To ensure the consistency of measurement in an international context, a standardised approach to response format is required. Available evidence from piloting and other NSO experiences suggests that a four-point Likert-scale with verbal scale anchors is preferable over the alternatives. A four-point scale offers the optimal range of response options for the concepts at hand, in terms of capturing as much meaningful variation between responses as there exists, while remaining understandable for respondents who are not very numerate or literate. Piloting experiences have revealed that offering too few response options (such as a ‘yes/no’ binary response format) would not reveal much variation and might even frustrate some respondents, who might feel their satisfaction level cannot be accurately expressed. Furthermore, the Guidelines on Measuring Subjective Well-Being (OECD, 2013) caution against using “agree/disagree, true/false, and yes/no response formats in the measurement of subjective well-being due to the heightened risk of acquiescence and socially desirable responding”. Meanwhile, piloting experiences have shown that respondents would be equally burdened by too many response categories (such a 7- or 10-point scale), especially if the categories are too close to distinguish between them cognitively. * There are different schools of thought on whether an odd or even number of categories is best when using Likert scales. While taking away the middle category forces respondents to voice a positive or negative opinion, and some respondents might find this approach frustrating, several NSOs in developing country contexts favor a Likert scale *without* a neutral value (such as “neither satisfied nor dissatisfied”). Their preference is motivated by their long-standing survey experience which has shown that when a neutral value is provided, a large proportion (often a majority) of respondents will refrain from expressing their opinion ‘hiding’ behind this middle-point. * The survey methodology for 16.6.2 therefore uses a 4-point bipolar Likert scale for all questions (for internal consistency), with the following scale labels: “strongly agree, agree, disagree, strongly disagree” for attributes-based questions, and “very satisfied, satisfied, dissatisfied, very dissatisfied” for overall satisfaction questions. “Don’t know” and “refuse to answer” options are also available, but *should not be read out loud*, so as to not provide an easy way for respondents to disengage from the subjects of the various questions. When respondents say they “don’t know”, enumerators should repeat the question and simply ask them to provide their best guess. The “don’t know” and “refuse to answer” options should be used only as a last resort.   **Selection of relevant disaggregation dimensions**   * *Relevant international legal frameworks:* Indicator 16.6.2 aims to provide a better understanding of how access to services and the quality of services differ across localities and across various demographic groups. This aim is supported by international human rights law: * Article 25 (c) of the International Covenant on Civil and Political Rights provides for the right to *equal access* to public service. In its report on the role of the public services as an essential component in the promotion and protection of human rights, the United Nations High Commissioner for Human Rights reminds that “States must bear in mind that there are demographic groups in every society that may be disadvantaged in their access to public services, namely women, children, migrants, persons with disabilities, indigenous persons and older persons. States need to ensure that the human rights of these groups are not undermined and that they receive adequate public services.”[[63]](#footnote-64) The High Commissioner also calls attention to the fact that “Poverty acts as a major barrier in relation to public services.” * The obligations to ensure equality and non-discrimination are recognized in article 2 of the Universal Declaration of Human Rights and are encountered in many United Nations human rights instruments, such as the International Covenant on Civil and Political Rights (arts. 2 and 26), the International Covenant on Economic, Social and Cultural Rights (art. 2 (2)), the Convention on the Rights of the Child (art. 2), the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (art. 7) and the Convention on the Rights of Persons with Disabilities (art. 5). In terms of public services, this means that States have an immediate obligation to ensure that deliberate, targeted measures are put into place to secure substantive equality and that all individuals have an equal opportunity to enjoy their right to access public services. * *Empirical analysis:* Statistical analysis of available datasets on citizen satisfaction with healthcare and education services[[64]](#footnote-65) shows that the demographic variables that are most strongly correlated with satisfaction with healthcare and education services are (1) income (by far the strongest determinant of satisfaction levels), (2) sex, and (3) place of residence (rural/urban). There is no statistically significant association between the age of respondents and satisfaction levels.   **Computation method**  Reporting on SDG 16.6.2 should be done separately for each of the three service areas. (NB: questions on education may refer to either primary or secondary education – and separate computation of results is recommended for the two levels, resulting in de facto four service areas). Computation involves the computation and reporting of the following three estimates, for each service area:  1) The share of respondents who responded positively (i.e. ‘strongly agree ‘ or ‘agree’) to each of the five attributes questions;  2) The simple average of positive reponses for the five attribute questions combined; and  3) The share of respondents who say they are satisfied (i.e. those who responded ‘very satisfied’ or ‘satisfied’) in the overall satisfaction question.  For instance:   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Attributes of healthcare services** | **Positive responses** | **Attributes of primary education services** | **Positive responses** | **Attributes of secondary education services** | **Positive responses** | **Attributes of government services** | **Positive responses** | | Accessibility | *50% respondents 'strongly agree' or 'agree'* | Accessibility |  | Accessibility |  | Accessibility |  | | Affordability | *60% respondents 'strongly agree' or 'agree'* | Affordability |  | Affordability |  | Affordability |  | | Quality of facilities | *73% respondents 'strongly agree' or 'agree'* | Quality of facilities |  | Quality of facilities |  | Effective service delivery process |  | | Equal treatment for everyone | *55% respondents 'strongly agree' or 'agree'* | Equal treatment for everyone |  | Equal treatment for everyone |  | Equal treatment for everyone |  | | Courtesy and treatment (Attitude of healthcare staff) | *42% respondents 'strongly agree' or 'agree'* | Effective delivery of service (Quality of teaching) |  | Effective delivery of service (Quality of teaching) |  | Timeliness |  | | **Average share of positive responses on attributes of healthcare services** | *(50+60+73+55+42)/5 = 56%* | **Average share of positive responses on attributes of primary education services** |  | **Average share of positive responses on attributes of secondary education services** |  | **Average share of positive responses on attributes of government services** |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Share of respondents satisfied with healthcare services overall** | *(23% 'very satisfied' + 37% 'satisfied') = 60%* | **Share of respondents satisfied with primary education services overall** |  | **Share of respondents satisfied with secondary education services overall** |  | **Share of respondents satisfied with government services overall** |  |   **\***Note: It is important for NSOs to clearly report, for each question, the number of respondents who selected “don’t know” (DK), “not applicable” (NA) or “refuse to answer” (RA), and to exclude such respondents from the calculation of shares of positive responses. For instance, if 65 respondents out of 1000 respondents responded DK, NA or RA on the first attribute-based question, the share of positive responses for this attribute will be calculated out of a total of 935 respondents, and the reporting sheet will indicate that for this particular question, 65 respondents responded DK/NA/RA.  While national-level reporting should cover all three estimates described above, global reporting on SDG indicator 16.6.2 will focus only on the last two estimates (i.e. the average share of positive responses across the five attribute questions; and the share of respondents who say they are satisfied in the overall satisfaction question), separately for each service area. | NSOs should identify suitable survey vehicles to incorporate the 16.6.2 batteries of question. Some countries may not have an integrated or unified survey covering various public services. In countries where each Ministry/Department/Agency conducts its respective satisfaction survey, the NSO should liaise with each entity to harmonize existing survey questions with this metadata. | National Statistical Offices | BBS  CPHS | BBS  CPHS | * Sex: male/female * Age; below 25 yrs/25-34 yrs/35-44 yrs/44-54 yrs/55-64 yrs/64 and above yrs * Income: upper/middle/lower * place of residence: rural/urban/division/district * Education: primary/higher secondary/tertiary * Disability: disable/not disable | Triennial | Group 1 | 1st Round:  2018  2nd Round:  July, 2020  3rd Round:  July, 2023  4th Round:  July, 2026  5th Round:  July, 2029 | Reviewed at 9th IAEG-SDG meeting (classified as Tier II) |
|  | Target 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels | | | | | | | | | | | |
| 16.7.1 Proportions of positions in national and local public institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary, compared to national distributions, by sex, age, persons with disabilities and population groups | IPU,  UNDP  **Partner Agencies:**  UN Women,  OECD | Tier II | **part (a) of this indicator**  **Definition:**  This metadata sheet is focused only on the first sub-component of indicator 16.7.1, namely on positions in national legislatures held by individuals of each target population (sex, age, persons with disabilities, and contextually relevant population groups).  The legislative sub-component of indicator 16.7.1 aims to measure how representative of the general population are the individuals occupying key decision-making positions in national legislatures. More specifically, this indicator measures the proportional representation of various demographic groups (women, age groups) in the national population amongst individuals occupying the following positions in national legislatures: (1) Members, (2) Speakers and (3) Chairs of permanent committees in charge of the following portfolios: Foreign Affairs, Defence, Finance, Human Rights and Gender Equality. Furthermore, it looks at the electoral and constitutional provisions adopted by countries to secure representation in national legislatures of persons with disabilities and contextually relevant population groups.  **Concepts:**  The indicator is based on the following key concepts and terms:   * *National legislature:* A legislature (alternatively called ‘assembly’ or ‘parliament’) is the multi-member branch of government that considers public issues, makes laws and oversees the executive.   + *Unicameral / bicameral parliaments:* A legislature may consist of a single chamber (unicameral parliament) or two chambers (bicameral parliament). The organization of a country’s legislature is prescribed by its constitution. Around the world, about 59% of all countries have unicameral legislatures, while the remaining 41% are bicameral[[65]](#footnote-66). To allow for a comprehensive analysis, this indicator will consider both chambers in bicameral parliaments. * *Member of Parliament (MP):* A person who is formally an elected or appointed member of a national legislature. This metadata considers all members of lower and upper chamber regardless of the selection modality (direct election, indirect election and appointment). * Speaker: A Speaker (alternatively called ‘president’ or ‘chairperson’ of the legislature) is the presiding officer of the legislature. * *Permanent committee* (alternatively called ‘standing committee’): established for the full duration of the legislature and generally aligned with the specific policy areas of key government departments. For the purpose of SDG indicator 16.7.1(a), the permanent committees in charge of five portfolios are being considered: Foreign Affairs, Defence, Finance, Human Rights and Gender Equality. * *Permanent Committee Chair:* A person designated to preside over the work of a permanent committee, selected through nomination by political parties, election by MPs, appointment by the Speaker, or other means. * *Disability:* long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder the full and effective participation of disabled persons in society on an equal basis with others.[[66]](#footnote-67) * *Population group:* The population of a country is a mosaic of different population groups that can be identified according to racial or ethnic, language, migration status, religious affiliation, sexual orientation, as well as disability status (UNECE). The indicator adopts a broad definition of population groups, not limited to minorities[[67]](#footnote-68) and indigenous peoples[[68]](#footnote-69), in order to capture all nationally relevant groups tracked by a given parliament, which depends on the constitutional and electoral measures in place to guarantee the representation of certain groups. Such measures sometimes extend to groups other than ‘minorities’, such as, for instance, occupational groups.[[69]](#footnote-70)   **Comments and limitations:**  *Measuring representation*   * The significance of descriptive representation has been challenged in different ways. First, there is the question of what and who should be mirrored in the representative body; why be attentive to some groups (women, young people, minorities etc) but not others (the poor, LGBTI, "ethnic" groups who might not be officially recognized etc)? Second, the mirror notion of descriptive representation may be deemed dangerous if it precludes citizens from choosing representatives who do not look like them. One of the base tenets of democracy is freedom of choice at the ballot box and if one is corralled into having to vote for a candidate of your own sex or ethnicity, then that intrinsic liberty is constrained. Third, descriptive representation has the danger of ultimately becoming an end in itself. Concerns about effective representation should not end once parliament has the appropriate number of members for each minority groups. Indeed at this stage concerns about adequate political representation should be just beginning. These members should be able to articulate minority concerns and have the same opportunities to influence policy as other members. Nevertheless, if a parliament includes none, or very few, women, young people, minorities etc., that is probably a worrying sign that their interests are not being heard. [[70]](#footnote-71) * Representation needs to go hand in hand with participation, with both concepts being part of target 16.7. Without meaningful opportunities for citizens to participate in parliamentary decision-making, representation alone is unlikely to automatically lead to effective popular control of the government - one of the fundamental principles of democracy (International IDEA, 2013). * The age and sex of individuals holding decision-making positions in parliament provide an indication at the symbolic level of the way in which power is shared within this institution. However, there is no certainty that because a Speaker or committee Chair is young (or old), a woman (or a man), or belongs to a minority group, s/he will bring to the fore issues of interest to groups with the same socio-demographic profile. * Tracking the age of MPs over time offers some measure of youth representation in parliament. However, in most parliaments around the world, leadership positions such as Speaker and permanent committee Chairs are considered senior functions which require considerable experience, and are awarded in recognition of parliamentary achievement. This means that such positions are by nature unlikely to be held by members below the ‘youth’ age bracket of ‘45 years old and under’. As such, for the positions of Speaker and committee Chairs, more relevant insights will be generated on the basis of sex disaggregation. * IPU studies on women in parliaments[[71]](#footnote-72) have found that committees representing the three ‘hard’ policy portfolios of Foreign Affairs, Defence and Finance are traditionally male-dominated. The two other committees tracked by this indicator, representing cross-cutting portfolios of Human Rights and Gender Equality, are also of interest given their specific areas of focus. Although not found in every parliament, the very existence of these two commitees suggests a particular commitment within parliament to safeguarding human rights and promoting gender equality. * In certain countries, particularly Small Island Developing States, the number of members of parliament may be very small. Consequently, there may not be a committee system, or the committee system may not contain the same distribution by areas of responsibility as observed in the majority of parliaments. In addition, in parliaments with a very small number of members, the addition or reduction of just one or two people to the number of women or the number of young MPs may have a significant impact on the overall percentage of representation of these groups.   ***Methodology***   * As regards the scope of ‘population groups’, while representation of minorities and indigenous peoples may be more often tracked by national parliaments due to the availability of internationally accepted definitions, the indicator also invites reporting on any other tracked population groups, including, for instance, occupational groups. * An obvious limitation of this metadata is that it only considers members of parliament, in keeping with the focus of target 16.7 on ‘decision-making’. However, some parliaments may find it useful to also look at the composition of various staff categories such as clerks of the parliament, committee clerks or researchers, etc. * Who holds the Chairs of parliamentary committees is largely tributary to the overall distribution of seats within the parliament. For example, parliaments with no members under the age of 30 will not have any committee Chairs under that age. Since committee chairs are typically awarded on the basis of experience and seniority,[[72]](#footnote-73) higher age groups are expected to be common among committee Chairs and Speakers.   ***Data collection***   * In between reporting dates, it may be difficult to maintain up-to-date information on the results of by-elections held in selected constituencies to fill vacancies arising from the death or resignation of members. * From one year to another during any given parliamentary term (typically 4 or 5 years), some Members may fall into a different age group amongst those considered for this indicator. For this reason, age should be reported as that at the time of election to parliament (and in the case of Speakers and permanent committee Chairs, at the time of nomination to a given position).   *Recommended approach to monitoring disability and population groups:*  *1) Sensitivity of disability and population group data*   * Efforts to promote inclusive parliaments presuppose recognition of ethno-cultural diversity[[73]](#footnote-74). In certain contexts, population group status may prove to be a sensitive and politically charged variable. For example, several countries actively restrict or ban identification of ethnic or religious status, in order to protect vulnerable populations or discourage inter-ethnic conflict. In addition, definitions of groups that constitute a minority vary greatly between countries. * Furthermore, there is a strong human rights principle that individuals must be able to choose to identify themselves as members of a minority, or not. It would not be appropriate for parliaments (or any other body) to assume or to assign MPs’ membership of a particular population group. * Similarly, discriminatory perceptions and implicit bias against disability can make the collection of data by parliaments on this characteristic equally sensitive. This is partly because parliamentarians with disabilities, like everyone else, have a right to privacy and therefore are not under an obligation to reveal a disability. Moreover, in many states, information concerning disability falls under the umbrella of health data and is therefore confidential, thus preventing parliaments to release this information even on an anonymous basis.[[74]](#footnote-75) * As a result, currently, next to no countries systematically collect data on disability among members of parliaments. As pointed out by the European Union Agency for Fundamental Rights (FRA), while collecting reliable and accurate statistical data regarding the experiences of persons with disabilities presents numerous challenges, the lack of comparable data hinders the understanding of barriers to political participation.[[75]](#footnote-76)   *2) Limitations of the descriptive representation approach to tracking disability and population group status*   * Unlike for sex and age, monitoring the descriptive representation of members of parliament based on disability or population group status would be neither feasible nor meaningful. * Considering how broad the concept of disability is, encompassing various types of impairments and various degrees of severity, it would be unrealistic and unwarranted to expect a one-to-one ratio of representation in parliament. Furthermore, since national-level disability statistics are not always up-to-date, let alone available, the comparison between the share of disabled in the national population and in parliament could be unsound, or difficult to establish. * There are similar concerns with respect to monitoring the representation of various population groups. In countries whose populations are a mosaic of many diverse groups (some of which may account for less than 1 percent of the population) an exact reflection of such pluralism in the composition of parliament would be impossible and unnecessary. * For ethical reasons, data on disability and population group status of MPs could only be collected through individual surveys that meet required standards of confidentiality. Seeing that such practice is currently not in place, the testing of this approach will be explored in the future to establish whether surveying the world’s 46,000 parliamentarians is feasible.   *3) Adopting an incremental approach*   * Given the perceived sensitivity of collecting data on disability and population group status and concerns related to the feasibility and usefulness of monitoring descriptive representation, it is proposed to take stock instead of electoral and constitutional provisions guaranteeing the representation of persons with disabilities and various population groups in national parliaments. * **Reserved seats and quotas** are among the most commonly utilized electoral means to ensure representation of certain groups in the political process. Above and beyond guaranteeing a minimum number of seats held by persons with disabilities and certain population groups, the existence of such provisions substantiates a country’s commitment to the right to equal participation in public and political life. * Provisions on quotas can be found in countries’ constitutions or electoral laws (i.e. legislated quotas).[[76]](#footnote-77) Such electoral measures are used to achieve equal or balanced access to political power by increasing access to political decision-making processes of certain sociodemographic groups. In 2010, the constitutions or electoral laws of more than 30 countries included electoral quotas for various groups (e.g. ethnic, religious) that commonly go under the name of ‘minority groups’. A few countries have similar provisions for persons with disabilities[[77]](#footnote-78). * The impracticality of looking at descriptive representation does not mean there is no merit in producing statistics on disability or population groups in parliament. Even an indicative number of MPs self-reporting disability could help parliamentary administrations around the world to better accommodate their special needs. It could also provide valuable information on the actual exercise (and not only the legal status) of the human right to equal opportunity to participate in the public and political life. When supported by concrete figures, such information can be valuable to a broad range of actors trying to identify and address barriers to political participation, including civil society, community advocates, researchers, development partners and political institutions themselves. * In line with the proposed incremental approach, an ‘Inclusion Survey’ (see Annex and Data Sources) was developed to facilitate the collection of self-reported data on disability (using the Short Set of Questions onDisabilityelaborated by the Washington Group) and population group status by parliaments. This short survey module of 8 questions, developed specifically for the purpose of reporting on indicator 16.7.1(a), could be administered directly to all Members by a neutral sponsor such as a national statistical office or the IPU itself. Importantly, the introduction to the survey reassures respondents of the anonymity and confidentiality of their responses, which is essential to overcome individual reluctance to disclose sensitive personal information.   *Recommendations for reporting also on the composition of local parliaments*  While at present the indicator looks only at national parliaments, broadening its scope to include legislative bodies of local governments could be considered in the future, in line with target 16.7 which calls for decision-making to be representative “at all levels”. Local councils or assemblies hold important decision-making powers, including the ability to issue by-laws that influence the lives of their respective local communities. While it is premature at this stage to propose a global methodology to report on representation in local legislatures due to the varying quality of data collection systems in place at the local level, and to a number of methodological complexities (notably with regards to the need for disaggregated population statistics to be available for each administrative division, in order to compute representation ratios in each local parliament), countries should nonetheless be encouraged to track diversity in local parliaments, using methodologies appropriate to their local context. As far as global SDG reporting is concerned, a recommendation for the future inclusion of local legislatures in indicator 16.7.1(a) can be found in Annex 1 to the Methodology Development Narrative. A custodian for this part of the indicator on local legislatures remains to be identified.  **Computation Method:**   * Members:   Indicator 16.7.1(a) aims to compare the proportion of various demographic groups (by sex and age) represented in national parliaments, relative to the proportion of these same groups in the national population above the age of eligibility.  To report on indicator 16.7.1(a), two ratios must be calculated, namely:   * For ‘young’ MPs (aged 45 and below) * For female MPs   When comparing ratios of ‘young’ MPs and female MPs with corresponding shares of the national population that is aged 45 and below (for the first ratio) and female (for the second ratio), *it is important to consider the population of, or above, the age of eligibility*, the latter being, by definition, the lowest possible age of members of parliament. In other words, if the age of eligibility in a given country is 18 years old, the national population to be used as a comparator for the first ratio (for ‘young’ MPs) will be the national population aged 18-45 (*not* 0-45), and for the second ratio (for female MPs), the female population aged 18 and above.   1. To calculate the ratio for ‘young’ MPs (aged 45 and below), the following formula is to be used:   **Ratio 1 = Proportion of MPs aged 45 and below in parliament**  **Proportion of the national population aged 45 and below**  *(with the age of eligibility as a lower boundary)*  Where:   * The numerator is the number of seats held by MPs aged 45 and below, divided by the total number of members in parliament * The denominator can be computed using national population figures as follows:   *[Size of national population < or = to 45] – [Size of national population < to age of eligibility]*  *Size of the national population*  The resulting ratio can then be interpreted as follows:   * 0 means no representation at all of ‘youth’ (45 years and below) in parliament * 1 means perfectly proportional representation of ‘youth’ (45 years and below) in parliament * <1 means under-representation of ‘youth’ (45 years and below) in parliament * >1 means over-representation of ‘youth’ (45 years and below) in parliament   While a simple proportion of ‘young’ MPs in parliament is not internationally comparable, a ratio computed using the above formula is. For instance, 48% of ‘young’ MPs (45 years old or younger) may be an overrepresentation of youth in country A where only 30% of the national population above eligibility age falls in this age bracket (Ratio = 48/30 = 1.6), but in country B where 70% of the national population is 45 years old or younger, the same 48% would be interpreted as under-representation (Ratio = 48/70 = 0.69). In this example, the figure of 48% is not internationally comparable in relation to the national population (it means over-representation in one country and under-representation in another), but the ratios 1.6 and 0.69 *are* internationally comparable. They help us understand whether 48% of MPs aged 45 years old or less is close to, or far from, proportional representation of this age group in the national population.   1. To calulate the ratio for female MPs, the following formula is to be used:   **Ratio 2 = Proportion of women in parliament Proportion of women in the national population**  *(with the age of eligibility as a lower boundary)*  Where:   * The numerator is the number of seats held by female MPs, divided by the total number of members in parliament * The denominator can be computed using national population figures as follows:   *[Size of female national population > or = to age of eligibility]*  *Size of the national population > or = to age of eligibility*  Note: This denominator can be set at 50 in most countries, as women generally represent around 50% of the national population in any given age bracket.  