




# COMPILATION OF GDP/QGDP IN AGRICULTURE SECTOR



Mohammad Eunoush  
Deputy Director  
National Accounting Wing, BBS



# Outline

Industrial Classification

GDP

Crops and horticulture

Animal farming

Forestry

Fishing

# Classification of Industries (ISIC Rev.4)

Section	Divisions	Description
A	01–03	Agriculture, forestry and fishing
B	05–09	Mining and quarrying
C	10–33	Manufacturing
D	35	Electricity, gas, steam and air conditioning supply
E	36–39	Water supply; sewerage, waste management and remediation activities
F	41–43	Construction
G	45–47	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	49–53	Transportation and storage
I	55–56	Accommodation and food service activities
J	58–63	Information and communication
K	64–66	Financial and insurance activities
L	68	Real estate activities
M	69–75	Professional, scientific and technical activities
N	77–82	Administrative and support service activities
O	84	Public administration and defence; compulsory social security
P	85	Education
Q	86–88	Human health and social work activities
R	90–93	Arts, entertainment and recreation
S	94–96	Other service activities
T	97–98	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
U	99	Activities of extraterritorial organizations and bodies

Agriculture

Industry

Service

# Gross Domestic Product (GDP)

- Gross Domestic product (GDP) is the value of all goods and services produced in a specific period of time (one year) minus the goods and services consumed in the production process during that period within the territory of a country.
- $GDP = \sum \text{Gross Value Added (GVA)}$
- $GVA = \text{Value of Gross Output (GO)} - \text{Value of Intermediate Input (IC)}$
- $GO = \text{Production} \times \text{Price}$
- IC is used in the process of production
- GDP is estimated following SNA
- In Bangladesh GDP is estimated by 19 economic activity sectors  
Of which Agriculture is the **third** largest sector
- It is Estimated in both Current and Constant Price

# Coverage of Agriculture Sector



- Crops and horticulture
- Animal farming
- Forestry
- **Fishing**





# **GVA of Crops and Horticulture**

## **(Scope and Coverage)**

- **Growing of crops; market gardening; horticulture**
- **Growing of non-perennial (o11) and perennial (o12) crops**
- **Plant propagation (o13)**
- **Production of non-perennial crops whose growth generally follows a yearly cycle (o111, o112,...) such as cereals, vegetables etc.**
- **Production of perennial crops whose growth generally follows long (more than a year) cycle (o121, o122,...) such as fruits, beverage (e.g. coffee, cocoa, tea etc.) and spices crops**
- **Plant propagation includes growing of plants for planting, growing of plants for ornamental purposes etc.**

# GVA of Crops and Horticulture (Data source)

- Agriculture Wing, BBS
- Census of Agriculture, BBS
- Survey on Forestry, Nursery and Horticulture Activities in Bangladesh,
- BFIDC (For Rubber)
- Survey on the Cost of Production for Selected Crops in Bangladesh, BBS
- Productivity survey of selected crops, BBS
- Survey on the Use of Agricultural Inputs for Major Crops in Bangladesh, BBS
- Survey on gross marketed surplus of agricultural commodities
- Department of Agriculture Marketing (DAM)
- **Household Income and Expenditure Survey (HIES), BBS**
- Input-Output (I-O) table of BIDS/Planning Commission

# GVA of Crops and Horticulture (Methods)

- Production of 146 crops (including nursery and horticultural products) are considered
- After deducting wastage during the harvesting period, the net available production is estimated
- The by-products of the main crops like paddy, wheat, jute etc. are also included in the estimation of net (total) production



# GVA of Crops and Horticulture (Methods)

- **HIES data are used for adjusted minor crops production**
- **Producer price/Harvest price (DAM) are used for estimating Gross Output**
- **Intermediate Input (IC) are estimated as percentage of Output for individual crops using I-O table (Planning Commission) and input cost survey (BBS)**
- **Gross Value Added (GVA) are estimated by deducting Intermediate Input (IC) from Gross Output**
- **Output of irrigation services is newly included in the revised and rebased estimate (Base: 2005-06, 2015-16)**

