# GDP/QGDP Compilation of Industry Sector

January, 2024

Md. Mahbubur Rahman
Deputy Director
Bangladesh Bureau of Statistics (BBS)

# Outline

- Introduction

- Industrial classification

- Mining and quarrying

- Manufacturing

- Electricity, gas, steam and air conditioning
- Water supply: sewerage, waste management and remediation activities
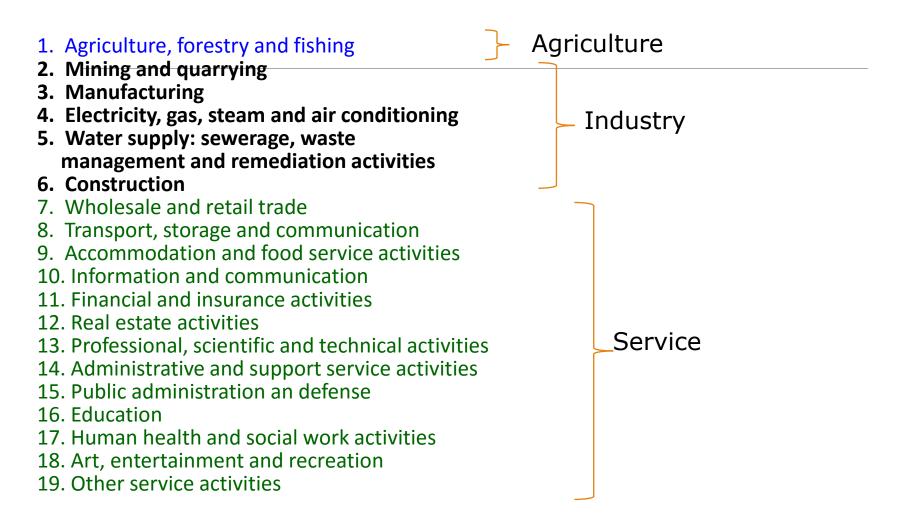- Construction

# Introduction

In practice, GDP is compiled by industrial sectors of the economy.

For classification of economic activities UN International Standard Industrial Classification (ISIC) framework is followed.

According to ISIC rev.4, the economic activities of Bangladesh are classified into 19 industrial sectors.

# Industrial Classifications by ISIC, rev.4

1. Agriculture, forestry and fishing
2. **Mining and quarrying**
3. **Manufacturing**
4. **Electricity, gas, steam and air conditioning**
5. **Water supply: sewerage, waste management and remediation activities**
6. **Construction**
7. Wholesale and retail trade
8. Transport, storage and communication
9. Accommodation and food service activities
10. Information and communication
11. Financial and insurance activities
12. Real estate activities
13. Professional, scientific and technical activities
14. Administrative and support service activities
15. Public administration an defense
16. Education
17. Human health and social work activities
18. Art, entertainment and recreation
19. Other service activities

Agriculture

Industry

Service

**20. Activities of households as employers**; **21. Activities of extraterritorial organizations and bodies**

# GDP of Industry sector

## 3. Mining and Quarrying:

▶ This sector includes natural gas and crude petroleum, coal, hard rock, stones and boulders, sand, crude salt, limestone, white clay.

▶ Production method is used to estimate value-added for this sector, i.e.

$$GVA = GO - IC$$

▶ For natural gas and crude petroleum, coal, stones and boulders, limestone and white clay GO is estimated by multiplying total production with the respective producer prices.

# GDP of Industry sector

## 3. Mining and Quarrying (contd.):

Production of sand is indirectly estimated as a fixed ratio of cement (i.e. 1:6).

Also crude salt production is indirectly estimated considering HH consumption, industrial uses and import of salt.

Unit price index is applied to obtain the constant price estimates.

# GDP of Industry sector

## 3. Mining and Quarrying (contd.):

▶ Data source of Mining sector:

   ▶ PETROBANGLA

   ▶ Bangladesh Chemical Industries Corporation (BCIC)

   ▶ Regional/District Offices of BBS

   ▶ Bureau of Mineral Development

# GDP of Industry sector

## 4.    Manufacturing

Manufacturing sector consists of:

- Large scale industries (TPE>250 or FA >Tk.300 mill.)