The resulting ratio can be:   * 0, when there is no representation of women at all in parliament * <1, when the proportion of women in parliament is lower than that in the national population * =1, when the proportion of women in parliament equals that in the national population * >1, when the proportion of women in parliament is higher than that in the national population * *Speakers:* No computation, as most parliaments will only have one Speaker per parliament in unicameral parliaments or one Speaker per chamber in bicameral parliaments[[78]](#footnote-79). Personal characteristics of the individual(s) holding the position of Speaker are recorded (i.e. age group and sex). * *Chairs of permanent committees on Foreign Affairs, Defence, Finance, Human Rights and Gender Equality:* No computation, as data is collected only on five committee Chairs. Personal characteristics of the five individuals chairing these three committees are recorded (i.e. age group and sex).     *Computation in bicameral legislatures*  In bicameral parliaments, data will be collected and computed separately for the same set of positions in each chamber.  part (b) of this indicator  **Definition:**  This metadata is focused only on the public service sub-component of indicator 16.7.1. It measures representation in the public service with respect to the sex, age, disability and population group status of public servants, and assesses how these correspond to the proportion of these groups in society as a whole.  More specifically, this indicator measures the proportional representation of various demographic groups (women, youth, persons with disability, and nationally relevant population groups) across various occupational categories as well as across two administrative levels (national and sub-national).  **Concepts:**  This indicator builds on various concepts and terms from international statistical standards and classifications as well as normative frameworks:   * ***Institutional units covered:***The concepts of ‘General Government Sector’ and ‘General Governmment Employment’[[79]](#footnote-80),as found in the 2008 System of National Accounts (SNA) but with some minor modifications[[80]](#footnote-81), define the boundaries of the institutional units covered under this indicator.   + The following institutional units should be included: All units of central and “state” (or equivalent sub-central level) government, i.e. all ministries, agencies, departments and non-profit institutions that are controlled by public authorities.   + The following institutional units should be excluded: local government units[[81]](#footnote-82), the military, social security funds, public corporations and quasi-corporations that are owned and controlled by government units. * ***Administrative levels:*** As outlined above, this indicator covers employment at both central and sub-central levels of government (but excludes local government). Employment data will therefore be collected at two levels:   + Employment in national/central government; and   + Employment in ‘state government units’, described in the 2008 SNA as “institutional units whose fiscal, legislative and executive authority extends only over the individual ‘states’ into which the country as a whole may be divided”.[[82]](#footnote-83) * ***Occupational categories in the public service:*** Target 16.7 calls for responsive, inclusive, participatory and representative decision-making *at all levels.* As such, reporting on indicator 16.7.1(b) needs to be done separately for various levels of decision-making. Since there is no international definition of ‘positions’ in the public service and therefore most countries have their own national classification for public service positions, a harmonized set of occupational categories in the public service is needed to ensure the comparability of data reported for this indicator.   + The International Standard Classification of Occupations (ISCO-08) was used to identify four ‘core’ occupational categories in the public service[[83]](#footnote-84) found to be relatively typical in every government, namely Managers (ISCO-08 Major Group 1), Professionals (ISCO-08 Major Group 2), Technicians and Associate Professionals (ISCO-08 Major Group 3) and Clerical Support Workers (ISCO-08 Major Group 4).   + Moreover, the rationale of this indicator places a particular focus on ‘front-line service workers’ which frequently interact directly with the public,[[84]](#footnote-85) such as police personnel, education personnel, health personnel and front-desk administrative personnel. While this list of front-line public service jobs is not exhaustive, these four categories were selected given the substantial portion of public service jobs they account for, and the frequent direct interaction these public servants have with the public. * ***Appointed/elected positions:*** In order to ensure consistent reporting, it is important to distinguish positions that are appointed (or elected) by the government or the head of government, and career public servant positions obtained on the basis of merit and seniority. This indicator only considers the latter – i.e. positions held by career public servants, obtained on the basis of merit and seniority. NB: This consideration is most likely to affect positions in the ‘managers’ occupational category. [[85]](#footnote-86) * ***Disability status:*** To disaggregate public servant data by disability status, it is recommended that countries use the [Short Set of Questions onDisabilityelaborated by the Washington Group](http://www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/).[[86]](#footnote-87)   **Comments and limitations:**   * ***Measuring representation:*** The significance of ‘descriptive’ or ‘proportional’ representation has been challenged in different ways:   + There is the question of why be attentive to some groups (women, young people, minorities, etc.) but not others (the poor, LGBTI, "ethnic" groups who might not be officially recognized, etc.). Moreover, in countries whose populations are a mosaic of many diverse groups (some of which may account for less than 1 percent of the population), an exact reflection of such pluralism in the composition of the public service would be impossible and unnecessary. Finally, descriptive representation has the danger of ultimately becoming an end in itself. Concerns about effective representation should not end once the public service has the appropriate number of public servants representing each minority groups. These public servants should be able to articulate minority concerns and should have the same opportunities as others to have some influence on policy formulation and implementation. Nevertheless, if a public service includes none, or very few, women, young people or minorities, that is probably a worrying sign that the interests of these particular groups are not being heard.   + The age, sex, disability and population group status of individuals holding positions at various levels of decision-making in the public service provide an indication at the symbolic level of the way in which power is shared within an institution. However, there is no certainty that because a Manager is young (or old), a woman (or a man), or belongs to a minority group, s/he will bring to the fore issues of interest to groups with the same socio-demographic profile.   + Tracking the age of public servants offers some measure of youth representation in the public service. However, in most ministries and agencies constituting the public service around the world, leadership positions such as those falling in the category of ‘Managers’ are considered senior functions which require considerable experience, and are awarded on the basis of seniority. This means that such positions are by nature unlikely to be held by individuals in the younger age brackets. As such, for positions falling in the category of ‘Managers’, more relevant insights will be generated on the basis of sex disaggregation, or disaggregation based on disability or population group status.   + Finally, governments use various ways to deliver public services, including through a range of partnerships with the private or not-for-profit sectors, and this indicator does not account for the staffing composition of other such entities which may have been contracted by the government to deliver public services. While in several countries, the large majority of health care providers, teachers and emergency workers are directly employed by the government, in others, public-private service delivery arrangements are in place, which means that many of these professionals are employed by organisations that are not state-owned, or by private contractors. Since this indicator does not account for the outsourcing of public service provision by the government, it may not give a complete picture of the representativeness of those who provide public services – irrespective of who their employer is. * ***Rationale for computing ratios rather than proportions:*** It may be noted that the below computation methods lead to ratios rather than simple proportions. The rationale for this is simple: while a simple proportion of ‘young’ public servants is not internationally comparable. For instance, 32% of ‘young’ public servants (34 years old or younger) may be an over-representation of youth in country A where only 20% of the national population (above eligibility age for a public service job) falls in this age bracket (Ratio 3 = 38/20 = 1.6), but in country B where 40% of the national population is 34 years old or younger (and above eligibility age for a public service job), the same 32% would be interpreted as under-representation (Ratio = 32/40 = 0.8). In this example, the figure of 32% is not internationally comparable (it means over-representation in one country and under-representation in another), but the ratios 1.6 and 0.8 are internationally comparable. They help us understand whether 32% of public servants aged 34 years old or less is close to, or far from, proportional representation of this age group in the national population. * ***Sensitivity of collecting disability and population group data in the public service:*** In certain contexts, population group status may prove to be a sensitive and politically charged variable. For example, several countries actively restrict or ban identification of ethnic or religious status, in order to protect vulnerable populations or discourage inter-ethnic conflict. In addition, definitions of groups that constitute a minority vary greatly between countries. Furthermore, there is a strong human rights principle that individuals must be able to choose to identify themselves as members of a minority, or not. It would not be appropriate for public service bodies (or any other body) to assume or to assign public servants a certain membership of a particular population group. As such, administrative data collection systems in the public service should allow public servants to self-report on membership of nationally relevant population groups. Similarly, discriminatory perceptions and implicit bias against disability can make the collection of data by public service bodies on this characteristic equally sensitive. This is partly because public servants with disabilities, like everyone else, have a right to privacy and therefore are not under an obligation to reveal a disability. Moreover, in many states, information concerning disability falls under the umbrella of health data and is therefore confidential, thus preventing public service bodies to release this information even on an anonymous basis.[[87]](#footnote-88) * ***Normative framework:*** The indicator calls for disaggregation of positions by age, sex, nationally relevant population groups and disability status. The following international human rights instruments contain provisions on enhancing opportunities for participation by individuals and groups holding such characteristics:   + *The universal right and opportunity to participate in public affairs:* Article 25 of the International Covenant on Civil and Political Rights (ICCPR) recognizes “the right and opportunity, without distinction of any kind such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status to take part in the conduct of public affairs, directly or through freely chosen representatives”. General Comment 25 of the Human Rights Committee elaborates that access to public service employment should be based on equal opportunity and general principles of merit, and that the provision of secured tenure would ensure that persons holding public service positions are free from political interference or pressures.   + *Sex:* The 1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) provides the basis for realizing equality between women and men through ensuring women's equal access to, and equal opportunities in, political and public life, including the right to participate in the formulation of government policy and the implementation thereof and to hold public office and perform all public functions at all levels of government (Article 7). States parties agree to take all appropriate measures to overcome historical discrimination against women and obstacles to women’s participation in decision-making processes (Article 8), including legislation and temporary special measures (Article 4). The Beijing Declaration and Platform for Action also call for women’s equal access to public service jobs, by setting a target of a minimum of 30 percent of women in leadership positions.   + *Age:* The 2015 Security Council Resolution 2250 urges Member States to consider ways to increase inclusive representation of *youth* in decision-making at all levels in local, national, regional and international institutions and mechanisms to prevent and resolve conflict and counter violent extremism.   + *‘Population group’ status:* The Declaration on the Rights of Persons belonging to National or Ethnic, Religious and Linguistic Minorities (1992) and the Declaration on the Rights of Indigenous Peoples (2007) provide that persons belonging to minorities and indigenous peoples have the right to participate in the political, economic, social and cultural life of the State.   + *Disability status:* The United Nations Convention on the Rights of Persons with Disabilities (2006) calls upon State Parties to ensure that persons with disabilities can effectively and fully participate in political and public life on an equal basis with others. Under Article 31 of the Convention, State Parties commit to collecting disaggregated information, including statistical and research data to give effect to the Convention, and assume responsibility for the dissemination of these statistics. * ***Transposing national classifications of public service jobs into ISCO-08 based occupational categories for the public service:*** The ISCO-08 based occupational categories proposed above for this indicator are meant to be broad enough to accommodate considerable diversity among national classifications. When transposing their national classifications, countries should strive to respect the criteria listed for each occupational category and the references provided to specific ISCO-08 codes, while noting any divergence when reporting. A list of specific criteria is provided below to guide the transposition from national classifications to the ISCO-08-based occupational categories in the public service prioritized for this indicator.   Computation Method:  Indicator 16.7.1(b) aims to compare the proportion of various demographic groups (by sex, age, disability and population groups) represented in the public service, with the proportion of these same groups in the national population. More specifically, the proportional representation of these demographic groups is assessed across various occupational categories as well as across two administrative levels.  When computing these proportions, all the considerations detailed above in the section “concepts and definitions” should be respected, including on institutional units covered, administrative levels, occupational categories and appointed/elected positions.  • An online SDG 16 Data Reporting Platform (https://sdg16reporting.undp.org – to be launched in April 2020) was developed by custodian agency UNDP to assist countries in reporting on this indicator, at the level of both national and sub-national government, and on the basis of sex, location (urban/rural), income or expenditure quintiles, age groups, nationally relevant population groups and disability status. Countries should use the online data forms and accompanying guidance provided on this platform to report on this indicator.  • Countries are encouraged to report data that is available, understanding that public servant disaggregated data for disability status and nationally-relevant population groups may not be currently available in many jurisdictions. Countries are encouraged to build additional capacities to disaggregate data by these demographic groups.  • Information for part-time positions should be given in full-time equivalents and should be counted only for permanent posts actually filled. It is important to consider the part-time or full-time status of posts to address the risk that some target groups may be underemployed and over-reported (e.g. If women are more likely to receive part-time posts than full-time posts, there might be a false impression that women are equally represented in those posts, when in reality they work less than their male counterparts due to their part-time status).  part (c) of this indicator  **Definition:**  This metadata is focused only on the judiciary sub-component of indicator 16.7.1. It measures representation in the judiciary with respect to the sex, age, disability and population group status, and assesses how these correspond to the proportion of these groups in society as a whole.  More specifically, this indicator measures the proportional representation of various demographic groups (women, youth, persons with disability, and nationally relevant population groups) across two key decision-making positions in the judiciary (judges and registrars) as well as across three ‘levels’ of courts, namely ‘supreme/constitutional courts,’ ‘higher-level courts’ and ‘lower-level courts’.  **Concepts:**  This indicator builds on various concepts and terms from international statistical standards and classifications as well as normative frameworks. The concepts and terms used for this indicator reflect general features of judiciaries around the world, while recognizing that different countries have their own legal systems informed by their specific histories and cultures, which in turn determine the specific functions and form of the judiciary in a given country. The below concepts and definitions were elaborated with a view to being broad enough to accommodate these national specificities:   * ***Focus on formal court system:*** The *judiciary* is the system of courts that constitutes the branch of central authority in a country concerned with the administration of justice. The judiciary sub-component of SDG indicator 16.7.1 focuses on the *formal* court system and does not include within its scope informal mechanisms (e.g., religious, tribal, or traditional dispute resolution mechanisms). * ***Levels of courts:*** The indicator disaggregates between three ‘levels’ of courts to reflect the way in which courts are used, namely ‘supreme/constitutional courts,’ ‘higher-level courts’ (courts that handle national issues or appeals), and ‘lower-level courts’ (courts – typically of first instance – that commonly handle local issues, such as disputes involving family, land, and government benefits and services). This broad categorization is elaborated to encompass the diversity of judicial systems across the world, including across different types of legal systems (common law, civil law, etc.) and across different types of government (unitary, federal, etc.): * *Supreme/constitutional* *courts*: Supreme/constitutional courts are the courts within a country with the highest authority to interpret the law. The category includes both supreme courts (i.e., the highest judicial bodies in the domain of civil and criminal jurisdiction) and constitutional courts (i.e., the legal bodies responsible for ensuring the compatibility of legislation with the provisions and principles of the constitution in each country, in particular to protect constitutionally-established rights and freedoms). Constitutional courts include those courts that sit only on constitutional issues, as well as courts that sit as constitutional courts only on occasion when constitutional issues arise. In federal court systems, highest courts include supreme courts and constitutional courts at the national level, but excludes any supreme courts that may exist at sub-national levels, as these should be included within the category of higher-level courts. In certain jurisdictions, the supreme court and constitutional court might be one and the same and therefore there would be just one court for the category of supreme/constitutional courts. * *Higher-level courts*: Higher-level courts include other high courts, high-level courts, and courts of appeal. In federal court systems, higher-level courts include higher-level courts at both the national and sub-national levels, and also include supreme courts at sub-national levels. * *Lower-level courts*: Lower-level courts encompass first-instance or frontline courts of local jurisdiction. This category includes local courts, district courts, magisterial courts, and magistrate courts. In federal court systems, lower-level courts include lower-level courts of both national and sub-national court systems. * Finally, a note about *specialized courts* is in order: The determination of whether specialized courts or tribunals, or a subset thereof, fall within supreme/constitutional, higher-level, or lower-level courts is left to the discretion of countries. Specialized courts are courts that have limited jurisdiction over a specialized subject matter, and may include, but are not limited to, war crimes courts, gender-based violence courts, commercial courts, finance courts, labour courts, family courts, property courts, military courts, administrative courts, social welfare courts, juvenile courts, courts for organized crime, narcotics, and corruption, etc. In many jurisdictions, specialized courts are considered higher-level courts. In such jurisdictions, these specialized courts might have exclusive or original jurisdiction over certain claims, and therefore act in the first instance for those claims, but are nevertheless considered higher-level courts. In other jurisdictions, specialized courts might be considered lower-level courts or supreme courts. Some jurisdictions might categorize a subset of specialized courts as higher-level courts and another subset as lower-level courts. * **Decision-making positions:** Target 16.7 focuses on ‘decision-making’ and the extent to which it is responsive, inclusive, and representative. In the judiciary, decision-making power and leadership roles are essentially held by individuals in two types of positions, namely judges and registrars. Judges play important roles in decision-making by carrying out their core functions of interpreting laws and adjudicating controversies over the application of laws to particular circumstances. Registrars assist judges in performing their functions and play an important role in case management, including by scheduling hearing dates, registering court documents, receiving fees emanating from court matters, preparing case files, drafting decisions, and executing court decisions. Additionally, in certain circumstances, they can perform judicial or quasi-judicial functions themselves, including making decisions on interlocutory applications, assessment of damages, and applications for the entry of default judgments. The judiciary sub-component of SDG indicator 16.7.1 does not cover other positions such as: court-annexed alternative dispute resolution professionals (individuals appointed by the state to decide upon an adjudicatory dispute resolution process, such as arbitrators and mediators); non-legal court personnel (part-time or full-time individuals paid by the state to support the administration of the judicial system, such as bailiffs, tipstaff, secretaries, notaries, paralegals, and administrators); or state-funded legal professionals within the justice sector (individuals paid by the state to carry out the representation or prosecution of an individual in a legal proceeding, including prosecutors, public defenders, and legal aid service providers). While these individuals play some role in the functioning of the justice system as a whole and are supported by state funds, they do not constitute the judiciary as it is understood by most countries. Additionally, they are typically accounted for in the public service sub-component of SDG indicator 16.7.1 (i.e. SDG 16.7.1b). * *Judge* (alternatively called ‘justice’, ‘magistrate’, or ‘jurist’): A judge is a person authorized to decide cases in a court of law. UN DESA’s Manual for the Development of a System of Criminal Justice Statistics defines ‘professional judges or magistrates’ as both full-time and part-time officials authorized to hear civil, criminal, and other cases, including in appeal courts, and to make dispositions in a court of law. This category includes associate judges and magistrates who may be so authorized.[[88]](#footnote-89) * *Registrar* (alternatively called ‘clerk’, ‘judicial officer’, ‘*Rechtspfleger*’, ‘*secretario de estudio y cuenta*’, ‘*secretario general*’, ‘*secretario de acuerdos*’, ‘*greffiers’*, ‘المسجلون’): A registrar is a judicial officer of the court entrusted with judicial or quasi-judicial functions who has autonomous competence. A registrar’s decisions may be subject to appeal in certain circumstances. * ***Definition of “youth”:*** youth for the purpose of this indicator is defined as 44 years old and below, because positions in the judiciary require training and experience. This cutoff also provides consistency with sub-component (a) of SDG 16.7.1 on parliaments which uses a similar cutoff for ‘youth’, based on the Interparliamentary Union’s definition of ‘young MPs’ as MPs aged 45 and below (see metadata for SDG indicator 16.7.1(a)). * ***Information for part-time positions should be given in full-time equivalents*** and should be counted only for permanent posts actually filled. *It is important to consider the part-time or full-time status of posts* to address the risk that some target groups may be underemployed and over-reported (e.g., if women are more likely to receive part-time posts than full-time posts, there might be a false impression that women are equally represented in those posts, when in reality they adjudicate a smaller portion of cases than their male counterparts due to their part-time status). * ***Disability status:*** To disaggregate data on judges and registrars by disability status, it is recommended that countries use the [Short Set of Questions onDisabilityelaborated by the Washington Group](http://www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/).[[89]](#footnote-90)   **Comments and limitations:**   * ***Tokenism:*** While the indicator provides a good measure of progress in overcoming historical or ongoing discrimination, it cannot detect tokenism where official job titles mask a lack of influence in practice or other forms of discrimination within the judiciary that may affect the ability of certain judges or registrars to participate in decision-making. For example, women in the judiciary may face institutional, cultural, or other constraints that restrict them from exercising their decision-making power.[[90]](#footnote-91) IDLO’s Women Delivering Justice Report (2018) notes that stereotypes in certain jurisdictions might dictate that women can rule on family court cases, but that they are not suited to decide criminal cases because of the perceived danger of such roles.[[91]](#footnote-92) * ***Rationale for computing ratios rather than proportions:*** It may be noted that the below computation methods lead to ratios rather than simple proportions. The rationale for this is simple:While a simple proportion of ‘young’ judges in the judiciary is not internationally comparable, a ratio computed using the above formula is. For instance, 48% of ‘young’ judges (aged 44 or below) may be an overrepresentation of youth in country A where only 30% of the national population of working-age falls in this age bracket (Ratio = 48/30 = 1.6), but in country B where 70% of the national population of working-age is aged 44 and below, the same 48% would be interpreted as under-representation (Ratio = 48/70 = 0.69). In this example, the figure of 48% is not internationally comparable in relation to the national population (it means over-representation in one country and under-representation in another), but the ratios 1.6 and 0.69 *are* internationally comparable. They help us understand whether 48% of judges aged 44 and below is close to, or far from, proportional representation of this age group in the national population. * ***Sensitivity of collecting disability and population group data***: Data disaggregated by disability and population group may not be readily available in many countries. Collecting this data for judges and registrars may therefore require additional investment in data collection systems, with a corresponding investment in human capacity to analyse the data and use the information generated in recruitment and human resources policies for the judiciary. Moreover, some countries may impose legal restrictions on collecting data on certain target groups (e.g. disability often falls under the umbrella of health data, and is therefore confidential, thus preventing Judicial Services Commissions, Ministries of Justice, or other similar competent bodies from releasing this information even on an anonymous basis; likewise, several countries actively restrict or ban identification of ethnic or religious status, in order to protect vulnerable populations or discourage inter-ethnic conflict. As such, it is left to the discretion of each country to determine which groups should be highlighted when disaggregating totals for judges and registrars).