# GVA of Animal Farming

## (Scope and Coverage)

- Farming of animals where
- **HH livestock and poultry birds are considered**
- **Farm livestock and poultry birds are considered**
- Within group 014 (Farming of animals), the activities are grouped according to the type of animal
- Meat, Milk, Egg, Hide and Skin etc. are used
- **Turkey fowls are newly included**

# GVA of Animal Farming (Data source)

- Livestock Survey, BBS
- Survey on Livestock and Poultry Activities in Bangladesh, BBS
- Census of Agriculture, BBS
- Department of Agriculture Marketing (DAM)
- Department of Livestock



Fig. 2. First AI buffalo calf born in Bangladesh

# GVA of Animal Farming (Methods)

- Estimates of animal farming populations are made on the basis of intercensal growth rates of livestock population and then adjusted in the light of the current livestock surveys



# GVA of Animal Farming (Methods)

- **Slaughter rate are used separately for HH and Farm based livestock and poultry to have a meat production**
- **Milk rate, Egg rate are used separately for HH and Farm**
- **Hide and skin; Animal fat and others are also used**
- **Price of the respected items are collected from DAM and used in the estimation of Gross Output (GO)**
- **Intermediate input (IC) is measured from the HH and Farm Based Survey of Livestock and Poultry, BBS**
- **Certain percent of the value of output for individual livestock and poultry (HH and Farm) is deducted as intermediate consumption or input cost (IC) to obtain the GVA in the animal farming sub-sector**



# GVA of Forestry (Scope and Coverage)

- Forestry, logging and related service activities
- **Both public** and private forestry is considered. Major activity of reserve forest (public) is generally conservation and development
- The output data of forestry by types of forest products such as timber, bamboo, honey, firewood etc.





# GVA of Forestry (Data source)

- Report on Farm Forest Survey, BBS
- Household Based Forestry Survey, BBS
- Household Income and Expenditure Survey (HIES), BBS
- Bangladesh Forest Department
- Bangladesh Forest Industries Development Corporation (BFIDC)
- Department of Agriculture Marketing (DAM)



# GVA of Forestry (Methods)

- The output is estimated by establishing a bench mark year data with the help of consultation with the Chief Conservator of forest, and trade sources
- Data from the periodic surveys like Farm Forest Surveys and HIES are also used in final adjustments of the annual estimates
- Different indices like Wood Product Index, Small Scale Manufacturing Index and Intercensal Rural Household Growth Rate
- Finally, the gross value of output is reduced by a certain percent to account for the input costs (IC) to arrive at the GVA of this sub-sector
- **Services of BFIDC is newly included**

# GVA of Fishing (Data source)

- Report on the Survey of Ponds, BBS
- Findings from the Survey on Fisheries Activities in Bangladesh, BBS
- Ad-hoc Fish Species Survey of, BBS
- Case Studies on Selected Economic Activities
- Household Income and Expenditure Survey (HIES), BBS
- Department of Fisheries (DOF)
- Department of Agriculture Marketing (DAM)





# GVA of Fishing (Methods)

- The activities in the fishing sector include (i) inland and (ii) marine fishing
- Estimates of the aggregate fish production, both inland and marine are obtained from DOF and validate with HIES data
- Estimated fish production (inland and marine) are disaggregated by major fish species
- The gross value of production thus arrived at is then reduced by the input proportion or intermediate consumption rates to obtain the gross value added



# GVA of Fishing (Methods)

- In the new estimates inland fish production has been divided into **capture and culture** separately
- In the revised estimate **seed fish (pauna)** is included as output of fishing but it is excluded from value added as an input cost
- Sundry fish (**dry fish**) is also included
- Value added of **Fisheries Development Corporation (FDC)** is included in the revised estimates

# QGDP of Agriculture Sector

- Crops and Horticulture

- Quarterly production data of selected crops

[illegible]



# QGDP of Agriculture Sector(contd.)

- **Animal Farming**

- IIP of meat processing
- Production of selected items (meat, milk, egg)

- **Forestry**

- IIP of wood and wood products

- **Fishing**

- Quarterly fish production data

# Thank You

# Q & A