- Small, medium and micro industries (10<=TPE<=250 or FA Tk.0.5 to 300 mill.)

- Cottage industries (TPE<10 or FA <Tk.0.5 mill.)

**Large, Small-Medium-Micro (SMME) industries**

- Benchmark estimate of large and SMME industries are derived from the Survey of Manufacturing Industries (SMI).

- For successive years, benchmark estimates are extrapolated using monthly Index of Industrial Production (IIP) at 3-digit level.

# GDP of Industry sector

## 4. Manufacturing

---

- For compiling IIP, BBS collects data from more than 1900 different manufacturing industries every month.

- PPI is used to obtain current price estimate of manufacturing sector.

- Data sources:
  - Census/Survey of Manufacturing Industries (CMI/SMI)
  - Current Industrial Production Statistics (IPS), BBS
  - Export Promotion Bureau (EPB)
  - National Board of Revenue (NBR)

# GDP of Industry sector

## 4.   Manufacturing

**Cottage industries**

- Benchmark estimates are derived from the Cottage Industries Survey.

  - Extrapolation based on IIP for cottage industries.

  - Data sources:

    - Industrial Production Statistics, BBS

    - Cottage Industries Survey, 2011

    - Economic Census, 2013

    WS

# GDP of Industry sector

5. **Electricity, Gas, steam and air conditioning supply:**

**Electricity:**

Production method is used for estimation.

Output and input costs are used from annual/administrative reports of respective organization.

Unit price index of electricity is used as deflator.

Data source:

- Power Development Board (PDB),

- Dhaka Electric Supply Company Ltd. (DESCO)

- Rural Electrification Board (REB)

- Budget estimates of autonomous bodies of the MoF

- Power Grid Company of Bangladesh (PGCB)

- Summit power, KPCL etc.

# GDP of Industry sector

**5. Electricity, Gas, steam and air conditioning supply:**

**Gas:**

GVA of this sub-sector is estimated by production method.

From the value of output (sale minus purchase), inputs (administrative cost, repair & maintenance etc.) are deducted to obtain gross value added of gas distribution.

Unit price index of gas is used as deflator.

Data source:

◦ PETROBANGLA

◦ Titas Gas Field Transmission and Distribution Co. Ltd.

◦ Jalalabad Gas T and D System Ltd.

◦ Bakhrabad Gas  T and D System Ltd.

◦ Karnafuly Gas Distribution limited

◦ West Region Gas Company

# GDP of Industry sector

## 5. Electricity, Gas, steam and air conditioning supply:

**Steam and air conditioning supply :**

▶ This activity is not available in Bangladesh perspective.

# GDP of Industry sector

5. **Water supply: sewerage, waste management and remediation activities**

**Water supply:**

➤ Production method is used for estimation.

➤ GVA is obtained by the differences of sales (or receipts from sale of water and sewerage services) and IC used in the generation of these services.

➤ Production and distribution of water and sewerage services of DWASA, CWASA, KWASA are included.

➤ The output of water supply in district headquarters, municipalities and city corporation are derived from respective annual budgets.

➤ Unit price index of water is used as deflator.

➤ Data source:

  ➤ Dhaka WASA

  ➤ Chittagong WASA

  ➤ Khulna WASA

  ➤ Municipalities/city corporation  budget document

# GDP of Industry sector

## 6. Construction:

- Output of residential and non-residential building construction is derived from the commodity flow of main construction materials such as cement, iron & steel, bricks, timber and fixtures & fittings.

- Benchmark estimate of kutcha house construction derive on the basis of special study. Benchmark estimates are extrapolated to current year using growth rate of SVRS kutcha dwelling structure.

- Building material price index (BMPI) is used as deflator to obtain constant price estimates of GVA.

- Data sources:
  - National Board of Revenue (NBR)
  - Current Industrial Production Section, NAW
  - Bangladesh Bank

# Compilation of QGDP

- QGDP is a high frequency indicator.

- Appropriate indicator.

- Benchmarking.

- Estimation of QGDP at current price.

- Trend analysis

# Thank You