[[92]](#footnote-93) Collecting disaggregated data should be subject to the legality of compiling such data in a particular national context and to a careful assessment of the potential risks of collecting such data for the safety and privacy of respondents. Meanwhile, most countries already produce sex-disaggregated data on judges and registrars and therefore countries are expected at a minimum to be able to report sex-disaggregated data for overall totals of individuals occupying these two positions, as well as for overall totals disaggregated by the three levels of courts cited above. * ***Rationale for the age disaggregation:*** The number of young persons in the judiciary tends to be relatively small, particularly in contexts where judges typically assume their position based on seniority. While in such contexts disaggregation on the basis of age may not be very insightful, in others contexts, such as that of new democracies where judges are typically younger, age-disaggregation can be a more meaningful measure of representation. The presence of a large proportion of ‘young’ judges in post-conflict countries, for example, can indicate a country’s investment in its justice system. Even if null values for the number of ‘young’ judges are likely to be common in many countries, there is an inherent awareness-raising value in tracking representation of ‘young’ judges and registrars, to help call attention to the challenges faced by younger age-brackets in accessing decision-making positions. Additionally, age-disaggregated data becomes particularly relevant when considering the intersectionality of age with other demographic variables (e.g. a growing proportion of ‘young’ female judges could signal that a country is making concerted efforts to invest in increasing female participation in decision-making positions over the longer-term). * ***Normative framework:*** Global reporting on this indicator includes data disaggregated by sex, age, disability, and population group. Disaggregated data that allows for comparison of these target groups to understand the situations of specific groups are central to a human-rights based approach to data and form part of countries’ obligations under international human rights treaties. OHCHR guidance on data collection and disaggregation for SDG monitoring urges that capacities and partnerships be developed to enable countries to meet their obligation to collect and publish disaggregated data:[[93]](#footnote-94)   + Sex is an important component of SDG indicator 16.7.1(c), as it tracks the extent to which judiciaries are inclusive and representative of women with a view to achieving equal representation of women and men. Women are largely underrepresented in judiciaries, particularly in the highest-level positions, according to A Practitioner’s Toolkit on Women’s Access to Justice Programming (2018), published by UN Women, UNDP, UNODC, and OHCHR. Sex-disaggregated data on individuals occupying decision-making and leadership positions in the judiciary can shed light on the existence of gender-based inequalities in accessing such positions. The Convention on the Elimination of All Forms of Discrimination Against Women (1979) provides the basis for realizing equality between women and men through ensuring women's equal access to, and equal opportunities in, political and public life, including the right to participate in the formulation of government policy and the implementation thereof and to hold public office and perform all public functions at all levels of government (Article 7). States parties agree to take all appropriate measures to overcome historical discrimination against women and obstacles to women’s participation in decision-making processes (Article 8), including legislation and temporary special measures (Article 4). The Beijing Declaration and Platform for Action (1995) also calls on governments to ensure women’s equal access to and full participation in power structures and decision-making, including in the judiciary, by setting specific targets and implementing measures to substantially increase the number of women in all governmental positions.   + Age: Security Council Resolution 2250 of 2015 urges Member States to consider ways to increase inclusive representation of youth in decision-making at all levels in local, national, regional, and international institutions and mechanisms for the prevention and resolution of conflict and to counter violent extremism.   + Disability: The United Nations Convention on the Rights of Persons with Disabilities (2006) calls upon State Parties to ensure that persons with disabilities[[94]](#footnote-95) can effectively and fully participate in political and public life on an equal basis with others. General Comment No. 7 (2018) on Article 4.3 and 33.3 on the participation of persons with disabilities in the implementation and monitoring of the Convention, drafted by the Committee on the Rights of Persons with Disabilities, acknowledges the positive impact that the participation of persons with disabilities has on decision-making processes. Their involvement in all forms of decision-making empowers persons with disability to convey their views and lived experiences, enabling them to advocate for their rights and realize their aspirations. Moreover, participation of persons with disability is a critical component of good governance and democracy, as it helps to hold authorities accountable to their commitments in this area, to make them more responsive to the requirements of persons with disability, and to promote and protect the rights of such persons. Persons with disabilities are consistently under-represented in decision-making processes, as is noted in UNDP’s Disability Inclusive Development Report: Guidance and Entry Points (2018). Persons with disabilities face significant challenges and barriers to their inclusion and ability to fully participate in society. Employment rates for persons with disability are lower than for persons without disabilities, and equal and effective access to justice can be a significant obstacle for persons with disabilities. As part of the emphasis across the 2030 Agenda to ‘leave no one behind,’ participation and representation of persons with disability in public institutions and decision-making processes, including in the judiciary, is crucial to reaching those that are often left furthest behind.   + Population groups: The collection of data on relevant population groups[[95]](#footnote-96) occupying decision-making and leadership positions in the judiciary is critical to assessing the inclusivity and representativeness of judiciaries. Increased judicial diversity with respect to populations groups strengthens the ability of judicial mechanisms to consider and respond to varied social contexts and experiences, which improves the justice sector’s responses to the needs of vulnerable and marginalized groups. When various national population groups are well-represented among judges and registrars, this can in turn improve access to justice by these various groups. Representative decision-making builds confidence among population groups and supports social cohesion and the ‘sustaining peace’ framework.[[96]](#footnote-97) Notably, the World Bank’s Pathways for Peace study stressed the centrality of inclusion in the justice and security sectors to the prevention of conflict. The International Convention on the Elimination of All Forms of Racial Discrimination (1965); Declaration on the Rights of Persons belonging to National or Ethnic, Religious and Linguistic Minorities (1992); and the Declaration on the Rights of Indigenous Peoples (2007) provide that persons belonging to racial and minority groups and indigenous peoples have the right to participate in the political, economic, social, and cultural life of the State.   Computation Method:  Indicator 16.7.1(c) aims to compare the proportion of various demographic groups (by sex, age, disability status, and population group) represented in the judiciary, with the proportion of these same groups in the national population. More specifically, the proportional representation of these groups assessed across two key decision-making positions in the judiciary (judges and registrars) as well as across three ‘levels’ of courts. | For (a)  The compilation of data by the Inter-Parliamentary Union uses the following mechanisms:  data collection forms sent to Parliaments[[97]](#footnote-98)  internal review and validation of data obtained from national parliaments by the IPU  on-line dissemination of data by IPU on New PARLINE  For  For (b)  NSOs should coordinate with primary data-producing entities at national and sub-national levels:  Public Service Commissions (or responsible bodies producing public servant data) should submit all relevant data to the NSO. If a different institution produces public service data at sub-national level (such as a Ministry of Local Government or a Ministry of Municipal Affairs), this institution should submit all relevant data to the NSO.  Similarly, if a different institution produces data on police personnel (such as a Police Services Commission or the like), this institution should also submit all relevant data to the NSO.  NSOs, as the main coordinator of the national statistical system, should quality assure the content of the Data Reporting Form before submitting it for SDG reporting at the international level.  For (c)  NSOs should coordinate with primary data-producing entities to report on this indicator. Data obtained from national judiciaries will be compiled, reviewed and validated by NSOs. | For (a)  The Inter-Parliamentary Union is responsible for the provision of data on all dimensions of the indicator. Most part of the data is already available on New Parline, directly provided by national parliaments. The few remaining data points (on the age and sex of the Chairs of permanent committees on Foreign Affairs, Defence and Finance) will be added to the Platform once the indicator will be upgraded to Tier II.  For (b)  National Statistical Offices with relevant primary data-producing entities at national and sub-national levels.  For (c)  National Statistical Offices with relevant primary data-producing entities (Judicial Services Commissions - also referred to as Councils of Justice, Councils of the Judiciary, Judicial Offices, Federal Judicial Centres, Ministries of Justice, or other similar competent bodies managing human resources for the judiciary, handling the appointment of judges and registrars, or otherwise having some oversight role over the judiciary). | a) MoPA  c) LJD  Administrative Data | a) MoPA b) LGD c) LJD  Administrative Data | * sex: male/female * age: Age; below 25 yrs/25-34 yrs/35-44 yrs/44-54 yrs/55-64 yrs/64 and above yrs * disability: disable/not disable * Religion: Muslim/Hindu/Budhhist/Christian/others * Ethnic minority: Ethnic/Non-ethnic * Type of public institution: Civil/Judiciary/Local government | Annual | Group 1 | 1st Round:  2017  2nd Round:  January,  2019  3rd Round:  June 2020  4th Round:  June 2021  5th Round:  June 2022 | Parts (b) and (c) reviewed at 9th IAEG-SDG meeting (classified as Tier II)  UNSC 50 refinement; Part (a) reviewed at 8th IAEG-SDG meeting (classified as Tier II) |
| 16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group | UNDP | Tier II | **Definition:**  This survey-based indicator measures self-reported levels of ‘external political efficacy’, that is, the extent to which people think that politicians and/or political institutions will listen to, and act on, the opinions of ordinary citizens.  To address both dimensions covered by this indicator, SDG indicator 16.7.2 uses two well-established survey questions, namely: 1) one question measuring the extent to which people feel they *have a say* in what the government does (focus on *inclusive* participation in decision-making) and 2) another question measuring the extent to which people feel the political system allows them to have an *influence* on politics (focus on *responsive* decision-making).  All efforts should be made to disaggregate survey results on these two questions by sex, age group, income level, education level, place of residence (administrative region e.g. province, state, district; urban/rural), disability status, and nationally relevant population groups.  **Concepts**  **Decision-making:** It is implicit in indicator 16.7.2 that ‘decision-making’ refers to decision-making in the public governance realm (and not all decision-making).  ***Inclusive* decision-making:** Decision-making processes which provide people with an opportunity to ‘have a say’, that is, to voice their demands, opinions and/or preferences to decision-makers.  ***Responsive* decision-making:** Decision-making processes where politicians and/or political institutions listen to and act on the stated demands, opinions and/or preferences of people.  **Comments and limitations:**  **Excludes measurement of ‘internal political efficacy’**  As discussed in detail above, there are two dimensions to political efficacy. First, subjective competence, or ‘internal efficacy’, and second, system responsiveness, or ‘external efficacy’. This methodology stops short of measuring ‘internal political efficacy’ (also called ‘subjective competence’), which can be defined as the confidence or belief that an individual has in his or her own abilities to understand politics and to participate in the political process. Subjective competence is expected to be correlated with political interest (ESS, 2016). Higher levels of subjective competence are also expected to be associated with higher levels of political participation, including voting in elections. As such, policymakers interested in identifying factors driving high or low levels of political participation should not base their diagnostics solely on levels of external efficacy measured by SDG 16.7.2, as levels of internal efficacy (*not* measured by SDG 16.7.2) also come into play.  **Translation challenges**  The idiom ‘having a say’ can be difficult to translate into other languages, given it can also have various meanings in English (such as expressing one’s views, or being in command, among others). To ensure global comparability of results on this question, getting good quality local language translations is a critical step in the measurement of SDG 16.7.2. To ensure the best possible quality of local language translations, NSOs should be cautious not to use formal or ‘academically correct’ versions of the local languages; rather, they should focus on the everyday (colloquial) use of the language.  To ensure equivalence of meaning during translation, the following protocol is recommended:   * NSOs should make sure that translators understand the concepts, rationale and meaning behind each question before they embark on translating. * Initial drafts of each local language translations should be given to independent reviewers for blind back translation back into the national language. These translators should not have seen the original language version of the questionnaire. * The original team of translators should then further refine their translations based on the review of the back translations. * These revised translations should then be pre-tested. Feedback from the pre-tests should lead to final refinements of the translations to produce the final versions that will go to the field.   It is important to recognize that it takes time to go through these steps and get good quality translations. NSOs should start this process well ahead of the planned fieldwork dates so that the procedures can be carefully followed.  Translation for the two questions is readily available in all languages used by the 29 European countries covered by the European Social Survey, as well as in Arabic, Catalan, Malay, Chinese/ Mandarin, Hausa, Igbo, Yoruba, Indonesian, Urdu, Bengali, Russian, Swahili and Kazakh languages.  **Social desirability bias**  Surveys are the most common and most reliable method of gathering public opinion data representative of the population from which the sample is drawn. However, when studying public opinion with surveys, the researcher assumes that respondents answer truthfully to the questions that interviewers pose. It has been shown that this assumption does not hold in many instances. Survey measures of self-reported voter turnout for example are highly biased in that a significant portion of survey respondents in the US have been found to state they have voted, when they have in fact not.[[98]](#footnote-99) Similarly, social scientists have determined that many common survey items are plagued by such bias such as those that probe for an individual’s attitude towards race relations[[99]](#footnote-100), corruption, and electoral support.  ‘Social desirability bias’, as this is known in the literature, arises whenever survey respondents do not reveal their true beliefs but rather provide a response that they believe to be more socially acceptable, or the response that they believe the interviewers wish to hear. Naturally, this poses a threat to the reliability and validity of survey items.  It is possible that the two questions used to measure SDG indicator 16.7.2 could be affected by social desirability bias. However, pilot-testing of the two questions across all regions and diverse national contexts, as well as statistical analysis of existing survey results on these two questions (using national datasets from the ESS), have not detected any systematic occurrence of social desirability bias. A useful way of detecting more positive results inflated by social desirability bias is to compare the results obtained by an NSO to results obtained by different entities (e.g. by independent researchers from the WVSA or the ESS), provided the time lag between the two data collection efforts is not too wide. It is useful also to keep in mind that high levels of ‘don’t know’ or ‘refuse to answer’ in a national dataset may be a possible sign that respondents do not feel comfortable revealing their true opinion on the questions posed.  **Normative framework for selection of disaggregation dimensions**  People’s perceived capacity to shape government decisions is affected by their personal characteristics and socio-economic background. As such, the indicator calls for disaggregation of survey results by age, sex, nationally relevant population groups and disability status. The following international human rights instruments contain provisions on enhancing opportunities for participation by individuals and groups holding such characteristics:   * *The universal right and opportunity to participate in public affairs:* Article 25 of the International Covenant on Civil and Political Rights (ICCPR) recognizes “the right and opportunity, without distinction of any kind such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status to take part in the conduct of public affairs, directly or through freely chosen representatives”. * *Sex:* The 1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) provides the basis for realizing equality between women and men through ensuring women's equal access to, and equal opportunities in, political and public life, including the right to participate in the formulation of government policy and the implementation thereof and to hold public office and perform all public functions at all levels of government (Article 7). States parties agree to take all appropriate measures to overcome historical discrimination against women and obstacles to women’s participation in decision-making processes (Article 8), including legislation and temporary special measures (Article 4). The Beijing Declaration and Platform for Action also call for women’s equal access to public service jobs, by setting a target of a minimum of 30 percent of women in leadership positions. * *Age:* The 2015 Security Council Resolution 2250 urges Member States to consider ways to increase inclusive representation of *youth* in decision-making at all levels in local, national, regional and international institutions and mechanisms to prevent and resolve conflict and counter violent extremism. Furthermore, the Madrid International Plan of Action on Ageing and the Political Declaration, adopted by the international community at the Second World Assembly on Ageing in April 2002, recognize for the first time in history that “ageing has profound consequences for every aspect of individual, community, national and international life”.[[100]](#footnote-101) The Madrid Plan of Action in particular stresses the importance of research, data collection and analysis in supporting policy and programme development as a key priority for national Governments and international assistance. Following the adoption of the Plan of Action, the General Assembly, at successive sessions, has called for the international community and the United Nations system to “support national efforts to provide funding for research and data-collection initiatives on ageing” (see, e.g., Assembly resolution 69/146, para. 38). * *‘Population group’ status:* The Declaration on the Rights of Persons belonging to National or Ethnic, Religious and Linguistic Minorities (1992) and the Declaration on the Rights of Indigenous Peoples (2007) provide that persons belonging to minorities and indigenous peoples have the right to participate in the political, economic, social and cultural life of the State. * *Disability status:* The United Nations Convention on the Rights of Persons with Disabilities (2006) calls upon State Parties to ensure that persons with disabilities can effectively and fully participate in political and public life on an equal basis with others. Under Article 31 of the Convention, State Parties commit to collecting disaggregated information, including statistical and research data to give effect to the Convention, and assume responsibility for the dissemination of these statistics.     **Computation method**   1. NSOs first need to calculate the share of respondents who responded positively to each question (i.e. the cumulative percentage of respondents who responded 3-'some', 4-'a lot' or 5-'a great deal').[[101]](#footnote-102)   For instance:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | *1. How much would you say the political system in [country X] allows people like you to have a say in what the government does?* | | | *2. And how much would you say that the political system in [country] allows people like you to have an influence on politics?* | | | 1- *Not at all* | 8% | 1- *Not at all* | | 16% | | 2- *Very little* | 22% | 2- *Very little* | | 30% | | 3- *Some* | 26% | 3- *Some* | | 26% | | 4- *A lot* | 34% | 4- *A lot* | | 14% | | 5- *A great deal* | 10% | 5- *A great deal* | | 14% | | **% of those who responded positively (i.e. answer choices 3, 4 or 5)** | **(26%+34%+10%) = 70%** | **% of those who responded positively (i.e. answer choices 3, 4 or 5)** | | **(26%+14%+14%) = 54%** |  1. Secondly, NSOs need to calculate the simple average of these two cumulative percentages. Continuing with the above example:   (70% + 54%) / 2 = 62%  *\*Note: It is important for NSOs to clearly report, for each question, the number of respondents who selected “don’t know” (DK), “no answer” (NA) or “refuse to answer” (RA), and to exclude such respondents from the calculation of cumulative shares of positive responses. For instance, if 65 out of 1000 respondents responded either one of these three options on the first question, the cumulative share of positive responses on this first question will be calculated out of a total of 935 respondents, and the reporting sheet will indicate that for this particular question, x respondents responded DK, y responded NA, and z responded RA.*  Overall, global reporting on SDG 16.7.2 will require:   * Distributions of answers across all answer options, for each one of the two questions; * Cumulative share of respondents who responded positively to each question (i.e. the cumulative percentage of respondents who responded 3-'some', 4-'a lot' or 5-'a great deal'); and * simple average of these two cumulative percentages. | NSOs should identify suitable survey vehicles | National Statistical Offices |  | BBS  CPHS | * Sex: Male/Female * Age: 15-24 yrs, 25-64 yrs, 64+ yrs * Disability : Disable/ non Disable * Population Group | - | Group 2 | 1st Round:  June 2020  2nd Round:  June 2021  3rd Round: June 2022  4th Round:  June 2023  5th Round:  June 2024 | Reviewed at 9th IAEG-SDG meeting (classified as Tier II) |
|  | Target 16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance | | | | | | | | | | | |
| 16.8.1 Proportion of members and voting rights of developing countries in international organizations | DESA/FFDO | Tier I | **Definition:**  The indicator Proportion of members and voting rights of developing countries in international organizations has two components, the developing country proportion of voting rights and the developing country proportion of membership in international organisations. In some institutions these two components are identical.  The indicator is calculated independently for eleven different international institutions: The United Nations General Assembly, the United Nations Security Council, the United Nations Economic and Social Council, the International Monetary Fund, the International Bank for Reconstruction and Development, the International Finance Corporation, the African Development Bank, the Asian Development Bank, the Inter-American Development Bank, the World Trade Organisation, and the Financial Stability Board.  **Concepts:**  There is no established convention for the designation of "developed" and "developing" countries or areas in the United Nations system. In common practice, Japan in Asia, Canada and the United States in Northern America, Australia and New Zealand in Oceania, and Europe are considered "developed" regions or areas. The aggregation across all institutions is currently done according to the United Nations M.49 statistical standard which includes designation of “developed regions” and “developing regions”, while an ongoing review seeks to reach agreement on how to define these terms for the purposes of SDG monitoring. The designations "developed" and developing" are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process.  **Comments and limitations:**  Cross institutional comparisons needs to pay attention to the different membership of the institutions. Voting rights and membership in their institutions are agreed by the Member States themselves. As a structural indicator, there will be only small changes over time to reflect agreement on new States joining as Members, suspension of voting rights, membership withdrawal and negotiated voting rights changes.  **Computation Method:**  The computation uses each institutions’ own published membership and voting rights data from their respective annual reports. The proportion of voting rights is computed as the number of voting rights allocated to developing countries, divided by the total number of voting rights. The proportion of membership is calculated by taking the number of developing country members, divided by the total number of members. | General Assembly website; Report of the Security Council; Report of the Economic and Social Council, Report of the International Monetary Fund; IBRD's Management’s Discussion & Analysis and Financial Statements; IFC Annual Report (volume 2); AfDB Annual Report; ADB Annual Report; IADB Annual Report; WTO Annual Report; Charters of the Financial Stability Board | UNGA, UNSC, ECOSOC, IMF, IBRD, IFC, AfDB, ADB, IADB, WTO, FSB. | a) ERD  Administrative Data | a) ERD  b) MoFA  Administrative Data | Institutional Organization | a) Annually (Tri-Annually)  b) Annually  c) Annually  d) (As per IDA-18) Tri-Annually  f) 02 years | Group 1 | 1st Round:  2018  2nd Round:  July, 2019  3rd Round:  July, 2020  4th Round:  July, 2021  5th Round:  July, 2022 | a) International Bank for Reconstruction (IBRD) Subscription and Voting Power (GCI & SCI have tri-annual payment schedule that Bangladesh has pledged to pay year by year)  b) Multilateral Investment Guarantee Agency (MIGA) Subscription and Voting Power  c) International Finance Corporation (IFC) Subscription and Voting Power  d) International Development Association (IDA) Subscription and Voting Power  e) AIIB  f) Voted for the post of Director/Executive Director on April 28, 2019.  Repeated 10.6.1 |
|  | Target 16.9 By 2030, provide legal identity for all, including birth registration | | | | | | | | | | | |
| 16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age | UNSD,  UNICEF  **Partner Agencies:**  UNFPA,  DESA Population Division | Tier I | **Definition:**  Proportion of children under 5 years of age whose births have been registered with a civil authority.  **Comments and limitations:**  The number of children who have acquired their right to a legal identity is collected mainly through censuses, civil registration systems and household surveys. Civil registration systems that are functioning effectively compile vital statistics that are used to compare the estimated total number of births in a country with the absolute number of registered births during a given period. However, the systematic recording of births in many countries remains a serious challenge. In the absence of reliable administrative data, household surveys have become a key source of data to monitor levels and trends in birth registration. In most low- and middle-income countries, such surveys represent the sole source of this information.  **Computation Method:**  Number of children under age of five whose births are reported as being registered with the relevant national civil authorities divided by the total number of children under the age of five in the population multiplied by 100 | UNICEF undertakes an annual process to update its global databases, called Country Reporting on Indicators for the Goals (CRING). This exercise is done in close collaboration with UNICEF country offices with the purpose of ensuring that UNICEF global databases contain updated and internationally comparable data. UNICEF Country Offices are invited to submit, through an online system, any updated data for a number of key indicators on the well-being of women and children. Updates sent by the country offices are then reviewed by sector specialists at UNICEF headquarters to check for consistency and overall data quality of the submitted estimates. This review is based on a set of objective criteria to ensure that only the most recent and reliable information is included in the databases. Once reviewed, feedback is made available on whether or not specific data points are accepted, and if not, the reasons why. New data points that are accepted are then entered into UNICEF’s global databases and published in the State of the World’s Children statistical tables, as well as in all other data-driven publications/material. The updated databases are also posted online at data.unicef.org. UNICEF also searches throughout the year for additional sources of data that are vetted by the UNICEF country office before they are included in the global databases. | National Statistical Offices (for the most part) and line ministries/other government agencies responsible for maintaining national vital registration systems | BBS  MICS | a. BBS  MICS  b. ORG, LG | * Sex: Male/Female * Age: Under 5 Years * Geographic Location: Division * Income : High/medium/low * Place Of Residence: Urban/Rural | Triennial | Group 1 | 1st Round:  2013  2nd Round:  December,  2020  3rd Round:  December,  2023  4th Round:  December,  2026  5th Round:  December,  2029 | Registration Data includes duplicate registrations also. |
|  | Target 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements | | | | | | | | | | | |
| 16.10.1 Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months | OHCHR  **Partner Agencies:**  ILO,  UNESCO-UIS | Tier II | **Definition:**  This indicator is defined as the number of verified cases of killing, enforced disappearance, torture, arbitrary detention, kidnapping and other harmful acts committed against journalists, trade unionists and human rights defenders on an annual basis.  *‘Journalists’* refers to everyone who observes, describes, documents and analyses events, statements, policies, and any propositionsthat can affect society, with the purpose of systematizing such information and gathering of facts and analyses to inform sectors of society or soci ety as a whole, and others who share these journalistic functions, including all media workers and support  staff, as well as community media workers and so-called “citizen journalists” when they momentarily play that role,2 professional full-time reporters and analysts, as well as bloggers and others who engage in forms of self-publication in print, on the internet or elsewhere.3  *‘Trade unionists’* refers to everyone exercising their right to form and to join trade unions for the protection of their interests.4 A trade union is an association of workers organized to protect and promote their common interests.5  *‘Human rights defenders’* refers to everyone exercising their right, individually and in association with others, to promote and to strive for the protection and realization of human rights and fundamental freedoms at national and international levels,6 including some journalists and trade unionists. While the term ‘human rights advocate’ is broadly speaking a synonymous of ‘human rights defender,’ the latter is preferred as it is more consistent with internationally agreed human rights standards and established practice.  The different categories of violations tracked by the indicator have been defined in accordance with international law and methodological standards and monitoring practices developed by the OHCHR and other international mechanisms and classified drawing on the International Classification of Crime for Statistical Purposes (ICCS) disseminated by the UN Office of Drugs and Crime (UNODC). As such:   * *‘Killing’* is defined as any extrajudicial execution or other unlawful killing by State actors or other actors acting with the State’s permission, support or acquiescence that were motivated by the victim, or someone associated with the victim, engaging in activities as a journalist, trade unionist or human rights defender; or while the victim was engaged in such activities; or by persons or groups not acting with the support or acquiescence of the State whose harmful acts were either motivated by the victim engaging in activities as a journalist, trade unionist or human rights defender, and/or met by a failure of due diligence on the part of the State in responding to these harmful acts, such a failu re motivated by the victim or associate engaging in activities as a journalist, trade unionist or human rights defender; and other unlawful attacks and destruction in violation of   international humanitarian law leading to or intending to cause the victim’s death., corresponding to ICCS codes 0101, 0102 and 110139 and coded herein as A [0101, 0102  and 110139].   * *`Enforced disappearance’* refers to the arrest, detention, abduction or any other form of deprivation of liberty of a victim by agents of the State or by persons or groups of persons acting with the authorization, support or acquiescence of the State, motivated by the victim, or someone associated with the victim, engaging in activities as a journalist, trade unionist or human rights defender, followed by a refusal to acknowledge the deprivation   of liberty or by concealment of the fate or whereabouts of the victim, which places the victim outside the protection of the law, corresponding to ICCS code 020222 (forced disappearance) and coded herein as B [02022ED]   * *‘Torture’* refers to any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a journalist, trade unionist or human rights defender, for such purposes as obtaining from them or a third person information or a confession, punishing them, intimidating them or coercing them, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other persons acting in an official capacity, corresponding to ICCS code 11011 and coded herein as C [11011]. * *‘Arbitrary detention’* refers to any arrest or detention not in accordance with national laws, because it is not properly based on grounds established by law, or does not conform to the procedures established by law, or is otherwise deemed arbitrary in the sense of being inappropriate, unjust, unreasonable or unnecessary in the circumstances, and motivated by the victim, or someone associated with the victim, engaging in activities as a journalist, trade unionist or human rights defender, corresponding to ICCS code 020222 (unlawful deprivation of liberty) and coded herein as D [020222AD] * *‘Kidnapping’* refers to unlawfully detaining, taking away and/or confining a victim without their consent by persons or groups not acting with the support or acquiescence of the State, and the unlawful detention and/or confinement was met by a failure of due diligence on the part of the State in responding to the unlawful detention, such a failure motivated by the victim or associate engaging in activities as a journalist, trade unionist or human rights defender, corresponding to ICCS codes 020221 and coded herein as E [020221] * *‘Other harmful acts’* refers to other acts by State actors or other actors acting with the   State’s permission, support or acquiescence causing harm or intending to cause harm and motivated by the victim engaging in activities as a journalist, trade unionist or human rights defender, corresponding to ICCS codes 0301, 0219, 110133, 02012, 0205, 0208,  0210 and 0211, and coded herein as F [0301, 0219, 110133, 02012, 0205, 0208, 0210 and  0211].  *‘Verified cases’* refer to reported cases that contain a minimum set of relevant information on particular persons and circumstances, which have been reviewed by mandated bodies, mechanisms, and institutions, and provided them with reasonable grounds to believe those persons were victims of the above-mentioned human rights violations or abuses.  Concepts:  The operational definitions of the cases, victims and other elements of the indicator have been patterned as far as practicable after corresponding categories in ICCS. The task of classifying cases entails observing events from both statistical standards and international law perspectives. For example, intentional homicide (ICCS code 0101) is included as a component of the violation type ‘killing’ and is in turn supplemented by applicable human rights standards:  • 0101 Intentional homicide. Inclusions: murder; serious assault leading to death; femicide ; honour killing; voluntary manslaughter; killings caused by excessive use of force by law enforcement officials; extrajudicial and extra-legal, summary or arbitrary executions. [human rights standards added in italics]  This conceptual approach is necessitated by the confluence of three factors. First is the principle that all the violent acts tracked by the indicator are motivated by the exercise of fundamental freedoms that are guaranteed by human rights law to all persons. Second, while human rights abuses are not always explicitly criminalized in domestic jurisdictions, ICCS has achieved a certain level of success in terms of integrating human rights elements in the classification of crimes.  Third, irrespective of definitions provided by national legislation or practices, all events – whether ordinary crimes or human rights violations – that meet the elements provided in the definitional framework will be counted for statistical purposes.  Comments and limitations:  As for other crime statistics and other statistics based on administrative sources, this indicator is sensitive to the completeness of reporting of individual events. There is a real but manageable risk of underreporting. Moreover, reporting rates and statistical accuracy are influenced by various factors, including changes and biases in victim reporting behaviour, changes in police and recording practices or rules, new laws, processing errors and non-responsive institutions.  Regional and global aggregates may underestimate the true incidence and vol ume of victimization, overcompensate for robust and inclusive national data collection systems . In most instances, the number of cases reported will depend on the access to information, motivation and perseverance of national stakeholders, of human rights defenders themselves, and the corresponding support of the international community.  Computation Method:  The indicator is calculated as the total count of victims of reported incidents occurring within the preceding 12 months.  Drawing on the ICCS, which is an incidents-based international classification system, the indicator counts victims on the basis of cases of violations or abuses using a classification framework developed for the purposes of the indicator.  For reporting purposes, the recorded offences will be ordered taking into account a hierarchy of violations or abuses drawing on the “most serious offence” rule commonly applied in crime statistics:  1. Killing  2. Torture  3. Enforced disappearance  4. Arbitrary detention  5. Kidnapping  6. Other harmful acts  If an incident incorporates elements of more than one category, it is coded to the higher category. Thus for an incident in which the victim was subjected to prolonged incommunicado detention without medical access in the course of an unlawful detainment, the violation would be counted under torture. | Data will be compiled from administrative data produced by OHCHR, ILO, UNESCO and other UN agencies or entities in accordance with their respective mandates and procedures. | International data providers: OHCHR, UNESCO and ILO  National data providers: national human rights institutions compliant with the Paris Principles and other relevant institutions at national level. |  | a) BP, MoHA b) NHRC  c) Registrar, Supreme Court  Administrative Data | * Type Of Violation : killing, enforced disappearance, torture, arbitrary detention, kidnapping and other * Profession/Area Of Work * Ethnicity: Ethnic/ non Ethnic * Age: 15-24 yrs, 25 and above * Income : High/Medium/Low * Geographic Location: Urban/Rural, Division * Disability: Disable/ Non Disable * Religion: Islam, Hindu, othrs * Migratory Or Displacement Status: Migrant/Non Migrant * Gender: Male, Female, Transgender * Minority Or Indigenous Status * Relevant Characteristics Of The Perpetrator * Sexual Orientation | Annual | Group 2 | 1st Round:  July, 2019  2nd Round:  July, 2020  3rd Round:  July, 2021  4th Round:  July, 2022  5th Round:  July, 2023 | Reviewed at 6th IAEG-SDG meeting (classified as Tier II) |
| 16.10.2 Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information | UNESCO-UIS  **Partner Agencies:**  World Bank,  UNEP | Tier I | **Definition:**  Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information  The focus of this indicator is thus on the status of adoption and implementation of constitutional, statutory and/or policy guarantees for public access to information. The definition relates directly to “public access to information”, which is wider than, but is also very much based upon, the established fundamental freedoms of expression and association. Conversely, these freedoms also both impact on the environment for public access to information.  **Concepts:**  Conceptually, ‘public access to information’ refers to “the presence of a robust system through which information is made available to citizens and others.” Such a system represents a combination of intellectual, physical, and social elements that affect the availability of information to individuals. In other words, in discussing the issue of public access to information, it is important to recognize that any measurement of its practical outworking needs to take into account how individuals perceive the quality of information in the public domain, the nature of the communicative infrastructure in place to facilitate access, and how that information is ultimately utilized by individuals as members of a particular polity.  In general, then, these are the issues that go into legislation and policy on public access. More specifically, such legislation and policy take the form of Freedom of Information laws (FOI laws) which are aimed at allowing access by the general public to data held by national governments and, increasingly, by private companies whose work intersect with government operations.  The emergence of freedom of information legislation was a response to increasing dissatisfaction with the secrecy surrounding government policy development and decision making. They establish a "right-to-know" legal process by which requests may be made for government-held information, to be received freely or at minimal cost, barring standard exceptions.  Such a formulation has a basis in international agreements. For example, the right to freedom of expression, which is not only recognized as a basic human right in the Universal Declaration of Human Rights (1948), is also upheld in the International Covenant on Civil and Political Rights (1966), the European Convention on Human Rights (1950), the American Convention on Human Rights (1969) and the African Charter on Human and Peoples’ Rights (1981), thus lending itself to universal political recognition and application. More specifically, in the European context, reference may be made to the Council of Europe Convention on Access to Official Documents, adopted on 18 June 2009. In the Americas, the Organization of American States’ Inter-American Juridical Committee developed a set of Principles on the Right of Access to Information in 2008.  **Comments and limitations:**  This indicator does not assess the totality of “public access to information” component of the full Target of 16.10. Nevertheless, it focusses on a key determinant of the wider information environment.  **Computation Method:**  The method of computation is both quantitative and qualitative, with data generated from a global review of existing surveys (e.g. UNESCO's World Trends in Freedom of Expression & Media Development reports, etc.), administrative records, expert assessments (e.g. World Justice Open Government Index), etc. More specifically, the following key variables will be assessed:  1. Does a country have constitutional, statutory and/or policy guarantees for public access to information?  2. Do those constitutional, statutory and/or policy guarantees reflect known international agreements (e.g. the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, etc.)?  3. What implementation mechanisms are in place to ensure that such guarantees work optimally?  To address these questions, the following will serve as performance sub-indicators:  - National law or constitutional guarantee on the right to information  - Country has signed and ratified relevant treaty obligations, with no significant exemptions, and these are reflected, to the extent possible, in domestic FOI legislation  - Public is aware of and exercises right to access official information  - Public bodies release information both pro-actively and on demand  - Effective and efficient appeals mechanism via independent administrative body e.g. information commissioner or ombudsman  - Any restriction on grounds of protection of personal privacy is narrowly defined so as to exclude information in which there is no justifiable public interest.  The means of verification will include:  - Any law or policy on right to information that accords with international standards  - Reports from credible agencies/experts about right to information guarantees and the extent to which they reflect international standards/agreements  - Policies of public bodies concerning release of information (which ensure readily, freely available public access to information, including online)  - Evidence of state commitment to open government e.g. publication and dissemination of laws, court decisions, parliamentary proceedings, spending programmes (vis-à-vis SDG undertakings)  - Statistical information about public requests for official information and their fulfilment or rejection  - Statistical information about appeals or complaints over information requests that have been refused | UNESCO uses a triangulated method to compare data for global monitoring, which includes (I) databases maintained by other international agencies; (2) own international surveys carried out in countries by independent entities and (3) modelled and estimated data, based on other data sources. More specifically, UNESCO analyses data inputs from a variety of sources to produce a consensus list of countries with freedom of information laws or equivalent. Among those organizations and experts that make available their data are: Freedominfo.org, Fringe Special by Robert Vleugels, Open Society Justice Initiative, Right to Information Rating, by Access Info Europe and the Centre for Law and Democracy, ARTICLE 19. Others include international agencies and UN bodies, such as: The World Bank, The Office of the High Commissioner for Human Rights, The UN Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression. | UNESCO, World Bank, UNDP, and other UN bodies; National bodies, Academic and research institutions, Media support NGOs |  | a) IC, Molnf  b) UPR, MoFA  Administrative Data | * Geographic location: rural, peri-rural, urban, peri-urban * Gender: Male, Female, Transgender * Disability: Disable/ non Disable | Triennial | Group 2 | 1st Round:  July, 2019  2nd Round:  July, 2022  3rd Round:  July, 2025  4th Round:  July, 2028  5th Round:  July, 2030 | Data on the existence of freedom of information laws are available for at least 195 countries. However, for future data collection and analysis, efforts are underway to ensure that the data is analysed to yield information on aspects relating to how FOI laws are actually "implemented", rather than just their existence. |
| Target 16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime | | | | | | | | | | | | |
| 16.a.1 Existence of independent national human rights institutions in compliance with the Paris Principles | OHCHR | Tier I | **Definition:**  This indicator Existence of independent national human rights institutions in compliance with the Paris Principles measures the compliance of existing national human rights institutions with the Principles relating to the Status of National Institutions (The Paris Principles), which were adopted by the General Assembly (resolution 48/134) based on the rules of procedure of the Global Alliance of National Human Rights Institutions (GANHRI, formerly the International Coordinating Committee of National Institutions for the Promotion and Protection of Human Rights or ICC).  **Concepts:**  A National Human Rights Institution is an independent administrative body set up by a State to promote and protect human rights. NHRIs are State bodies with a constitutional and/or legislative mandate to protect and promote human rights. They are part of the State apparatus and are funded by the State. However, they operate and function independently from government. While their specific mandate may vary, the general role of NHRIs is to address discrimination in all its forms, as well as to promote the protection of civil, political, economic, social and cultural rights. Core functions of NHRIs include complaint handling, human rights education and making recommendations on law reform. Effective NHRIs are an important link between government and civil society, in so far as they help bridge the 'protection gap' between the rights of individuals and the responsibilities of the State. Six models of NHRIs exist across all regions of the world today, namely: Human rights commissions, Human rights ombudsman institutions, Hybrid institutions, Consultative and advisory bodies, Institutes and centers and multiple institutions. An Independent NHRI is an institution with ‘A level’ accreditation status as benchmarked against the Paris Principles. The process of accreditation is conducted through peer review by the Sub-Committee on Accreditation (SCA) of the GAHNRI. There are three possible types of accreditation:  A: Compliance with Paris Principles  B: Observer Status – Not fully in compliance with the Paris Principles or insufficient information provided to make a determination  C: Non-compliant with the Paris Principles  Accreditation by the GANHRI entails a determination whether the NHRI is compliant, both in law and practice, with the Paris principles, the principal source of the normative standards for NHRIs, as well as with the General Observations developed by the SCA. Other international standards may also be taken into account by the SCA, including the provisions related to the establishment of national mechanisms in the Optional Protocol to the Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment as well as in the International Convention on the Rights of Persons with Disabilities. Likewise, the SCA looks at any NHRI-related recommendation from the international human rights mechanisms, notably, the Treaty Bodies, Universal Periodic Review (UPR) and special procedures. The process also looks into the effectiveness and level of engagement with international human rights systems.  The Principles relating to the Status of National Institutions (The Paris Principles) adopted by General Assembly, Resolution 48/134 of 20 December 1993 provide the international benchmarks against which NHRIs can be accredited by the GANHRI.  **Comments and limitations:**  The important and constructive role of national institutions for the promotion and protection of human rights has been acknowledged in different United Nations instruments and resolutions, including the Final Document and Programme of Action of the 1993 World Conference on Human Rights in Vienna, GA resolutions A/RES/63/172 (2008) and A/RES/64/161 (2009) on National institutions for the promotion and protection of human rights. In addition, creation and strengthening of NHRIs have also been encouraged. For example, the 1993 GA resolution 48/134 ‘affirms the priority that should be accorded to the development of appropriate arrangements at the national level to ensure the effective implementation of international human rights standards’ while the 2008 GA resolution A/RES/63/169 encouraged states ‘to consider the creation or the strengthening of independent and autonomous Ombudsman, mediator and other national human rights institutions’. The Human Rights Council (HRC resolution 5/1, 2007) also called for the effective participation of national human rights institutions in its institution building package, which provides elements to guide its future work.  UN treaty bodies have also recognized the crucial role that NHRIs represent in the effective implementation of treaty obligations and encouraged their creation (e.g. CERD General Comment 17, A/48/18 (1993); CESCR General Comment 10, E/C.12/1998/25; and CRC General Comment 2, CRC/GC/2002/2). A compilation of various recommendations and concluding observations relevant to NHRIs emanating from the international human rights mechanisms in the United Nations is available at: http://www.universalhumanrightsindex.org/.  The GANHRI is an international association of NHRIs which promotes and strengthens NHRIs to be in accordance with the Paris Principles and provides leadership in the promotion and protection of human rights (ICC Statute, Art. 5). Decisions on the classifications of NHRIs are based on their submitted documents such as: 1) copy of legislation or other instrument by which it is established and empowered in its official or published format (e.g. statute, and /or constitutional provisions, and/or presidential decree, 2) outline of organizational structure including details of staff and annual budget, 3) copy of recent published annual report; 4) detailed statement showing how it complies with the Paris Principles. NHRIs that hold ‘A’ and ‘B’ status are reviewed every five years. Civil society organizations may also provide relevant information to OHCHR pertaining to any accreditation matter.  Accreditation of NHRIs shows that the government supports human rights work in the country. However their effectiveness should also be measured based on their ability to gain public trust and the quality of their human rights work. In this context, it would also be worthwhile to look into the responses of the NHRI to the recommendations of the GANHRI. Likewise, the inputs from the NHRI while engaging with the international human rights mechanisms (i.e. submissions to the Human Rights Council, including UPR, and to the treaty bodies) represent a valuable source of information on how NHRIs carry out their mandate in reference to international human rights instruments.  **Computation Method:**  In terms of method of computation, the indicator is computed as the accreditation classification, namely A, B or C of the NHRI. | An international survey is sent to national human rights institution, which fill it in and send it back to the international mechanism. The latter also use complementary information, if available, received from civil society organizations. National human rights institutions seeking accreditation have to submit detailed information about their practices and how they directly promote compliance with the Paris Principles, namely the Principles relating to the Status of National Institutions that were adopted by the General Assembly (resolution 48/134). Information to be submitted relates to: 1) Guarantee of tenure for members of the National Human Rights Institution decision-making body; 2) full-time members of a National Human Rights Institution; 3) Guarantee of functional immunity; 4) Recruitment and retention of National Human Rights Institution staff; 5) Staffing of the National Human Rights Institution by secondment; 6) National Human Rights Institutions during the situation of a coup d’état or a state of emergency; 7) Limitation of power of National Human Rights Institutions due to national security; 8) Administrative regulation of National Human Rights Institutions; 9) Assessing National Human Rights Institutions as National Preventive and National Monitoring Mechanisms; 10) The quasi-judicial competency of National Human Rights Institutions (complaints-handling). Based on the information received, the process of accreditation is conducted through peer review by the Sub-Committee on Accreditation (SCA) of GANHRI. | National human rights institution |  | MoFA (UPR) b) NHRC  Administrative Data | Not Applicable | Triennial | Group 2 | 1st Round:  July, 2019  2nd Round:  July 2022  3rd Round:  July 2025  4th Round:  July 2028  5th Round:  July 2030 | Fully compliant with the Paris Principles: 79  Partially compliant with the Paris Principles: 33 (including Bangladesh)  Non-compliance with the Paris Principles: 10  Data availability reviewed in Oct. 2019  (classified as Tier I) |
| Target 16.b Promote and enforce non-discriminatory laws and policies for sustainable development | | | | | | | | | | | | |
| 16.b.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law | OHCHR | Tier II | **Definition:**  This indicator is defined as the proportion of the population (adults) who self-report that they personally experienced discrimination or harassment during the last 12 months based on ground(s) prohibited by international human rights law. International human rights law refers to the body of international legal instruments aiming to promote and protect human rights, including the Universal Declaration of Human Rights and subsequent international human rights treaties adopted by the United Nations.  **Concepts:**  Discrimination is any distinction, exclusion, restriction or preference or other differential treatment that is directly or indirectly based on prohibited grounds of discrimination, and which has the intention or effect of nullifying or impairing the recognition, enjoyment or exercise, on an equal footing, of human rights and fundamental freedoms in the political, economic, social, cultural or any other field of public life.[[102]](#footnote-103) Harassment is a form of discrimination when it is also based on prohibited grounds of discrimination. Harassment may take the form of words, gestures or actions, which tend to annoy, alarm, abuse, demean, intimidate, belittle, humiliate or embarrass another or which create an intimidating, hostile or offensive environment. While generally involving a pattern of behaviours, harassment can take the form of a single incident.[[103]](#footnote-104)  International human rights law provides lists of the prohibited grounds of discrimination. The inclusion of “other status” in these lists indicate that they are not exhaustive and that other grounds may be recognized by international human rights mechanisms. A review of the international human rights normative framework helps identify a list of grounds that includes race, colour, sex, language, religion, political or other opinion, national origin, social origin, property, birth status, disability, age, nationality, marital and family status, sexual orientation, gender identity, health status, place of residence, economic and social situation, pregnancy, indigenous status, afro-descent and other status.[[104]](#footnote-105) In practice, it will be difficult to include all potentially relevant grounds of discrimination in household survey questions. For this reason, it is recommended that data collectors identify contextually relevant and feasible lists of grounds, drawing on the illustrative list and formulation of prohibited grounds of discrimination outlined in the methodology section below, and add an “other” category to reflect other grounds that may not have been listed explicitly.  **Comments and limitations:**  The indicator measures an overall population prevalence of discrimination and harassment in the total population at the national level. The indicator will not necessarily inform on the prevalence of discrimination within specific population groups. This will depend on sample frames. For example, if disability is included within the selected grounds, the resulting data for discrimination on the ground of disability will represent only the proportion of the total population who feel that they had personally experienced discrimination against on the ground of disability. Unless the sample design provides adequate coverage of people with disability to allow disaggregation on this characteristic, the data cannot be understood as an indication of the prevalence of discrimination (on the ground of disability) within the population of people with a disability.  The indicator is not measuring a general perception of respondents on the overall prevalence of discrimination in a country. It is based on personal experience self-reported by individual respondents. The indicator does not provide a legal determination of any alleged or proven cases of discrimination. The indicator will also not capture the cases of discrimination or harassment the respondents are not personally aware off or willing to disclose to data collectors. The indicator should be a starting point for further efforts to understand patterns of discrimination and harassment (e.g. location/context of incidents, relationship of the respondent to the person or entity responsible for discrimination or harassment, and frequency and severity of incidents). More survey questions will be needed for examining policy and legislative impact and responses.  OHCHR advises that data collectors engage in participatory processes to identify contextually relevant grounds and formulations. The process should be guided by the principles outlined in OHCHR’s [Human Rights-Based Approaches to Data](https://www.ohchr.org/HRBAD) (HRBAD), which stems from internationally agreed human rights and statistics standards. National Institutions with mandates related to human rights or non-discrimination and equality are ideal partners for these activities. Data collectors are also strongly encouraged to work with civil society organisations that are the representatives of or have better access to groups more are risk of being discriminated or left behind.  **Computation Method:**  Number of survey respondents who felt that they personally experienced discrimination or harassment on one or more prohibited grounds of discrimination during the last 12 months, divided by the total number of survey respondents, multiplied by 100.  To minimize the effect of *forward telescoping[[105]](#footnote-106)*, the module asks two questions: a first question about the respondent’s experience over the last 5 years, and a second question about the last 12 months:   * Question 1: In [COUNTRY], do you feel that you personally experienced any form of discrimination or harassment during the last 5 years, namely since [YEAR OF INTERVIEW MINUS 5] (or since you have been in the country), on the following grounds? * Question 2: In [COUNTRY], do you feel that you personally experienced any form of discrimination or harassment during the past 12 months, namely since [MONTH OF INTERVIEW] [YEAR OF INTERVIEW MINUS 1], on any of these grounds?   The proposed survey module recommends that interviewer reads or the data collection mechanism provides a short definition of discrimination/harassment to the respondent before asking the questions. Providing respondents with a basic introduction to these notions helps improve their comprehension and recall of incidents. Following consultations with experts and complementary cognitive testing, the following introductory text is recommended:  *Discrimination happens when you are treated less favourably compared to others or harassed because of the way you look, where you come from, what you believe or for other reasons. You may be refused equal access to work, housing, healthcare, education, marriage or family life, the police or justice system, shops, restaurants, or any other services or opportunities. You may also encounter comments, gestures or other behaviours that make you feel offended, threatened or insulted, or have to stay away from places or activities to avoid such behaviours.*  The proposed survey module also recommends that a list of grounds is provided to respondents to facilitate comprehension and recall of incidents. As a starting point, OHCHR recommends the use of the following list of grounds prohibited by international human rights law and adding an “any other ground” category to capture grounds that are not explicitly listed. The module recommends that the following illustrative list is reviewed and contextualised at national level through a participatory process (see HRBAD and accompanying guidance) to reflect specific population groups and data collection/disaggregation needs:  1. SEX: such as being a woman or a man  2. AGE: such as being perceived to be too young or too old  3. DISABILITY OR HEALTH STATUS: such as having difficulty in seeing, hearing, walking or moving, concentrating or communicating, having a disease or other health conditions and no reasonable accommodation provided for it  4. ETHNICITY, COLOUR OR LANGUAGE: such as skin colour or physical appearance, ethnic origin or way of dressing, culture, traditions, native language, indigenous status, or being of African descent  5. MIGRATION STATUS: such as nationality or national origin, country of birth, refugees, asylum seekers, migrant status, undocumented migrants or stateless persons  6. SOCIO-ECONOMIC STATUS: such as wealth or education level, being perceived to be from a lower or different social or economic group or class, land or home ownership or not  7. GEOGRAPHIC LOCATION OR PLACE OF RESIDENCE: such as living in urban or rural areas, formal or informal settlements  8. RELIGION: such as having or not a religion or religious beliefs  9. MARITAL AND FAMILY STATUS: such as being single, married, divorced, widowed, pregnant, with or without children, orphan or born from unmarried parents  10. SEXUAL ORIENTATION OR GENDER IDENTITY: such as being attracted to person of the same sex, self-identifying differently from sex assigned at birth or as being either sexually, bodily and/or gender diverse  11. POLITICAL OPINION: such as expressing political views, defending the rights of others, being a member or not of a political party or trade union  12. OTHER GROUNDS | Household surveys, such as MICS, victimisation surveys and other social surveys, are the main data source for this indicator. | National Statistical Offices. If the data are not collected by the NSO but another source, they will be sent to the NSO for consultation prior to their publication in global SDG databases. | BBS  CPHS | BBS  CPHS | * income * gender/Sex: Male, Female, Transgender * age: 15-24 yrs, 25 and above * Residence: Urban/Rural * Ethnicity: Ethnic/Non Ethnic * migratory status: Migrant/ Non Migrant * disability: Disable/ Non Disable * geographic location: Division | Triennial | Group 1 | 1st Round:  2018  2nd Round:  July, 2019  3rd Round:  July, 2022  4th Round:  July, 2025  5th Round:  July, 2028 | Reviewed at 9th IAEG-SDG meeting (classified as Tier II)  Repeated 10.3.1 |

Action Plan and Methodological Guidelines towards Data Generation and Disaggregation for Monitoring and Evaluation of SDGs

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| A close up of a sign  Description automatically generated | Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development |

| **Targets and Indicators** | **Custodian Agency (ies)** | **Tier Classifi-cations** | **Definition, Concept, Computation Methods and formula** | **UN Suggested activities of data generation** | **UN Suggested data provider** | **Recent Available Data Sources** | **Possible future Sources** | **Minimum Disaggregation Dimensions and Categories** | **Frequency of data generation** | **Local Indicator Group** | **Deadline for Data providing** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
|  | Target 17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection | | | | | | | | | | | |
| 17.1.1 Total government revenue as a proportion of GDP, by source | IMF  **Partner Agencies:**  OECD,  World Bank | Tier I | **Definition:** Revenue is defined in Chapter 4 (paragraph 4.23) of *GFSM 2014* an increase in net worth resulting from a transaction. It is a fiscal indicator for assessing the sustainability of fiscal activities. General government units have four types of revenue. The major types of revenue are taxes (GFS code 11), social contributions (GFS code 12), grants (GFS code 13), and other revenue (GFS code 14). Of these, compulsory levies and transfers are the main sources of revenue for most general government units. In particular, taxes are compulsory, unrequited amounts receivable by government units from institutional units. Social contributions are actual or imputed revenue receivable by social insurance schemes to make provision for social insurance benefits payable. Grants are transfers receivable by government units from other resident or nonresident government units or international organizations, and that do not meet the definition of a tax, subsidy, or social contribution. Other revenue is all revenue receivable excluding taxes, social contributions, and grants. Other revenue comprises: (i) property income; (ii) sales of goods and services; (iii) fines, penalties, and forfeits; (iv) transfers not elsewhere classified; and (v) premiums, fees, and claims related to nonlife insurance and standardized guarantee schemes.  **Concepts:** The transactions and the associated classifications are detailed in Chapter 5 of *GFSM 2014* and are structured to demonstrate how general government (and public sector) units raise revenue. Only those taxes and social insurance contributions that are evidenced by tax assessments and declarations, customs declarations, and similar documents are considered to create revenue for government units. Thus, the difference between assessments and expected collections represents a claim that has no real value and should not be recorded as revenue (see *GFSM 2014* paragraph 5.20). The analytic framework of *GFSM 2014* (like that of the *GFSM 2001*) builds on the *GFSM 1986* framework, and extends it by incorporating additional elements that are useful in assessing fiscal policy. An important example is the treatment of nonfinancial assets, where the sale of such assets is no longer included in revenue. The disposal of a nonfinancial asset by sale or barter is not revenue because it has no effect on net worth. Rather, it changes the composition of the balance sheet by exchanging one asset (the nonfinancial asset) for another (the proceeds of the sale). Similarly, amounts receivable from loan repayments and loan disbursements are not revenue. In general, transactions that increase net worth result from current operations. Capital transfers are an exception. In *GFSM 2014*, capital transfers receivable are classified as revenue because they increase the recipient’s net worth and they are often indistinguishable from current transfers in their effect on government operations. In recording cash-based accounting revenue transactions, data representing the tax payments received by government, net of refunds paid out during the period covered should be reported. These data will include taxes paid after the original assessment, taxes paid or refunds deducted from taxes after subsequent assessments, and taxes paid or refunds deducted after any subsequent reopening of the accounts. Therefore, total tax revenue could be presented on a gross basis as the total amount of all taxes accrued, or on a net basis as the gross amount minus tax refunds. Revenue categories are presented gross of expense categories for the same or related category. In particular, interest revenue is presented gross rather than as net interest expense or net interest revenue. Similarly, social benefits and social contributions, grant revenue and expense, and rent revenue and expense are presented gross. Also, sales of goods and services are presented gross of the expenses incurred in their production. In cases of erroneous or unauthorized transactions, revenue categories are presented net of refunds of the relevant revenue, and expense categories are presented net of inflows from the recovery of the expense. For example, refunds of income taxes may be paid when the amount of taxes withheld or otherwise paid in advance of the final determination exceeds the actual tax due. Such refunds are recorded as a reduction in tax revenue. For this reason, tax revenue is presented net of non-payable tax credits (see *GFSM 2014* paragraphs 5.29–5.32).  Rational and interpretation  Fiscal policy is the use of the level and composition of the general government and public sectors’ spending and revenue—and the related accumulation of government assets and liabilities—to achieve such goals as the stabilization of the economy, the reallocation of resources, and the redistribution of income. In addition to revenue mobilization, government units may also finance a portion of their activities in a specific period by borrowing or by acquiring funds from sources other than compulsory transfers—for example, interest revenue, incidental sales of goods and services, or the rent of subsoil assets. Indicator 17.1.1 *Total government revenue as a proportion of GDP, by source* supports understanding countries’ domestic revenue mobilization in the form of tax and nontax sources. The indicator will provide analysts with a cross-country comparable dataset that highlights the relationship between the four main types of revenue as well as the relative "tax burden" (revenue in the form of taxes) and “fiscal burden” (revenue in the form of taxes plus social contributions).  Methodology  **Method of computation:** Indicator 17.1.1 will be derived using series that are basic to the GFS reporting framework. GFS revenue series maintained by the IMF Statistics Department are collected in Table 1 of the standard annual data questionnaire. Each revenue transaction is classified according to whether it is a tax or another type of revenue. GFS revenue aggregates are summations of individual entries and elements in this particular class of flows and allow for these data to be arranged in a manageable and analytically useful way. For example, tax revenue is the sum of all flows that are classified as taxes. Conceptually, the value for each main revenue aggregate is the sum of the values for all items in the relevant category. The annual GFS series for monitoring Indicator 17.1.1will be derived from the data reported by the national authorities (in national currency) expressed as a percent of Gross Domestic Product (GDP), where GDP is derived from the IMF *World Economic Outlook* database (no adjustments and/or weighting techniques will be applied). Mixed sources are not being used nor will the calculation change over time (i.e., there are no discontinuities in the underlying series as these are key aggregates/ components in all country reported GFS series). The presentation will closely align with that currently contained in World Table 4 from the hard-copy *GFS Yearbook*:  Historic series have been aligned with *GFSM 2014* classifications. This enhances the comparability of data across countries and ensures establishing robust analytical findings to support SDG monitoring using fiscal data. | fiscal statistics | Ministries of Finance, Central Banks, National Statistics Offices, | FD  Administrative Data | a) NBR, IRD  b) FD  Administrative Data | * source of support * donor * recipient country * type of finance * type of aid | Annual | Group 1 | 1st Round:  2015  2nd Round:  January  2019  3rd Round:  January  2020  4th Round:  January  2021  5th Round:  January  2022 |  |
| 17.1.2 Proportion of domestic budget funded by domestic taxes | IMF  **Partner Agencies:** | Tier I | **Definition:**  The precise definition of the indicator is the *Proportion of domestic budgetary central government expenditure funded by taxes*. Budgetary central government, described in *GFSM 2014* (paragraph 2.81) is an institutional unit of the general government sector particularly important in terms of size and power, particularly the power to exercise control over many other units and entities. The budgetary central government is often a single unit of the central government that encompasses the fundamental activities of the national executive, legislative, and judiciary powers. This component of general government is usually covered by the main (or general) budget. The budgetary central government’s revenue (and expense) are normally regulated and controlled by a ministry of finance, or its functional equivalent, by means of a budget approved by the legislature. Most of the ministries, departments, agencies, boards, commissions, judicial authorities, legislative bodies, and other entities that make up the budgetary central government are not separate institutional units. This is because they generally do not have the authority to own assets, incur liabilities, or engage in transactions in their own right (see *GFSM 2014* paragraph 2.42). including references to standards and classifications, preferably relying on international agreed definitions. The indicator definition should be unambiguous and expressed in universally applicable terms. It must clearly express the unit of measurement (proportion, dollars, number of people, etc.).  **Concepts:** The key concepts and terms associated with the indicator are outlined in *GFSM 2014*, as are the associated classifications. Revenue is defined in Chapter 4 (paragraph 4.23) and the associated classifications are detailed in Chapter 5. Expenditure is also defined in Chapter 4 (paragraph 4.21) while the associated detailed classifications and concepts used for calculating this aggregate are outlined in Chapter 6 - 8.  Methodology  **Method of computation:** GFS budgetary central government revenue series - collected in Table 1 of the annual data questionnaire provided to all countries - will be combined with series on budgetary central government expenditure (actual execution of the main budget) on “expense” plus the “net acquisition of nonfinancial assets”, as defined in *GFSM 2014*). GFS Expenditure series are reported by the economic classification in Tables 2, and 3 (items under code 31). Alternatively, for those countries that report total expenditure according to the functional classification (COFOG) in GFS Table 7, a similar calculation can be made. The *Proportion of domestic budgetary central government expenditure funded by taxes* will be calculated as (Taxes / Expenditure expressed as a %) using the following data series:    Consistency across countries will be ensured through the underlying structure of the IMF GFS database and application of one simple mathematical formulas to make computations on the country reported source data used to produce the indicator (no adjustments and/or weighting techniques will be applied). Mixed sources are not being used nor will the calculation change over time (i.e., there are no discontinuities in the underlying series as these are key aggregates/ components in all country reported GFS series). | fiscal statistics | Identification of national data provider, specifying the organization responsible for producing the data at national level (see attached Excel file). | FD  Administrative Data | FD  Administrative Data | * Main source of income: Taxes, Social contributions, Grants, Other revenue * Expense type: compensation of employees, use of goods and services, and consumption of fixed capital all relate to the costs of producing nonmarket (and, in certain instances, market) goods and services by government. Subsidies, grants, social benefits, and transfers other than grants relate to transfers in cash or in kind, and are aimed at redistributing income and wealth | Annual | Group 1 | 1st Round:  2015  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 |  |
| Target 17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries | | | | | | | | | | | | |
| 17.2.1 Net official development assistance, total and to least developed countries, as a proportion of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors’ gross national income (GNI) | OECD  **Partner Agencies:** | Tier I | **Definition:**  The indicator Net official development assistance, total and to least developed countries, as a proportion of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors' gross national income (GNI) is defined as Net ODA disbursements as a per cent of GNI.  **Concepts:**  ODA: The DAC defines ODA as “those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are i) provided by official agencies, including state and local governments, or by their executive agencies; and ii) each transaction is administered with the promotion of the economic development and welfare of developing countries as its main objective; and  is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent). (See http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm)  GNI is obtained by DAC reporters from their national statistical offices.  **Comments and limitations:**  Data are available from 1960.  **Computation Method:**  Net ODA disbursements as a per cent of GNI. | A statistical reporter is responsible for the collection of DAC statistics in each providing country/agency. This reporter is usually located in the national aid agency, Ministry of Foreign Affairs or Finance etc. | Data are reported on an annual calendar year basis by statistical reporters in national administrations (aid agencies, Ministries of Foreign Affairs or Finance, etc. | OECD &  ERD  Administrative Data | ERD  Administrative Data | * source of support * donor * recipient country * type of finance * type of aid * sub-sector | Annual | Group 1 | 1st Round:  2015  2nd Round:  September  2019  3rd Round:  September  2020  4th Round:  September  2021  5th Round:  September  2022 |  |
|  | Target 17.3 Mobilize additional financial resources for developing countries from multiple sources | | | | | | | | | | | |
| 17.3.1 Foreign direct investment, official development assistance and South-South cooperation as a proportion of gross national income |  | TBD | **Definition:**  FDI part: FDI inflows (expressed in millions of US dollars)  **Concepts:**  Foreign direct investment (FDI) is defined as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate). Please see the Methodological Note of UNCTAD’s World Investment Report (<https://unctad.org/en/PublicationChapters/wir2019chMethodNote_en.pdf>).  **Comments and limitations:**  FDI inflows are available from 1980 onwards.  **Methodology:**  UNCTAD regularly collects published and unpublished national official FDI data flows directly from central banks, statistical offices or national authorities. | ODA DATA: A statistical reporter is responsible for the collection of DAC statistics in each providing country/agency. This reporter is usually located in the national aid agency, Ministry of Foreign Affairs or Finance etc. | Data are reported on an annual calendar year basis by statistical reporters in national administrations (aid agencies, Ministries of Foreign Affairs or Finance, etc. |  | a) BIDA, PMO b) ERD  c) BB, FID  Administrative Data | * type of flow: FDI/ ODA/ SSC * By donor * Recipient country * Type of finance * Type of aid * sector | Annual |  | 1st Round:  September  2019  2nd Round:  September  2020  3rd Round:  September  2021  4th Round:  September  2022  5th Round:  September  2023 | UNSC 51 replacement included in the 2020 comprehensive review |
| 17.3.2 Volume of remittances (in United States dollars) as a proportion of total GDP | World Bank  **Partner Agencies:** | Tier I | **Definition:**  Personal remittances received as proportion of GDP is the inflow of personal remittances expressed as a percentage of Gross Domestic Product (GDP).  **Concepts:**  Personal remittances comprise of personal transfers and compensation of employees. Personal transfers consist of all current transfers in cash or in kind made or received by resident households to or from non-resident households. Personal transfers thus include all current transfers between resident and non-resident individuals. Compensation of employees refers to the income of border, seasonal, and other short-term workers who are employed in an economy where they are not resident and of residents employed by non-resident entities. Data are the sum of two items defined in the sixth edition of the IMF's Balance of Payments Manual: personal transfers and compensation of employees.  The concepts used are in line with the Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6).  **Computation Method:**  Personal remittances are the sum of two items defined in the sixth edition of the IMF's Balance of Payments Manual: personal transfers and compensation of employees. World Bank staff estimates on the volume of personal remittances data are used for gap-filling purposes. GDP data, sourced from the World Bank’s World Development Indicators (WDI) database, are then used to express the indicator as a percentage of GDP. | Volume of personal remittances data are sourced from IMF’s Balance of Payments Statistics database and then gap-filled with World Bank staff estimates.  GDP data, sourced from the World Bank’s World Development Indicators (WDI) database is used as the denominator. GDP data collection is conducted from national and international sources through an annual survey of economists in the Bank’s country office network – the World Bank’s principal mechanism for gathering quantitative macroeconomic information on its member countries. | The national data provider of personal remittances is the institution in charge of the collection and compilation of the Balance of Payments statistics. This responsibility varies and is country specific (i.e. Central Bank). World Bank staff estimates for personal remittances data are used for gap-filling purposes. Personal remittances data are not reported directly to the World Bank from the national data provider. They are reported to the International Monetary Fund (IMF), which is the institution in charge of overseeing balance of payment stability as part of its institutional mandate. GDP data are sourced from the World Bank’s World Development Indicators (WDI) database and are compiled in accordance to the System of National Accounts, 2008 (2008 SNA) methodology. GDP data collection is conducted through the Unified Survey process, the World Bank’s principal mechanism for gathering quantitative macroeconomic information on its member countries. | BB  Administrative Data | BB, FID  Administrative Data | Not Applicable | Annual | Group 1 | 1st Round:  2016  2nd Round:  July,  2019  3rd Round:  July,  2020  4th Round:  July,  2021  5th Round:  July,  2022 |  |
|  | Target 17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress | | | | | | | | | | | |
| 17.4.1 Debt service as a proportion of exports of goods and services | World Bank  **Partner Agencies:**  UNCTAD | Tier I | **Definition:**  Debt service as proportion of exports of goods and services is the percentage of debt services (principle and interest payments) to the exports of goods and services. Debt services covered in this indicator refer only to public and publicly guaranteed debt..  **Concepts:**  Concepts of public and publicly guaranteed external debt data are in accordance with the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6) methodology.  “Exports of goods and services” data concepts are in accordance with the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6).  **Computation Method:**  Public and publicly guaranteed external debt data are compiled by the World Bank based on the World Bank Debtor Reporting System Manual, dated January 2000 which sets out the reporting procedures to be used by countries. The data are provided by the countries on a loan by loan basis.  “Exports of goods and services” data are sourced from IMF’s Balance of Payments Statistics database and then gap-filled with World Bank staff estimates in accordance with the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6)  Both components are used to express the indicator in percentage terms. | Public and publicly guaranteed debt is reported on a quarterly basis through form 1 and form 2. Specifically, the new loan commitments are reported on Form 1 and when appropriate, Form 1a (Schedule of Drawings and Principal and Interest Payments); the loan transactions are reported once a year on Form 2 (Current Status and Transactions). Form 3 is used to report corrections to data originally reported in Forms 1 and 2. Forms 1 and 1A are submitted quarterly, within 30 days of the close of the quarter. Form 2 is submitted annually, by March 31 of the year following that for which the report is made. | The agency in charge of producing the debt statistics at the national level is the World Bank with the data sourced by government agencies on a loan by loan basis. The national data provider of “Exports of Goods, and Services” is the institution in charge of the collection and compilation of the Balance of Payments statistics. This responsibility varies and is country specific (i.e. Central Bank). World Bank staff estimates for “Exports of Goods and Services” data are used for gap filling purposes. “Exports of Goods and Services” data are not reported directly to the World Bank from the national data provider. They are reported to the International Monetary Fund (IMF), which is the institution in charge of overseeing balance of payment stability as part of its institutional mandate. | a) ERD  b) BB  Flows of External Resources  (Administrative Data) | a) ERD  b) BB, FID  Flows of External Resources  (Administrative Data) | Not Applicable | Annual | Group 1 | 1st Round:  2016  2nd Round:  September  2019  3rd Round:  September  2020  4th Round:  September  2021  5th Round:  September  2022 |  |
|  | Target 17.5 Adopt and implement investment promotion regimes for least developed countries | | | | | | | | | | | |
| 17.5.1 Number of countries that adopt and implement investment promotion regimes for developing countries, including the least developed countries | UNCTAD | Tier II | **Definition:**  The indicator provides the number of countries that have adopted and implemented investment promotion regimes for developing countries, including least developed countries.  **Concepts:**  Investment promotion regimes can be defined as those instruments that directly aim at encouraging outward or inward foreign investment through particular measures of the home or host countries of investment.  Investment promotion regimes for LDCs are those instruments that *home countries* of investors have put in place to *encourage outward investment in LDCs directly or through measures intended for developing countries.*  Home country refers to donor countries that put in place investment promotion regimes to encourage outward investment in developing countries, including LDCs.  Foreign direct investment involves a long-term relationship and reflects a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate).  Adoption means that a country has put in place such a system i.e. through the formal adoption of a law, regulation or programme to encourage investment in developing countries, including LDCs.  Implementation means that a country has actually started to promote individual investments in developing countries, including LDCs, on the basis of the relevant legislation.  Instruments used under investment promotion regimes include investment guarantees, financial or fiscal support for outward investors as well as the conclusion of international investment agreements between the home and the host country of the investor. Besides these legal instruments, countries often also provide information and other advisory services for their outward investors.  Investment guarantee is an insurance, offered by governments of the home country or other institutions, to investors to protect against certain political risks in host countries, such as the risk of discrimination, expropriation, transfer restrictions or breach of contract.  International investment agreement is a treaty between two or more countries regarding the promotion and protection of investments made by investors from one country in the other country’s territory, which commits the host country government to grant certain standards of treatment and protection to foreign investors (nationals and companies of the other country) and their investments.  **Comments and limitations:**  SDG indicator 17.5.1 calls for the measurement of both adoption and implementation of investment promotion regimes. The *adoption* of investment promotion regimes for LDCs is an important yet not sufficient means for strengthening the global partnership for the SGDs (Goal 17). Subsequent *implementation* of these regimes is necessary for making the tool effective.  However, getting comprehensive and reliable data on the implementation stage (i.e. how many investments in LDCs have actually been promoted through the promotion regime?) will be very difficult. These data are usually not publicly available. However, to some extent, data may exist in aggregate form (see below).  **Computation Method:**  The proposed computation method includes the following in the compilation of SDG indicator 17.5.1:   1. ***Target countries of outward investment promotion regimes***   The indicator methodology covers both:   * Specific investment promotion regimes targeted for LDCs only; * Investment promotion regimes for developing countries in general, including LDCs.   The measurement should include investment promotion regimes for all developing countries. Only this approach ensures getting a full picture of outward investment promotion with LDCs as beneficiaries, which is better aligned with Target 17.5. By contrast, limiting the research to specific promotion regimes for LDCs only would result in partial information, because the number of LDCs that receive support through investment promotion regimes for all developing countries is likely to be much higher than the number of LDCs that benefit from LDC-specific promotion regimes. Therefore, both types are included when identifying the countries that have adopted and implemented investment promotion regimes for developing countries, including least developed countries.   1. ***Types of outward investment promotion regimes***   Based on consultations and feasibility studies on *what types* of investment promotion regimes to look at, the following methodology is suggested:  Countries use various means to promote foreign investment abroad (see above “Concepts”). Indicator 17.5.1 will focus on the legal investment instruments, since relevant information is – to various degrees - usually publicly available, and thus feasible to compile.  Information is less frequently available on informal and ad-hoc means of outward investment promotion, such as advisory services. The availability of reliable information on such measures would vary greatly across countries. Thus, including such information would hamper the international comparability of the indicator.  To be included in the number of countries that have adopted and implemented investment promotion regimes, the existence of at least one type of promotion instrument (e.g. an investment guarantee scheme or IIAs with LDCs) would be sufficient.   1. ***Adoption vs. implementation of outward investment promotion regimes***   Consultations and feasibility studies were carried out on whether – in addition to the existence of an outward investment promotion regime – it would also be feasible to examine as to what extent the regime was actually *implemented* (i.e. whether an LDC *actually benefitted* from it, e.g., by receiving a foreign investment promoted by an investment guarantee). It was concluded to focus the research on the *adoption* of a promotion system as such. Information on the actual stage of implementation in individual countries is usually not publicly available; scattered data about the situation in some countries could not provide a comprehensive and reliable picture of the overall situation. However, it may be possible to come up with some aggregate data at the regional or global level (see below).   1. ***Coverage of home countries of outward investment promotion regimes***   There is also a question of *which countries* should be included in the measure as home countries of outward investment promotion regimes. The indicator will not only include measures put in place by developed countries but also by emerging economies, thus measuring South-South cooperation in this respect in addition. | Data will be collected through the following means:  An in-depth pilot survey where a limited number of countries that offer outward investment promotion are contacted and asked for detailed information;  A less detailed online questionnaire for all outward investment promotion agencies;  Internet research carried out by UNCTAD;  UNCTAD database on international investment agreements. | Data providers include national ministries, outward investment promotion agencies and other international organisations. |  | a) BIDA, PMO b) NBR, IRD  Administrative Data | By type Of  investment | Triennial | Group 2 | 1st Round:  July,  2019  2nd Round:  July,  2022  3rd Round:  July,  2025  4th Round:  July,  2028  5th Round:  July,  2030 | UNSC 51 revision included in the 2020 comprehensive review  Reviewed at Nov./Dec. 2019 WebEx meeting (classified as Tier II) |
|  | Target 17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism | | | | | | | | | | | |
| 17.6.1 Fixed Internet broadband subscriptions per 100 inhabitants, by speed | ITU | Tier I | **Definition:**  The indicator fixed Internet broadband subscriptions, by speed, refers to the number of fixed-broadband subscriptions to the public Internet, split by advertised download speed.  The indicator is currently broken down by the following subscription speeds:  - 256 kbit/s to less than 2 Mbit/s subscriptions: Refers to all fixed broadband Internet subscriptions with advertised downstream speeds equal to, or greater than, 256 kbit/s and less than 2 Mbit/s.  - 2 Mbit/s to less than 10 Mbit/s subscriptions: Refers to all fixed -broadband Internet subscriptions with advertised downstream speeds equal to, or greater than, 2 Mbit/s and less than 10 Mbit/s.  - Equal to or above 10 Mbit/s subscriptions (4213\_G10). Refers to all fixed -broadband Internet subscriptions with advertised downstream speeds equal to, or greater than, 10 Mbit/s.  **Concepts:**  Fixed Internet broadband subscriptions refer to subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, 256 kbit/s. This includes cable modem, DSL, fibre-to-the-home/building, other fixed (wired)-broadband subscriptions, satellite broadband and terrestrial fixed wireless broadband. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks. It should include fixed WiMAX and any other fixed wireless technologies. It includes both residential subscriptions and subscriptions for organizations.  The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files.  **Comments and limitations:**  Since most Internet service providers offer plans linked to download speed, the indicator is relatively straightforward to collect. Countries may use packages that do not align with the speeds used for this group of indicators. Countries are encouraged to collect the data in more speed categories so as to allow aggregation of the data according to the split shown above. In the future, ITU might start to include higher-speed categories, reflecting the increasing demand and availability of higher-speed broadband subscriptions.  **Computation Method:**  ITU collects data for this indicator through an annual questionnaire from national regulatory authorities or Information and Communication Technology (ICT) Ministries, who collect the data from national Internet service providers. The data can be collected by asking each Internet service provider in the country to provide the number of their fixed-broadband subscriptions by the speeds indicated. The data are then added up to obtain the country totals. | ITU collects data for this indicator through an annual questionnaire from national regulatory authorities or Information and Communication Technology Ministries, who collect the data from Internet service providers. | The telecommunication/ICT regulatory authority or the Ministry in charge of ICTs within each country, who collect the data from Internet Service Providers (ISPs). | BTRC  Administrative Data | BTRC, PTD  Administrative Data | * Speed: 10 MB/ 265KL2M/ 2L10MB * Geographic location: urban, rural | Triennial | Group 2 | 1st Round:  2015  2nd Round:  July,  2019  3rd Round:  July,  2020  4th Round:  July,  2021  5th Round:  July,  2022 | The current indicator 17.6.1 was previously listed as 17.6.2; previous indicator 17.6.1 was deleted during UNSC 51 included in the 2020 comprehensive review. |
|  | Target 17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed | | | | | | | | | | | |
| 17.7.1 Total amount of funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies | UNEP-CTCN  **Partner Agencies:**  OECD | Tier II | **Definition:**  The purpose of this indicator is to develop a methodology for tracking the total amount of approved funding to promote the development, transfer, dissemination and diffusion of environmentally sound technologies. A two-pronged approach is suggested:  Level 1. Use globally available data to create a proxy of funding flowing to developing countries for environmentally sound technologies, or of trade in environmentally sound technologies  Leve2. Collect national data on investment in environmentally sound technologies.  **Concepts:**  **UNEP definition**  Environmentally Sound Technologies (ESTs) are technologies that have the potential for significantly improved environmental performance relative to other technologies. ESTs protect the environment, are less polluting, use resources in a sustainable manner, recycle more of their wastes and products, and handle all residual wastes in a more environmentally acceptable way than the technologies for which they are substitutes. ESTs are not just individual technologies. They can also be defined as total systems that include know-how, procedures, goods and services, and equipment, as well as organizational and managerial procedures for promoting environmental sustainability. This means that any attempt to provide an assessment of investment into ESTs on either a global or national level must incorporate ways to track funding flows into both hard and soft technologies.  **The definition of an environmentally sound technology (EST) to be used to track SDG 17.1**  Include both hardware and software, including total systems that include know- how, procedures, processes, goods and services, equipment, as well as organisational and managerial procedures for promoting environmental sustainability.  **EST definition at national level**  In deciding which technologies are most appropriate, there will always be trade-offs between cost and a range of economic, social, health and environmental impacts, to be determined based on national or local contexts and priorities. It would also not be feasible for all countries to strive towards the best available technologies globally if these are not appropriate in a domestic context. Given the highly contextual nature of ESTs, it is therefore something that is better defined at the national level, taking into account the national context and mainstream technologies nationally. However, there is a real need to support national, sub-national governments and other actors with decision-making and defining the most nationally or locally appropriate technologies.  **Comments and limitations:**  Various definitions of ‘environmentally sound technology’ exist and are in use. Terms such as ‘environmental technology’, ‘clean technology’, ‘and cleantech ’or ‘low- carbon technology’ are sometimes used, although low-carbon technology can be considered as a sub-set of green technology. Other less commonly used terms include climate-smart and climate-friendly technology.  Additional limitation include: different baseline years in numerous available databases, and the different purposes of available databases.  Many national statistical systems lack the capacity to compile information on “Total amount of approved funding to promote the development, transfer, dissemination and diffusion of environmentally sound technologies”. Compiling data on this indicator presents a challenge in terms of consistent definitions and approaches. However, this methodology recognizes these difficulties and provides an approach that can allow a comparability among countries.  Methodology  **Computation Method:**  The methodology for tracking the total amount of approved funding to promote the development, transfer, dissemination and diffusion of environmentally sound technologies has a two-pronged approach:  **Level 1**. Use globally available data to create a proxy of funding flowing to developing countries for environmentally sound technologies, or of trade in environmentally sound technologies.  The international proxy that provides the closest indicator of investment flows is that of trade (e.g. traded goods and services that have been internationally agreed to have a positive environmental benefit), using HS codes, preferably more than 6-digit level.  The sectors deemed to be ESTs through historical research include:   * Air pollution control (APC) * Wastewater management (WWM), * Solid and Hazardous waste management (SHWM), * Renewable Energy (RE), * Environmentally Preferable Products (EPPs) * Water Supply & Sanitation (relating to indicators for #6 and #11) * Energy Storage & Distribution (relating to indicators for #7 and #13)  1. Environmental considerations:    * Performance of the technology and operational data – Can the technology achieve the environmental objective (e.g. this could be compliance with local environmental law)    * Cross-media effects – Does the technology has negative environmental impacts?   2. Local considerations – Is the technology suitable for the local market?   * + Economics impacts – Capital and operating costs   + Market considerations – Local market availability and suitability   + Suitability for the local natural conditions * Land & Water Protection & Remediation (relating to indicators for #14 and #15   There are two key sub-indicators which are initially to be tracked by proxy of trade in agreed/approved ESTs:   1. global and b) national   **Level 2.** Collect national data on investment in environmentally sound technologies.  Identifying ESTs at the national/ sub-national level should be a simple process based on a set of criteria and simple analysis tool (excel form), which could be used to evaluate if the environmental objective is achieved and if the technology is suitable for the local market.  The environmental objective can be assessed with the performance and operational data (in relevance to the environmental objective) and if the technology has any negative environmental impact (cross- media effects). Suitability of the technology for the national market could involve assessments on criteria related to economics, market considerations and suitability to local natural conditions.  The guidelines: steps to identify, assess and priorities ESTs at the national or sub-national level | Data will be collected at national levels through a Questionnaire sent out to national governments every two years. | NSOs and other members of the NSS, complemented by global modelling |  | ERD  Administrative Data |  | Annual | Group 2 | 1st Round:  June 2020  2nd Round:  June 2021  3rd Round:  June 2022  4th Round:  June 2023  5th Round:  June 2024 | UNSC 51 refinement  Reviewed at Nov./Dec. 2019 WebEx meeting (classified as Tier II) |
|  | Target 17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology | | | | | | | | | | | |
| 17.8.1 Proportion of individuals using the Internet | ITU | Tier I | **Definition:**  The indicator proportion of individuals using the Internet is defined as the proportion of individuals who used the Internet from any location in the last three months.  **Concepts:**  The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files, irrespective of the device used (not assumed to be only via a computer - it may also be by mobile telephone, tablet, PDA, games machine, digital TV etc.). Access can be via a fixed or mobile network.  **Comments and limitations:**  While the data on the percentage of individuals using the Internet are very reliable for countries that have collected the data through official household surveys, they are less reliable in cases where the number of Internet users is estimated by ITU. ITU is encouraging all countries to collect data on this indicator through official surveys and the number of countries with official data for this indicator is increasing.  **Computation Method:**  For countries that collect data on this indicator through an official survey, this indicator is calculated by dividing the total number of in-scope individuals using the Internet (from any location) in the last 3 months by the total number of in-scope individuals. For countries that have not carried out a survey, data are estimated (by ITU) based on the number of Internet subscriptions and other socioeconomic indicators (GNI per capita) and on the time series data. | Data on individuals using the Internet are collected through an annual questionnaire that ITU sends to national statistical offices (NSO). In this questionnaire ITU collects absolute values. The percentages are calculated a-posteriori. The survey methodology is verified to ensure that it meets adequate statistical standards. The data are verified to ensure consistency with previous years’ data and situation of the country for other related indicators (ICT and economic). | National Statistical Office (NSO). |  | BBS  SVRS/MICS (female partial)/LFS/CPHS/ICTUS/PHC/HIES | * Division: Dhaka, Chattogram, Rajshahi, Khulna, Barishal, Sylhet, Rangpur, Mymensingh * geographic location urban, rural * sex: male/female * age * labour force status * educational level * occupation | Annual | Group 2 | 1st Round:  December  2020  2nd Round:  December  2021  3rd Round:  December  2022  4th Round:  December  2023  5th Round:  December  2024 |  |
|  | Target 17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation | | | | | | | | | | | |
| 17.9.1 Dollar value of financial and technical assistance (including through North-South, South‑South and triangular cooperation) committed to developing countries | OECD | Tier I | **Definition:**  Gross disbursements of total ODA and other official flows from all donors for capacity building and national planning.  **Concepts:**  ODA: The DAC defines ODA as “those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are   1. provided by official agencies, including state and local governments, or by their executive agencies; and 2. each transaction is administered with the promotion of the economic development and welfare of developing countries as its main objective; and   is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent).  (See <http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm>)  Other official flows (OOF): Other official flows (excluding officially supported export credits) are defined as transactions by the official sector which do not meet the conditions for eligibility as ODA, either because they are not primarily aimed at development, or because they are not sufficiently concessional.  (See <http://www.oecd.org/dac/stats/documentupload/DCDDAC(2016)3FINAL.pdf>, Para 24).    **Comments and limitations:**  Data in the Creditor Reporting System are available from 1973. However, the data coverage is considered complete since 1995 for commitments at an activity level and 2002 for disbursements.  **Computation Method:**  The sum of ODA and OOF flows from all donors to developing countries for capacity building and national planning. | A statistical reporter is responsible for the collection of DAC statistics in each providing country/agency. This reporter is usually located in the national aid agency, Ministry of Foreign Affairs or Finance etc. | Data are reported on an annual calendar year basis by statistical reporters in national administrations (aid agencies, Ministries of Foreign Affairs or Finance, etc. | ERD  Administrative Data | ERD  Administrative Data | * type of cooperation: North-South cooperation/South-South cooperation/ triangular cooperation * type of flow: ODA, OOF * donor * recipient country * type of finance * type of aid * sector | Annual | Group 1 | 1st Round:  2015  2nd Round:  July,  2019  3rd Round:  July,  2020  4th Round:  July,  2021  5th Round:  July,  2022 |  |
|  | Target 17.10 Promote a universal, rules-based, open, non‑discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda | | | | | | | | | | | |
| 17.10.1 Worldwide weighted tariff-average | WTO,  ITC,  UNCTAD | Tier I | **Definition:**  Value in percentage of weighted average tariffs applied to the imports of goods in HS chapter 01-97.  **Concepts:**  Weighted average: In order to aggregate tariff value for country groups it is recommended to make use of a weighting methodology based on the value of goods imported.  Tariffs: Tariffs are customs duties on merchandise imports, levied either on an ad valorem basis (percentage of value) or on a specific basis (e.g. $7 per 100 kg). Tariffs can be used to create a price advantage for similar locally-produced goods and for raising government revenues. Trade remedy measures and taxes are not considered to be tariffs.  **Comments and limitations:**  Tariffs are only part of the factors that can explain the degree of openness and transparency in the international trade arena. However, accurate estimates on non-tariff measures or of transparency indicator do not exist.  To further refine the quality of the information, additional sub-measurements could be calculated including: a) Tariff peaks (i.e. % of tariffs on some products that are considerably higher than usual, defined as above 15 per cent) and b) Tariff escalation (i.e. wherein a country applies a higher tariff rate to products at the later stages of production). These calculations were already provided by ITC as part of the MDG Gap Task Force Report. See the report for further information on the methodology at http://www.un.org/en/development/desa/policy/mdg\_gap/mdg\_gap2014/2014GAP\_FULL\_EN.pdf  **Computation Method:**  In order to include all tariffs into the calculation, some rates which are not expressed in ad valorem form (e.g., specific duties) are converted in ad valorem equivalents (i.e. in per cent of the import value), The conversion is made at the tariff line level for each importer by using the unit value method. Import unit values are calculated from import values and quantities. Only a limited number of non-ad valorem tariff rates (i.e. technical duties) cannot be provided with ad valorem equivalents (AVE) and are excluded from the calculation. This methodology also allows for cross-country comparisons. | Time series: Yearly data from 2005 to latest year  Data collection: Continuously update all year round | The main information used to calculate indicators 17.10.1 is import tariff data. Information on import tariffs might be retrieved by contacting directly National statistical offices, permanent country missions to the UN, regional organizations or focal points within the customs, ministries in charge of customs revenues (Ministry of economy/finance and related revenue authorities) or, alternatively, the Ministry of trade. Tariff data for the calculation of this indicator are retrieved from ITC (MAcMap) - http://www.macmap.org/ - WTO (IDB) - http://tao.wto.org - and UNCTAD (TRAINS) databases. Import tariff data included in the ITC (MAcMap) database are collected by contacting directly focal points in line national agencies or regional organizations (in the case of custom unions or regional economic communities). When available, data are downloaded from national or regional official websites. In some cases, data are purchased from private companies. Import tariff data included in the WTO (IDB) database are sourced from official notifications of WTO members. Import tariff included in the UNCTAD (TRAINS) database are collected from official sources, including official country or regional organizations websites. | BTC, MoC  Administrative Data | a)BTC, MoC  b) WTO Cell, MoC  Administrative Data | * product sector: Agriculture, Textile, Environmental * geographic location: Division * type of country: Developed, Developing, LDCs | Annual | Group 1 | 1st Round:  2015  2nd Round:  June  2020  3rd Round:  June  2021  4th Round:  June  2022  5th Round:  June  2023 | Estimated from Data available from Bangladesh Bank and National Board of Revenue |
|  | Target 17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries’ share of global exports by 2020 | | | | | | | | | | | |
| 17.11.1 Developing countries’ and least developed countries’ share of global exports | WTO,  ITC,  UNCTAD | Tier I | **Definition:**  Exports by developing countries and LDCs as a share of global exports of goods and services  **Concepts:**  Harmonized System (HS): Is the international classification used to categorize products that are traded (merchandise trade)  Balance of Payments (BoP): Services are classified according to the items presented in the Balance of Payments as defined by the IMF in t the Balance of Payments Manual.  **Comments and limitations:**  Export shares need to be analysed from different angles in order to infer whether a particular country or region made improvements in its trade performance. First of all, exports value should be always kept into account in order to observe whether changes in export shares are originating from increasing developing and LDCs exports or from a decrease of other countries exported values. Secondly, and in order to foster trade that is beneficial for the other SDGs, it would be useful to analyze the composition of the export basket by the level of processing of the goods that are traded. This will allow understanding whether progress are made in terms of the quality and value added of the products exported. In addition to that, while some exports like arms, oil and other natural resources would require a separate analysis, the calculation of export diversification indicators would be recommended to assess the progress made by developing and LDCs in terms of productivity and improvement of their export portfolio.  For what concerns trade in services, it could be necessary to draw on supplementary data from migration, tourism, multinational companies (MNC) and labour market statistics, in order to provide detailed figures for Travel and Government services n.i.e. A typical area of interest for international trade in services relates to the data that may be maintained by governments on education and health services provided to or by non-residents (travel; personal, cultural and recreational services). Information obtained from partner countries is useful in order to validate and improve statistics of the compiling economy. Data from international organizations can be useful for aid recipient countries to compile data on technical assistance services.  **Computation Method:**  Share of global trade is intended of a particular group of country fraction of total trade.  While for merchandise trade data are consistent through he time series (2000-current), for services trade there might be difficulties related to lack of harmonization for data previous to 2005. Before 2005 data are reported according the 5th Balance of Payments Manual. After 2005, data have been converted according to the categories and principles established by the 6th edition of the Balance of Payments Manual. | Time series: Yearly data from 2000 to latest year  Data collection: Collection of trade data (import and export flow) occurs all year round. | "Trade in goods data included in the ITC (Trade Map) database are collected by contacting directly focal points in national agencies or regional organizations (in the case of custom unions or regional economic communities). Trade in goods data included in the WTO (IDB) database are sourced from official notifications of WTO members. Trade in goods data are complemented, when needed using the UN COMTRADE database. Trade in services data are sourced from a joint ITC/UNCTAD/WTO database, prevalently based on balance of payments accounts data maintained by the IMF, OECD and EUROSTAT. In some cases WTO jointly with UNCTAD collects information from national sources. Trade in services data can be retrieved by domestic banks and/or national statistic offices from one or more of the following sources: International Transaction Reporting System (ITRS). In this case, international payments channelled through domestic banks are collected, generally, under the responsibility of the national central bank. Payments are used as a proxy of transactions. Enterprise surveys. Generally, under the responsibility of the national statistical office. | UNSTATS | BTC, MoC  Administrative Data | * product sector (e.g. Agriculture, Textile, Environmental goods), * level of goods processing | Annual | Group 1 | 1st Round:  2015  2nd Round:  September  2019  3rd Round:  September  2020  4th Round:  September  2021  5th Round:  September  2022 |  |
| Target 17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access | | | | | | | | | | | | |
| 17.12.1 Weighted average tariffs faced by developing countries, least developed countries and small island developing States | WTO,  ITC,  UNCTAD | Tier I | **Definition:**  Average import tariffs (in per cent) faced by products exported from developing countries and least developed countries.  **Concepts:**  Tariffs: Tariffs are customs duties on merchandise imports, levied either on an ad valorem basis (percentage of value) or on a specific basis (e.g. $7 per 100 kg). Tariffs can be used to create a price advantage for similar locally-produced goods and for raising government revenues. Trade remedy measures and taxes are not considered to be tariffs. Tariff in HS chapters 01-97 is taken into consideration.  Tariff line or National Tariff lines (NTL): National Tariff Line codes refer to the classification codes, applied to merchandise goods by individual countries that are longer than the HS six digit level. Countries are free to introduce national distinctions for tariffs and many other purposes.  The national tariff line codes are based on the HS system but are longer than six digits. For example, the six digit HS code 010120 refers to Asses, mules and hinnies, live, whereas the US National Tariff line code 010120.10 refers to live purebred breeding asses, 010120.20 refers to live asses other than purebred breeding asses and 010120.30 refers to mules and hinnies imported for immediate slaughter.  **Comments and limitations:**  "The reduction of average tariffs on key sector as agriculture can represent a proxy of the level of commitment of developed country to improve market access conditions.  In terms of limitations:  Tariffs are only part of the trade limitation factors to the implementation of duty-free and quota-free market access, especially when looking at exports of developing or least developed countries under non-reciprocal preferential treatment that set criteria for eligibility. Accurate estimates on non-tariff measures do not exist, thus the calculations on market access are limited to tariffs only.  A full coverage of preferential schemes of developed countries has been used for the computation, but preferential treatment may not be fully used by developing countries' exporters for different reasons such as the inability of certain exporters to meet eligibility criteria (i.e., complying with rules of origin)."  **Computation Method:**  Some tariff rates which are not expressed in ad valorem form (e.g., specific duties) need to be converted in ad valorem equivalents (i.e. in per cent of the import value). The conversion is made at the tariff line level for each importer by using the unit value method. Import unit values are calculated from import values and quantities. Only a limited number of non-ad valorem tariff rates (i.e. technical duties) cannot be provided with ad valorem equivalents (AVE) and are excluded from the calculation. This methodology also allows for cross-country comparisons. | Time series: Yearly data from 2005 to latest year  Continuously updated all year round | The main information used to calculate indicators 17.12.1 is import tariff data. Information on import tariffs might be retrieved by contacting directly National statistical offices, permanent country missions to the UN, regional organizations or focal points within the customs, ministries in charge of customs revenues (Ministry of economy/finance and related revenue authorities) or, alternatively, the Ministry of trade. Tariff data for the calculation of this indicator are retrieved from ITC (MAcMap) - http://www.macmap.org/ - WTO (IDB) - http://tao.wto.org - and UNCTAD (TRAINS) databases. Import tariff data included in the ITC (MAcMap) database are collected by contacting directly focal points in line national agencies or regional organizations (in the case of custom unions or regional economic communities). When available, data are downloaded from national or regional official websites. In some cases, data are purchased from private companies. Import tariff data included in the WTO (IDB) database are sourced from official notifications of WTO members. Import tariff included in the UNCTAD (TRAINS) database are collected from official sources, including official country or regional organizations websites. | BTC, WITS  Administrative Data | BTC, MoC  Administrative Data | * type of country: Developed, Developing, LDCs * product sector | Annual | Group 1 | 1st Round:  2014  2nd Round:  July,  2019  3rd Round:  July,  2020  4th Round:  July,  2021  5th Round:  July,  2022 | UNSC 51 refinement |
|  | Target 17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence | | | | | | | | | | | |
| 17.13.1 Macroeconomic Dashboard | World Bank | Tier II | **Objective:**  To provide a standardized instrument to monitor the macroeconomic stability of countries, the World Bank has designed a Macroeconomic dashboard including important macroeconomic indicators covering the external, financial, fiscal, and real sectors. The indicator selection builds on existing macroeconomic monitoring frameworks developed and used by international and regional agencies, such as the IMF, the WB, the ECB and the OECD.  The Macroeconomic dashboard has selected indicators covering the above-mentioned topics, annual data for the ten most recent years, and will be maintained for all countries. The dashboard will be updated quarterly, and will be published on the World Bank’s Data site (Data.WorldBank.org) as well as on the UN SDG website.  **External Sector**  To monitor each country’s trade and balance of payments situation, the dashboard will include indicators for the current and capital & financial accounts.  Current Account: The current account balance is an important indicator of an economy’s health. It is defined as the sum of the resource balance (exports less imports of goods and services), net primary income and secondary income. In addition, the dashboard includes indicators such as merchandise trade as a share of GDP to monitor the trade openness of the country, and data on personal remittances, which have become an important integral part of many developing economies, since any changes to these flows may have major impact on developing countries’ current account balances. The current account balance is also defined as the savings-investment gap for an economy.  Capital and Financial Accounts: Data on capital and financial flows are key for monitoring vulnerability to shocks and constraints on fiscal and monetary policies. Financing trade deficits or other current imbalances through capital and financial flows is a reasonable way to achieve consumption smoothing of emerging economies. FDI equity are a preferred method of financing external current account deficits since these flows are non – debt – creating. Portfolio investment inflows measure the exposure of foreign investors to developing country bond and equity markets.  The sustainability of the balance of payments depends on both the current account and the capital and financial account balances, including foreign reserves.  External indebtedness affects a country's creditworthiness and investor perceptions. Nonreporting countries might have outstanding debt with the World Bank, other international financial institutions, or private creditors. Total debt service is contrasted with countries' ability to obtain foreign exchange through exports of goods, services, primary income, and personal remittances. Debt ratios are used to assess the sustainability of a country's debt service obligations, but no absolute rules determine what values are too high.  Exchange Rates: Sharp devaluations are usually associated with significant declines in equity markets, capital flows, and reserves. The dashboard will present official average exchange rates.  **Financial Sector**  Financial sector indicators are essential for measuring countries’ financial market stability, and in-turn economic stability of the country. Money and the financial accounts that record the supply of money lie at the heart of a country’s financial system. There are several commonly used definitions of the money supply. To assess the monetary base and stability, the dashboard will present broad money growth and broad money to total reserve ratios. Stronger financial institutions play a very important role in a country’s economic performance. The strength of these institutions will be evaluated through bank capital assets ratios and non-performing loans to total gross loans ratios.  **Fiscal Sector**  For a country to have a sustainable economic growth path, sustainable fiscal policy is must. To monitor the fiscal policy issues, the dashboard will include government revenues to measure the impact of economic growth and changes in commodity prices. The dashboard will also include tax revenue, overall fiscal balance, public debt as a share of GDP.  **Real Sector and Prices**  GDP measures the nation’s total output of goods and services. For many decades, it has been a comprehensive measure of market activity used for a wide variety of analytical purposes such as measuring productivity, conducting monetary policy, and projecting tax revenues. The Dashboard groups indicators for the real sector into two sets, national accounts and prices.  National Accounts: An economy's growth is measured by the change in the volume of its output or in the real incomes of its residents. The 2008 United Nations System of National Accounts (2008 SNA) offers three plausible indicators for calculating growth: the volume of gross domestic product (GDP), real gross domestic income, and real gross national income. The volume of GDP is the sum of value added, measured at constant prices, by households, government, and industries operating in the economy. GDP accounts for all domestic production, regardless of whether the income accrues to domestic or foreign institutions.  In this section, we monitor growth trends of GDP; Gross domestic capital formation; Exports of goods and services; Imports of goods and services; Household consumption; and Government consumption.  Prices:  Consumer Price Index: The dashboard will include CPI to monitor the price trends.  International Commodity Prices: Primary commodities most relevant to each country will be identified and most recent price data for these commodities will be included in the proposed dashboard.  **Unemployment**  Unemployment is a key measure to monitor whether a country is on track to achieve the Sustainable Development Goal of promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. [SDG Indicator 8.5.2]. Trends in unemployment rate data are a very important indicator for the analysis of the long-term economic development of a country. Stronger and sustainable economic growth will result in lower unemployment rates. The dashboard will include time series data on total unemployment.  **Annex I Definitions**  **External Sector**  **Merchandise trade (% of GDP):** This indicator is used as measurement for the Trade Openness of a country. Merchandise trade as a share of GDP is the sum of merchandise exports and imports divided by the value of GDP. Source: (World Trade Organization, and World Bank GDP estimates).  **Personal remittances, received (% of GDP):** Comprise personal transfers and compensation of employees, as defined in the sixth edition of the IMF's Balance of Payments Manual. Personal transfers consist of all current transfers in cash or in kind made or received by resident households to or from nonresident households. Personal transfers thus include all current transfers between resident and nonresident individuals. Compensation of employees refers to the income of border, seasonal, and other short-term workers who are employed in an economy where they are not resident and of residents employed by nonresident entities. Source: (World Bank staff estimates based on IMF balance of payments data, and World Bank and OECD GDP estimates).  **Current account balance (% of GDP):** Current account balance is the sum of net exports of goods and services, net primary income, and net secondary income. Source: (International Monetary Fund, Balance of Payments Statistics Yearbook and data files, and World Bank and OECD GDP estimates).  **Foreign direct investment, net inflows (% of GDP):** Comprises the net inflows of foreign direct investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. FDI is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.Source: (International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, International Debt Statistics, and World Bank and OECD GDP estimates).  **Portfolio Investment, net (Bop, current US$):**  Portfolio investment covers transactions in equity securities and debt securities. Data are in current U.S. dollars. Source: (International Monetary Fund, Balance of Payments Statistics Yearbook and data files).  **Total reserves in months of imports:** Total reserves comprise holdings of monetary gold, special drawing rights, reserves of IMF members held by the IMF, and holdings of foreign exchange under the control of monetary authorities. The gold component of these reserves is valued at year-end (December 31) London prices. This item shows reserves expressed in terms of the number of months of imports of goods and services they could pay for [Reserves/(Imports/12)]. Source: (International Monetary Fund, International Financial Statistics and data files).  **Debt service (PPG and IMF only, % of exports of goods, services and primary income):** Debt service is the sum of principle repayments and interest actually paid in currency, goods, or services. This series differs from the standard debt to exports series. It covers only long-term public and publicly guaranteed debt and repayments (repurchases and charges) to the IMF. Data for Heavily Indebted Poor Countries (HIPC) are from HIPC Initiative's Status of Implementation Report. Source: (World Bank, International Debt Statistics).  **External debt stocks (% of GNI):** Total external debt is debt owed to nonresidents repayable in currency, goods, or services. Total external debt is the sum of public, publicly guaranteed, and private nonguaranteed long-term debt, use of IMF credit, and short-term debt. Short-term debt includes all debt having an original maturity of one year or less and interest in arrears on long-term debt. GNI (formerly GNP) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.  **Official exchange rate (LCU per US$, period average annual):** Official exchange rate refers to the exchange rate determined by national authorities or to the rate determined in the legally sanctioned exchange market. It is calculated as an annual average based on monthly averages (local currency units relative to the U.S. dollar). Source: (International Monetary Fund, International Financial Statistics).  **Financial Sector**  **Broad money growth (annual % growth):** Broad money is the sum of currency outside banks; demand deposits other than those of the central government; the time, savings, and foreign currency deposits of resident sectors other than the central government; bank and traveler’s checks; and other securities such as certificates of deposit and commercial paper. Source: (International Monetary Fund, International Financial Statistics and data files).  **Broad money to total reserves ratio:** Broad money (IFS line 35L..ZK) is the sum of currency outside banks; demand deposits other than those of the central government; the time, savings, and foreign currency deposits of resident sectors other than the central government; bank and traveler’s checks; and other securities such as certificates of deposit and commercial paper. Source: (International Monetary Fund, International Financial Statistics and data files).  **Bank nonperforming loans to total gross loans ratio (%):** Bank nonperforming loans to total gross loans is the value of nonperforming loans divided by the total value of the loan portfolio (including nonperforming loans before the deduction of specific loan-loss provisions). The loan amount recorded as nonperforming should be the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue. Source: (International Monetary Fund, Global Financial Stability Report).  **Bank capital to assets ratio (%):** Bank capital to assets is the ratio of bank capital and reserves to total assets. Capital and reserves include funds contributed by owners, retained earnings, general and special reserves, provisions, and valuation adjustments. Capital consists of tier 1 capital (paid-up shares and common stock), which is a common feature in all countries' banking systems, and total regulatory capital, which includes several specified types of subordinated debt instruments that need not be repaid if the funds are required to maintain minimum capital levels (these comprise tier 2 and tier 3 capital). Total assets include all nonfinancial and financial assets. Source: (International Monetary Fund, Global Financial Stability Report).  **Fiscal Sector**  **Revenue (% of GDP):** Revenue is cash receipts from taxes, social contributions, and other revenues such as fines, fees, rent, and income from property or sales. Grants are also considered as revenue.  **Tax revenue (% of GDP):** Tax revenue refers to compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded. Refunds and corrections of erroneously collected tax revenue are treated as negative revenue. Source: (International Monetary Fund, Government Finance Statistics Yearbook and data files, and World Bank and OECD GDP estimates).  **Overall Fiscal Balance (% of GDP):** is difference between national government revenues and expenditures, expressed as a percent of GDP.  **D2 gross government and public sector debt (% of GDP):**  The D2 coverage of instruments according to this classification includes (1) debt securities, (2) loans, (3) special drawing rights and (4) currency and deposits as percentage of GDP. Source: (The Public Sector Debt Statistics (PSD) database developed by the World Bank and the International Monetary Fund).  **Real Sector and Prices**  **Gross domestic product (annual % change) :** GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Source: (World Bank national accounts data, and OECD National Accounts data files).  **Gross capital formation (annual % change) :** Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and "work in progress." According to the 2008 SNA, net acquisitions of valuables are also considered capital formation. Source: (World Bank national accounts data, and OECD National Accounts data files).  **Household final consumption expenditure (annual % change):** Household final consumption expenditure (formerly private consumption) is the market value of all goods and services, including durable products (such as cars, washing machines, and home computers), purchased by households. It excludes purchases of dwellings but includes imputed rent for owner-occupied dwellings. It also includes payments and fees to governments to obtain permits and licenses. In WDI, household consumption expenditure includes the expenditures of nonprofit institutions serving households, even when reported separately by the country. This item also includes any statistical discrepancy in the use of resources relative to the supply of resources. Source: (World Bank national accounts data, and OECD National Accounts data files).  **General government final consumption expenditure (annual % change):** General government final consumption expenditure (formerly general government consumption) includes all government current expenditures for purchases of goods and services (including compensation of employees). It also includes most expenditures on national defense and security, but excludes government military expenditures that are part of government capital formation. Source: (World Bank national accounts data, and OECD National Accounts data files).  **Exports of goods and services (annual % change):** Exports of goods and services represent the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. Source: (World Bank national accounts data, and OECD National Accounts data files).  **Imports of goods and services (annual % change):** Imports of goods and services represent the value of all goods and other market services received from the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. Source: (World Bank national accounts data, and OECD National Accounts data files).  **Inflation, Consumer price index (annual % change):** Consumer price index reflects changes in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used. Data are period averages. Source: (International Monetary Fund, International Financial Statistics and data files).  **Unemployment, total (% of total labor force) (national estimate):** Unemployment refers to the share of the labor force that is without work but available for and seeking employment. Definitions of labor force and unemployment differ by country. Source: (International Labor Organization, ILOSTAT database). | Not Available | Not Available |  | WB,  Administrative Data | Not Applicable | Annual | Group 2 | 1st Round:  July,  2019  2nd Round:  July,  2020  3rd Round:  July,  2021  4th Round:  July,  2022  5th Round:  July,  2023 | WB has already published.  Reviewed at 8th IAEG-SDG meeting (classified as Tier II) |
| Target 17.14 Enhance policy coherence for sustainable development | | | | | | | | | | | | |
| 17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development | UNEP | Tier II |  | Not Available | Not Available |  | a) GED b) MoEFCC  Administrative Data | - | Triennial | Group 2 | 1st Round:  December  2020  2nd Round:  December  2023  3rd Round:  December  2026  4th Round:  December  2029  5th Round:  December  2030 | IAEG awaiting results of pilots to make determination on tier classification  Reviewed at Feb. 2020 WebEx meeting  (classified as Tier II)  Reviewed at Nov./Dec. 2019 WebEx meeting: IAEG awaiting results of pilots to make determination on tier classification (classified as TBD) |
| Target 17.15 Respect each country’s policy space and leadership to establish and implement policies for poverty eradication and sustainable development | | | | | | | | | | | | |
| 17.15.1 Extent of use of country-owned results frameworks and planning tools by providers of development cooperation | OECD,  UNDP | Tier II | **Definition:**  This indicator measures the extent to which, and the ways in which, all concerned development partners use country-led results frameworks (CRFs) to plan development cooperation efforts and assess their performance.  The indicator assesses the degree to which providers of development cooperation (i.e. development partners) design their interventions by relying on objectives and results indicators that are drawn from country government-led results frameworks reflecting the country’s development priorities and goals.  **Concepts:**  Country results frameworks (CRFs) define a country’s approach to results and its associated monitoring and evaluation systems focusing on performance and achievement of development results. Using a minimal definition, these results frameworks include agreed objectives and results indicators (i.e. output, outcome, and/or impact). They also set targets to measure progress in achieving the objectives defined in the government’s planning documents.  The definition of country-led results framework used for this indicator allows the possibility to use equivalent priority-setting mechanisms at the country level since not all countries articulate their priorities through consistent, integrated CRFs.  In practice, government-led results frameworks defined at the country level are often broadly stated (e.g. long-term vision plans, national development strategies) and operationalised in more detail at the sector level (e.g. sector strategies), where specific targets and indicators are set for a given timeframe.  Some examples of CRFs are long-term vision plans; national development strategies; joint government-multi-donor plans; government’s sector strategies, policies and plans; subnational planning instruments, as well as other frameworks (e.g. budget support performance matrices, sector-wide approaches). In contrast, planning and priority setting documents produced outside the government, such as country strategies prepared by development partners, are not considered CRFs.  **Comments and limitations:**  Data collection covered about 80 low and middle-income countries for the 2015-2016 period. The number of countries covered is expected to increase for the period 2018 and beyond. The estimates for high-income countries are generated taking as a reference their role as development cooperation providers.  The monitoring exercise collects data beyond the scope of the proposed indicator, including additional aspects such as government of development partners’ engagement in planning project/programme evaluations.  **Computation Method:**  To provide a comprehensive measure on the extent of use of country-owned results frameworks and other government-led planning tools, the indicator calculates the degree to which objectives, results indicators and monitoring frameworks associated with new development interventions are drawn from government sources –including national, sector and subnational planning tools.  For each development intervention of significant size (US$ 100,000 and above) approved during the year of reference, the following dimensions are assessed:   * Q1. Whether objectives are drawn from government-led results frameworks, plans and strategies 0/1 * Q2. Share of results (outcome) indicators that are drawn from government-led results frameworks, plans and strategies % * Q3. Share of results (outcome) indicators that will rely on sources of data provided by existing country-led monitoring systems or national statistical services to track project progress %   Aggregated averages per partner country will provide an assessment of the country’s available policy space and leadership.  All formulas are available at: <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-17.pdf>  Aggregated averages per development partner will indicate the percentage of alignment with country-led priority setting mechanisms. Formulas are available at: <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-17.pdf>  Note that data to weight the results by development partner’s actual contributions in terms of development finance is available, if requested by the IAEG SDG / UN Statistical Commission.  A global aggregate for the indicator is obtained by averaging the three dimensions of alignment with country’s priorities and goals across all new interventions for the reporting year. Formulas are available at: <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-17.pdf>  When aggregating, the size of the project/ intervention is not considered as weight in order to give the same level of importance to the extent of use of country-owned results frameworks and planning tools in medium-sized vs. larger projects, as the indicator tries to capture the overall behaviour of development partners in designing new interventions in a given country. Weighting by project size would otherwise over represent infrastructure projects and underrepresent interventions focused on influencing policies and institutional arrangements. Nevertheless, data on project size is available. | The data collection process is as follows: (i) A representative from the country government referred to as a national coordinator is first identified. (ii) The national coordinator collects inputs from providers of development cooperation. The data is submitted to the OECD and UNDP monitoring team and subsequently undergoes a validation round with the headquarters offices of providers of development cooperation. (iii) No adjustments are made to the data after they have undergone the validation process. | Country government representatives (usually from the Ministry of Planning or the Ministry of Finance) are responsible for data collection. These representatives consolidate inputs from providers of development cooperation. | OECD & UNDP  Administrative Data | a) GED b) ERD  Administrative Data | * provider * sector * development project | Bi-annual | Group 1 | 1st Round:  2017  2nd Round:  September  2019  3rd Round:  September  2021  4th Round:  September  2023  5th Round:  September  2025 |  |
| Target 17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries | | | | | | | | | | | | |
| 17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals | OECD,  UNDP  **Partner Agencies:**  UNEP | Tier II | **Definition:**  The indicator tracks the number of countries reporting progress in multi stakeholder monitoring frameworks that track the implementation of development effectiveness commitments supporting the achievement of sustainable development goals (SDGs).  **Concepts:**  “Multi-stakeholder development effectiveness monitoring frameworks” that track effective development cooperation are monitoring frameworks:   * whose indicators have been agreed on a voluntary basis; whose indicators measure the strength of the relationship between development actors; * where data collection and review is led by the countries themselves; and where participation in data collection and review involves relevant multi-stakeholder representing, at minimum, the public sector, the private sector and civil society organizations.   The indicator takes into account the need to capture the respective roles and responsibilities of all parties involved in multi-stakeholder partnerships for development. It does so by looking at development effectiveness frameworks that are led by countries but include the participation of all relevant development partners.  The *Global Partnership for Effective Development Cooperation* (Global Partnership) monitoring framework is an example of existing development effectiveness monitoring frameworks. There are other complementary efforts, such as the *ECOSOC Development Cooperation Forum* (DCF) mutual accountability survey. Emerging and future monitoring frameworks that fit the above definition, such as recent efforts to track South-South Cooperation by *SEGIB*, could also be considered.  **Comments and limitations:**  The design of the indicator has practical benefits:   * the indicator allows for relevant monitoring frameworks to be updated in line with evolving commitments and country specific context without affecting the spirit of the indicator; * the indicator does not presume a globally-set multi-stakeholder framework, acknowledging the diversity of complementary efforts supporting effective development cooperation; * the indicator allows participating countries to choose whether they would like to report as a provider of development co-operation, as a recipient, or both.   Data collection for the Global Partnership monitoring framework is led by low and middle-income countries receiving development co-operation. Progress of countries providing development co-operation in implementing development effectiveness commitments is captured through their partnership behaviour in those low and middle-income countries. Depending on each case, middle income countries that currently are both recipient and providers of development cooperation opt to report in their role as recipient and/or provider of development cooperation.  **Computation Method:**  To reflect the universal nature of target 17.16 this indicator is presented as the global aggregate number of countries reporting progress. For any country reporting towards one (or more) multi-stakeholder development effectiveness framework(s), the country is considered to be reporting progress when, for the year of reference, the number of indicators within the framework(s) that show a positive trend is greater than the number of indicators that show a negative trend.  Countries providing development co-operation funding and reporting in multi-stakeholder development effectiveness monitoring frameworks are assessed against the following elements:   * *Aligning to country-defined development objectives:* Percentage of new development interventions whose objectives are drawn from country-led results frameworks. * *Using country-led results frameworks:* Percentage of results indicators contained in new development interventions which are drawn from country-led results frameworks. * *Using national monitoring and statistical systems:* Percentage of results indicators in new development interventions which will be monitored using government sources and monitoring systems. * *Using national evaluation systems:* Percentage of new interventions that plan a final evaluation with country government involvement. * *Transparency of development co-operation*: Public availability of information on development co‑operation according to international reporting standards. * *Annual predictability of development co-operation*: Proportion of development co-operation disbursed as development partners had scheduled at the beginning of the year. * *Medium-term predictability of development co-operation:* forward-looking spending plans made available to the partner government (indicative annual amounts of development co-operation support to be provided over the one-to-three years. * *Development co-operation on budgets subject to parliamentary oversight: share* of development co-operation funds planned to/for the country’s public sevtor that are recorded in the annual budget submitted for legislative approval. * *Development co-operation delivered through country systems:* Proportion of development co-operation disbursed to a give country according to national regulations and systems for public financial management (i.e. budgeting, financial reporting, auditing) and procurement. * *Untied Aid:* Proportion of development co-operation that is untied[[106]](#footnote-107)   Countries receiving development co-operation funding and reporting in multi-stakeholder development effectiveness monitoring frameworks are assessed against the following elements:   1. *Leading in setting up national priorities: Countries strengthen their* national results frameworks. 2. *Creating an enabling environment for civil society organisations:* Civil society organizations operate within an environment that maximises their engagement in and contribution to development. 3. *Promoting private sector engagement and contribution to development:* Quality of public-private dialogue 4. *Recording development co-operation on budgets subject to parliamentary oversight*: Share of development co-operation funds planned to/for the country’s public sector that are recorded in the annual budget submitted for legislative approval. 5. *Strengthening mutual accountability:* Mutual accountability among development actors is strengthened through inclusive reviews. 6. *Strengthening gender equality and women’s empowerment:* Existence of transparent government systems to track public allocations for gender equality and women’s empowerment 7. *Strengthening domestic institutions:* Quality of the country’s budgetary and public financial management.   Countries providing and receiving development co-operation funding are invited to select whether they would like to report against provider-specific commitments, against recipient-specific commitments, or against both sets of commitments.  For countries reporting both as providers and recipients of development co-operation, progress is calculated separately based on the respective set of indicators described above. Disaggregated results will show the detailed performance in each category. For the ultimate count of the number of countries making progress, dual countries are accounted as making progress if progress is made as recipient **or** as provider of development co-operation.  The baseline for counting progress is the latest measurement available for each specific country, dating back to 2010. When no baseline exists for a country, the first measurement available for an indicator constitutes the baseline for future measurements of progress.  When a country meets and sustains all targets for the indicators it reports on (i.e. it is logically impossible to make further progress) it is considered as “making progress”. | (i) For the data collection process of the Global Partnership's monitoring exercise, a national coordinator is assigned from the country government. S/he typically comes from the Ministry of Foreign Affairs, the Ministry of Finance, or the Ministry of Planning. (ii) The national coordinator in turn consults with other stakeholders (including country offices of providers of development co-operation, Civil Society Organisations, the private sector, and trade unions) to gather and validate data. The data is then validated by headquarters offices of providers of development co-operation. (iii) No adjustments are made to submitted data, given that the validation process needs to stay at country level. However, inconsistencies or possible problematic values are highlighted and sent back to national co-ordinators for revision. | Leading central ministry from reporting countries. Typically the ministry of finance, the ministry of planning, ministry of development, or the ministry of foreign affairs, depending on the division of labour within each government. |  | ERD  Administrative Data | Not Applicable | Bi-annual | Group 2 | 1st Round:  September  2019  2nd Round:  September  2021  3rd Round:  September  2023  4th Round:  September  2025  5th Round:  September  2027 |  |
| Target 17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships | | | | | | | | | | | | |
| 17.17.1 Amount in United States dollars committed to public-private partnerships for infrastructure |  | TBD | **Definition:**  *Indicator proposed based on WBG data: “Amount of United States dollars committed to public-private partnerships in Infrastructure*.”  The proposed indicator by the World Bank Group defines the term Public-Private Partnership (PPPs) as “*any contractual arrangement between a public entity or authority and a private entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility*.”The term infrastructure refers to:   * Energy: electricity generation, transmission, and distribution, and natural gas transmission and distribution pipelines * Information and communications technology (ICT): ICT backbone infrastructure * Transport: Airports, railways, ports, and roads. * Water: potable water treatment and distribution, and sewerage collection and treatment.       **Concepts:**  PPPs is defined as “*any contractual arrangement between a public entity or authority and a private entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility*.”  The term infrastructure refers to:   * Energy: electricity generation, transmission, and distribution, and natural gas transmission and distribution pipelines * Information and communications technology (ICT): ICT backbone infrastructure * Transport: Airports, railways, ports, and roads. * Water: potable water treatment and distribution, and sewerage collection and treatment.      * **Comments and limitations:**   The limitations of the proposed indicator is that it does not account for other sectors such as education and health may account for a significant part of PPPs but they are not captured by the database. Expanding the data to include PPPs in other sector beyond infrastructure is something that the World Bank is considering but it is currently limited by budget constraints.  Unfortunately, PPI database does not collect data on civil society partnerships and this will not fit the currently methodology of data gathering and is outside the present work’s scope.  **Computation Method:**  The indicator has a established methodology that is available at the website <http://ppi.worldbank.org/methodology/ppi-methodology>and the data collection process is as follows:   * Team of researcher gather data for each of the regions using public sources (from government and MDBs websites); commercial news databases ( such as Factiva, Business   News America, ISI Emerging markets, and the Economist Intelligence Unit’s databases) as well as from commercial specialized and industry publications/subscriptions (Thomson  Financial’s Project Finance International, Euromoney’s Project Finance, Media Analytics’  Global Water Intelligence, Pisent Masons’ Water Yearbooks, and Platt’s Power in Asia, etc.), specialist portal (such as Privatization, IPAnet, and Privatization Barometer), Internet resources (such as web sites of project companies, privatization or PPP agencies, and regulatory agencies) sponsor information (primarily through their Web sites, annual reports, press releases, and financial reports such as 10K and 20F forms submitted to the NYSE) and multilateral development agencies primarily through information on their Websites, annual reports, and other studies.   * Data is uploaded to an administrative website through a template to make sure data is standardized. * Data is validated by a group of experts in Singapore. * Data is later uploaded to the public website (www.ppi.worldbank.org) and make it available free of charge.   The limitations of the proposed indicator is that it does not account for other sectors such as education and health may account for a significant part of PPPs but they are not captured by the database. Expanding the data to include PPPs in other sector beyond infrastructure is something that the World Bank is considering but it is currently limited by budget constraints.  Unfortunately, PPI database does not collect data on civil society partnerships and this will not fit the currently methodology of data gathering and is outside the present work’s scope. | A Team of researcher gather data for each of the regions using public sources (from government and MDBs websites); and commercial news databases. | While the data is currently collected by the World Bank Group, PPP units at national and subnational level are identified as national data providers that could directly provide data on projects financially closed each year or they could actively validate data collected by World Bank group. | a) NGOAB, PMO  Administrative Data | a) NGOAB, PMO b) PPPA, PMO  c) ERD  Administrative Data | * Sector * geographical location * municipality * provice * country or region | Annual |  | 1st Round:  2016  2nd Round:  September  2019  3rd Round:  September  2020  4th Round:  September  2021  5th Round:  September  2022 | UNSC 51 replacement included in the 2020 comprehensive review  Part (a) reviewed at Dec. 2018 WebEx meeting: remain as TBD until all components of part (a) can be included (i.e. infrastructure, education and health) (classified as TBD)  IAEG-SDG 6th meeting: need to develop methodology to measure amount of dollars committed to civil society partnerships |
| Target 17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts | | | | | | | | | | | | |
| 17.18.1 Statistical capacity indicator for Sustainable Development Goal monitoring |  | TBD |  | Not Available | Not Available |  | SDG Cell, SID  Administrative Data |  | 5-yearly |  | 1st Round:  2019  2nd Round:  December  2020  3rd Round:  December  2025  4th Round:  December  2030 | Considered at least one disaggregation  UNSC 51 replacement included in the 2020 comprehensive review |
| 17.18.2 Number of countries that have national statistical legislation that complies with the Fundamental Principles of Official Statistics | PARIS21 | Tier I | **Definition:**  The indicator refers to the number of countries that have national statistical legislation that complies with the Fundamental Principles of Official Statistics. This refers to the number of countries that have a statistical legislation which respects the principles of UNFOP.  **Concepts:**  National statistical legislation: The statistics law defines rules, regulation, measures with regard to the  organization, management, monitoring and inspection of the statistical activities in a systematic way, strength, effectiveness and efficiency to assure the full coverage, accuracy and consistency with facts in order to provide reference for policy direction, socio economic planning, and contribute to the  country’s development to achieve wealth, culture, well-being and equity.  UN Fundamental Principles of Official Statistics  The Fundamental Principles for Official Statistics adopted by the United Nations Statistical Commission, in its Special Session of 11-15 April 1994 are:  Principle 1. Official statistics provide an indispensable element in the information system of a society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens’ entitlement to public information.  Principle 2. To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.  Principle 3. To facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.  Principle 4. The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.  Principle 5. Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.  Principle 6. Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.  Principle 7. The laws, regulations and measures under which the statistical systems operate are to be made public.  Principle 8. Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.  Principle 9. The use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.  Principle 10. Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.  **Comments and limitations:**  Information on the indicator is collected through a survey of NSOs. The low response rate (37%) means that interpretation of the data is subject to caution.  **Computation Method:**  Indicator 17.18.2 = ∑countries of which the law has provisions relating to all the ten Principles | Online survey The Director General(DG) of NSO | National Statistics Offices (NSO) of countries. | BBS | SDG Cell, SID  Administrative Data | Not Applicable | 5-yearly | Group 1 | 1st Round:  2018  2nd Round:  December  2019  3rd Round:  December  2024  4th Round:  December  2029  5th Round:  December  2030 | Data availability reviewed in Oct. 2019  (classified as Tier I)  Reviewed at 6th IAEG-SDG meeting (classified as Tier II) |
| 17.18.3 Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding | PARIS21  **Partner Agencies:**  UNSD,  Regional Commissions,  World Bank | Tier I | **Definition:**  The indicator Number of countries with a national statistical plan that is fully funded and under implementation is based on the annual Status Report on National Strategies for the Development of Statistics (NSDS). In collaboration with its partners, PARIS21 reports on country progress in designing and implementing national statistical plans. The indicator is a count of countries that are either (i) implementing a strategy, (ii) designing one or (iii) awaiting adoption of the strategy in the current year.  **Computation Method:**  Simple count of countries that are either (i) implementing a strategy, (ii) designing one or (iii) awaiting adoption of the strategy in the current year. | Data is provided by the National Statistical Offices. The information is collected annually and verified by direct email correspondence with the national focal point for the country's NSDS (National Strategy for Development of Statistics). | National Statistical Offices | BBS | SDG Cell, SID  Administrative Data | Not Applicable | 5-yearly | Group 1 | 1st Round:  2018  2nd Round:  January  2019  3rd Round:  January  2024  4th Round:  January  2029  5th Round:  January  2030 |  |
| Target 17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries | | | | | | | | | | | | |
| 17.19.1 Dollar value of all resources made available to strengthen statistical capacity in developing countries | PARIS21  **Partner Agencies:**  UNSD,  Regional Commissions,  World Bank | Tier I | **Definition:**  The indicator Dollar value of all resources made available to strengthen statistical capacity in developing countries is based on the Partner Report on Support to Statistics (PRESS) that is designed and administered by PARIS21 to provide a snapshot of the US dollar value of ongoing statistical support in developing countries.  **Comments and limitations:**  Measuring support to statistics comes with many methodological challenges. The financial figures presented in the PRESS therefore need to be interpreted with these challenges in mind. For instance, PRESS numbers rely on the Creditor Reporting System (CRS) for ODA commitments supplemented by voluntary reporting from additional donors. Yet, full coverage of all programs cannot be guaranteed. Furthermore, the reported commitments can be seen as an upper bound to the actual support to statistics for mainly three reasons. First, double counting of projects may occur when the donor and project implementer report on the same project or when all project co-financers report project totals. Second, the reported numbers may be inflated by working with project totals for multi-sector projects, which comprise only a small statistics component. Finally, the PRESS reports on donor-side commitments which do not always translate to actual disbursements to the recipient countries.  The indicator only captures international support to statistics and does not account for domestic resources.  **Computation Method:**  The financial amounts were converted to US dollars by using the period average exchange rate of the commitment year of the project/program. In cases where the disbursement amounts were reported, the exchange rate used was the period average of the disbursement year. | OECD Creditor Reporting System (CRS), PARIS21 | PARIS21/OECD |  | SDG Cell, SID  Administrative Data | * Geographical Area * ODA Sectors * Area of Statistics * Method of Financing: Grant, Loan | Annual | Group 2 | 1st Round:  July 2019  2nd Round:  July 2020  3rd Round:  July 2021  4th Round:  July 2022  5th Round:  July 2023 |  |
| 17.19.2 Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration | UNSD  **Partner Agencies:**  UNFPA,  DESA Population Division,  other involved agencies in the inter-agency group on CRVS | Tier I | **This information only refers to 17.19.2 (a)**  **Definition:**  The indicator tracks the proportion of countries that have conducted at least one population and housing census in the last 10 years. This also includes countries which compile their detailed population and housing statistics from population registers, administrative records, sample surveys or other sources or a combination of those sources.  **Rationale:**  Population and housing censuses are one of the primary sources of data needed for formulating, implementing and monitoring policies and programmes aimed at inclusive socioeconomic development and environmental sustainability. Population and housing censuses are an important source for supplying disaggregated data needed for the measurement of progress of the 2030 Agenda for Sustainable Development, especially in the context of assessing the situation of people by income, sex, age, race, ethnicity, migratory status, disability and geographic location, or other characteristics.  In recognition of the above, the ECOSOC resolution E/RES/2015/10 establishing the 2020 World Population and Housing Census Programme urges Member States to conduct at least one population and housing census during the period from 2015 to 2024, taking into account international and regional recommendations relating to population and housing censuses and giving particular attention to advance planning, cost efficiency, coverage and the timely dissemination of, and easy access to, census results for national stakeholders, the United Nations and other appropriate intergovernmental organizations in order to inform decisions and facilitate the effective implementation of development plans and programmes.  The indicator tracks the proportion of countries that have conducted at least one population and housing census in the last 10 years and hence provides information on the availability of disaggregated population and housing data needed for the measurement of progress of the 2030 Agenda for Sustainable Development,.  **Disaggregation:**  The indicator could be disaggregated by geographic region.  **This information only refers to 17.19.2 (b)**  **Definition:**  According to the Principles and Recommendations for a Vital Statistics System, Revision 3 (<https://unstats.un.org/unsd/demographic/standmeth/principles/M19Rev3en.pdf>), a complete civil registration is defined as: “The registration in the civil registration system of every vital event that has occurred to the members of the population of a particular country (or area), within a specified period as a result of which every such event has a vital registration record and the system has attained 100 per cent coverage.”  In a given country or area, the level of completeness of birth registration can be different from the level of completeness of death registration.  There exist several methods for the evaluation of completeness of birth or death registration systems.  An elaboration of these methods is available at Principles and Recommendations for a Vital Statistics System, Revision 3. The evaluation and monitoring of quality and completeness of birth and death registration systems are addressed in Part three, sub-Chapters: D. Quality assessment methods; E. Direct versus indirect assessment, and F. Choosing appropriate methods for assessing completeness and qualitative accuracy of registration and register-based vital statistics (para 579 to 622).  Indicator 17.19.2(b) has two parts; the first concerning the birth registration and the second concerning the death registration of each individual country or area.  **Computation Method:**  The two sub-indicators of the indicator 17.19.2(b) are expressed as proportions: at the global level, the proportion of countries that have achieved 100 per cent birth registration is measured as the number of countries that have achieved 100 per cent birth registration to the total number of countries. The computation is done in an analogous manner for the death registration part as well as for the regional measurements of both birth and death registration sub-indicators.  The latest compiled data for this indicator are part of the Statistical Annex to the 2017 SG’s progress report, available at <https://unstats.un.org/sdgs/files/report/2017/secretary-general-sdg-report-2017--Statistical-Annex.pdf> (please refer to the last two pages). These data are compiled using the country-reported information on availability and completeness of birth and death registration data at the country level, to the United Nations *Demographic Yearbook*, via the *Demographic Yearbook* Vital Statistics questionnaire and accompanying metadata. United Nations *Demographic Yearbook* collection and associated online compilations are published by the United Nations Statistics Division of the Department of Economic and Social Affairs. Please refer to: <https://unstats.un.org/unsd/demographic/products/dyb/default.htm>  At the present time, the thresholds used for compiling the data for the indicator 17.19.2(b) are 90 per cent for birth registration and 75 per cent for death registration, due to the classification that has been used in the *Demographic Yearbook* metadata questionnaire on vital statistics. This classification has currently been modified to enable reporting according to the exact formulation of the indicator 17.19.2(b). | The national level of completeness of birth and death registration is provided by the National Statistical Offices of all countries and areas to the United Nations Statistics Division as part of the annual data collection for the United Nations Demographic Yearbook. This information is usually reported as part of the metadata worksheets of the Vital Statistics questionnaire. The template of this questionnaire is available at: https://unstats.un.org/unsd/demographic/products/dyb/dybquest.htm | National Statistical Office or Census Agency | (a) BBS  Administrative Data | (a) BBS (PHC), SID  (b) ORG, LGD  Administrative Data | * Sub-National Administrative Areas * Income * Geographical Location * Sex: Male/Female * Age * Disability | Annual | Group 1 | 1st Round:  2018  2nd Round:  July 2019  3rd Round:  July 2020  4th Round:  July 2021  5th Round:  July 2022 |  |

1. In order to maintain consistency with the terminology used in SEEA-Water, the terms water use and water abstraction are utilized in this text. In particular, “water abstraction” must be considered synonym of “water withdrawal, as expressed in both AQUASTAT and the statement of the SDG target 6.4. [↑](#footnote-ref-2)
2. In AQUASTAT, as well as in the World Bank databank and in other national and international datasets, the MIMEC sector is referred to as “Industry”. Also, SEEA-Water uses the term “industrial use” of water. [↑](#footnote-ref-3)
3. The related body of comments of the ILO supervisory bodies are: *Digest of Decisions and Principles of the Freedom of Association Committee of the Governing Body of the ILO* (ILO, 2006); *Freedom of Association and Collective Bargaining: General Survey of the Reports on the Freedom of Association and the Right to Organise Convention (No. 87), 1948, and the Right to Organise and Collective Bargaining Convention (No. 98)* (ILO, 1994); *General Survey on the Fundamental Conventions Concerning Rights at Work in Light of the ILO Declaration on Social Justice for a Fair Globalization, 2008* (ILO, 2012). [↑](#footnote-ref-4)
4. In cases where there is no relevant national legislation, violations in practice refer to acts committed in violation of FACB rights as defined by the ILO. [↑](#footnote-ref-5)
5. The formula is thus: (x\*10/95), where x = the weighted non-normalized score for a given country and year and is capped at 95. [↑](#footnote-ref-6)
6. See, for instance, Art. 1 of the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD); Art. 1 of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW); Art. 2 of the Convention on the Rights of Persons with Disabilities (CRPD); General Comment 18 of the Human Rights Committee (paragraphs 6 and 7) and General Comment 20 of the Committee on Economic, Social and Cultural Rights (paragraph 7). [↑](#footnote-ref-7)
7. See, for instance, General Comment 20 of the Committee on Economic, Social and Cultural Rights, and United Nations Secretary-General’s bulletin (ST/SGB/2008/5) on Prohibition of discrimination, harassment, including sexual harassment, and abuse of authority. [↑](#footnote-ref-8)
8. More information on the grounds of discrimination prohibited by international human rights law is available at: <http://www.ohchr.org/Documents/Issues/HRIndicators/HumanRightsStandards.pdf> [↑](#footnote-ref-9)
9. Pattern of reporting events as having occurred more recently that they actually did. This is a phenomenon commonly observed in crime victimization surveys. [↑](#footnote-ref-10)
10. [↑](#footnote-ref-11)
11. [↑](#footnote-ref-12)
12. [↑](#footnote-ref-13)
13. [↑](#footnote-ref-14)
14. [↑](#footnote-ref-15)
15. [↑](#footnote-ref-16)
16. Landsat Imagery is made up of several spectral bands that can be used to identify impervious surfaces roughly corresponding to built-up areas, making it possible to classify them by human-assisted algorithms into several classes with a high degree of accuracy. [↑](#footnote-ref-17)
17. . [↑](#footnote-ref-18)
18. [↑](#footnote-ref-19)
19. *UNEP (2010). ABC of SCP: Clarifying Concepts on Sustainable Consumption and Production.* [↑](#footnote-ref-20)
20. The method for compiling international dollar prices is described in FAO (1993) [↑](#footnote-ref-21)
21. [↑](#footnote-ref-22)
22. Applicable to Parties bound by the amendments to the Stockholm Convention. Parties that are not bound by the amendments will by default receive one point for each such amendment. [↑](#footnote-ref-23)
23. NOAA. What is ocean acidification? National Ocean Service website <https://oceanservice.noaa.gov/facts/acidification.html>, 06/25/18 [↑](#footnote-ref-24)
24. [↑](#footnote-ref-25)
25. [↑](#footnote-ref-26)
26. [↑](#footnote-ref-27)
27. [↑](#footnote-ref-28)
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45. [↑](#footnote-ref-46)
46. [↑](#footnote-ref-47)
47. [↑](#footnote-ref-48)
48. Genn, G, *Paths to Justice: What People Do and Think About Going to Law* (Oxford: Hart, 1999), 12. [↑](#footnote-ref-49)
49. See [*Legal Needs Surveys and Access to Justice*](https://www.oecd.org/governance/legal-needs-surveys-and-access-to-justice-g2g9a36c-en.htm) , OECD (2019) [↑](#footnote-ref-50)
50. See Question I5 in Annex A for more information. [↑](#footnote-ref-51)
51. These types of disputes have broad applicability across countries as reflected in [*Legal Needs Surveys and Access to Justice*](https://www.oecd.org/governance/legal-needs-surveys-and-access-to-justice-g2g9a36c-en.htm) , OECD (2019), which builds upon a review of more than 60 large-scale legal need surveys conducted over the past 25 years. [↑](#footnote-ref-52)
52. Experimental evidence indicates that increasing a legal needs survey’s reference period from one to three years has only “a fairly modest” impact on problem reporting [Pleasence et al. (2016)] [↑](#footnote-ref-53)
53. [↑](#footnote-ref-54)
54. [↑](#footnote-ref-55)
55. [↑](#footnote-ref-56)
56. [↑](#footnote-ref-57)
57. The formulation ‘government services’ (also commonly called ‘administrative services’) is used in this metadata to mirror this more colloquial language used in the survey questionnaire. [↑](#footnote-ref-58)
58. *Good Governance Practices for the Protection of Human Rights* (United Nations publication, Sales No. E.07.XIV.10), p. 38 – cited in Report of the United Nations High Commissioner for Human Rights on the role of the public service as an essential component of good governance in the promotion and protection of human rights, Human Rights Council, 25th Session, 23 December 2013, A/HRC/25/27 [↑](#footnote-ref-59)
59. European Commission’s 2011 Communication regarding ‘A Quality Framework for Services of General Interest in Europe’, p. 3 [↑](#footnote-ref-60)
60. [↑](#footnote-ref-61)
61. [↑](#footnote-ref-62)
62. [↑](#footnote-ref-63)
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92. [↑](#footnote-ref-93)
93. [↑](#footnote-ref-94)
94. [↑](#footnote-ref-95)
95. [↑](#footnote-ref-96)
96. UN General Assembly, Resolution on Review of the United Nations Peacebuilding Architecture, A/RES/70/262 (12 May 2016); UN Security Council, Resolution 2282, S/RES/2282 (2016). [↑](#footnote-ref-97)
97. In case of bicameral parliaments, data will be obtained separately from the secretariat of each chamber, except where the two chambers share a secretariat / contact point. [↑](#footnote-ref-98)
98. See Holbrook, A. L., & Krosnick, J. A. (2010). Social desirability bias in voter turnout reports tests using the

    item count technique. Public Opinion Quarterly, 74 (1), 37{67}. [↑](#footnote-ref-99)
99. See Kuklinski, J. H., Cobb, M. D., & Gilens, M. (1997). Racial attitudes and the new south. The Journal of

    Politics, 59 (02), 323{349}. [↑](#footnote-ref-100)
100. See https://www.un.org/development/desa/ageing/wp-content/uploads/sites/24/2018/03/Report-of-the-United-Kingdom-of-Great-Britain-and-Northern-Ireland-on-ageing-related-statistics-and-age-disaggregated-data.pdf [↑](#footnote-ref-101)
101. If this indicator is being calculated from an existing survey that uses a non-standard response scale, please contact UNDP at [sdg16indicators@undp.org](mailto:sdg16indicators@undp.org) for guidance on identifying “positive” responses in non-standard response scales. [↑](#footnote-ref-102)
102. See, for instance, Art. 1 of the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD); Art. 1 of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW); Art. 2 of the Convention on the Rights of Persons with Disabilities (CRPD); General Comment 18 of the Human Rights Committee (paragraphs 6 and 7) and General Comment 20 of the Committee on Economic, Social and Cultural Rights (paragraph 7). [↑](#footnote-ref-103)
103. See, for instance, General Comment 20 of the Committee on Economic, Social and Cultural Rights, and United Nations Secretary-General’s bulletin (ST/SGB/2008/5) on Prohibition of discrimination, harassment, including sexual harassment, and abuse of authority. [↑](#footnote-ref-104)
104. More information on the grounds of discrimination prohibited by international human rights law is available at: <http://www.ohchr.org/Documents/Issues/HRIndicators/HumanRightsStandards.pdf> [↑](#footnote-ref-105)
105. Pattern of reporting events as having occurred more recently that they actually did. This is a phenomenon commonly observed in crime victimization surveys. [↑](#footnote-ref-106)
106. Estimates currently available for countries that are members of the OECD Development Assistance Committee. [↑](#footnote-ref-107)