

Agricultural Cost of Production Statistics in Bangladesh

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Country Profile - Bangladesh

Area	: 147,570 sq. km
Population	: 158.9 million
Population Density:	1077 persons per sq. km
Location	: In the West, North & North-East: India In the South East: Myanmar In the South: Bay of Bengal
Average Height:	10m above sea level.
Capital City	: Dhaka
Language	: Bengali
Government	: Parliamentary Form
Main River	: The Padma, the Jamuna & the Meghna
Climate	: Sub-tropical
Temperature	: 7.22 - 22.77 °C in winter & 23.88 - 38.5 °C in summer
Main Export	: Jute, Tea, Garments, Frozen Fish etc.



BBS was established in 1974 consolidating following four organizations

1. Bureau of Statistics under Ministry of Planning
2. Population Census Commission under Ministry of Home Affairs
3. Bureau of Agriculture Statistics under MoA
(Field office was inbuilt for regular activities)
4. Agriculture Census Commission under MoA

Ministry of Planning

Statistics and Informatics Division

Bangladesh Bureau of Statistics

Census Wing

Agriculture Wing

Industry and Labour Wing

FA and MIS

National Accounting Wing

ICT & Data Processing Wing

Demography and Health Wing

Statistical Staff Training Institute (SSTI)

Divisional Statistical Office

District Statistical Office

Upazila
Statistical
Office

Thana
Statistician
Office

Major Activities

- Estimation of Area, Production and Yield rate of 6 major and 120 minor crops following the survey calendar
- Forecasting of Area and production of major crops
- Estimation of crop damage caused by natural calamities
- Estimation of monthly agriculture labour wage rate by gender
- Estimation of cost of production of major crops
- Preparation of annual land use irrigation statistics

Major Activities (con..)

- Estimation of cost of production of major and minor crops (Irregular) survey
- Collect data on forestry, fisheries and livestock (secondary source)
- Preparation and publication of Yearbook of Agricultural Statistics
- Coordinate and cooperate national and international organizations
- Harmonize the concepts and definitions as well as methodologies as per recommendations of international organizations

Legal Arrangement

□ Statistics Act, 2013

Agriculture statistics mentioned in different sections-

Section-6 (Ga)- Population census, agriculture census, fisheries and livestock census, economic census and survey programmes

Section-6(Dha)-Land use statistics , annual crop production statistics.

Crop Classifications

Size of Production and area

Major Crops in Bangladesh: Rice (Aus, Aman, Boro), Wheat, Potato and Jute. Major crops is considered on the basis of volume of production and area

- **Minor Crops:** There are 120 minor crops in Bangladesh for which annual production statistics are produced

Crop Classifications (major crops)

Crop Class	Total Crop
Cereals	4
Fibres	1
vegetables	1
Total	6

Crop Classifications (Minor Crops)

Crop Class	Total Crop	Crop Class	Total Crops
Cereals	9	Fruits-Temporary	5
Pulses	8	Fruits-Perennial	19
Oil Seeds	9	Winter-vegetables	20
Spices and Condiments	10	Summer vegetables	14
Sugar Crops	6	Other Fodders	5
Fibers	5	Flowers	5
Drugs & Narcotics	5	Total	120

Cost of production

- Bangladesh is an agricultural country and most of the inhabitants are involved directly or indirectly for their livelihood.
- Production of crops, cost of production and market price of crops are interrelated.
- Government has to give proper attention to these three factors so that the farm gate price of the crop produced during the harvest time.
- BBS annually conducts the cost of production survey of 6 major crops (Aus, Aman, Boro, Wheat, Potato and Jute)
- BBS conducts cost of production survey on important minor crops by ad-hoc survey .

Objectives

- To estimate per acre production cost
- To estimate per acre yield rate
- To estimate area under cultivation
- Per acre production value
- Management of food
- Export-import decision making of food

Periodic survey on cost of production

Name of project	No. of crops	Name of crops Survey	year
UCPSCP (Updating and Extension of Agriculture Cluster Plots and Survey of Cost of production Project)	10	Aus, Aman, Boro, Potato, Jute, Wheat, Maize, Onion, Oil seeds & Pulses	2009-10
Cost of Production Survey of Some selected crops 2011-12	04	Papaya, Brinjal Tomato, water melon	2011-12
PASDAC (Productivity Assessment Survey of Different Agricultural Crops	09	Banana, Chilly pumpkin, Maize Turmeric , Onion, Cauliflower Pineapple, Zinger	2013-15

The Pumpkin Survey 2014

Methodology:

- ❑ Using the frame of Agriculture census -2008, household having at least one decimal area of land under pumpkin cultivation has been considered
- ❑ 30 PSUs were selected from each division using the systematic random sampling

Total 210 PSUs were systematically selected in the whole country and from each PSU 30 households were selected using systematic random sampling. If the household cultivating pumpkin was less than 25 then those were selected from adjacent Mauza (the lowest administrative unit)

The Pumpkin Survey 2014

Production ingredient (per acre)	Cost (Tk)	%	\$ (80 tk= 1 \$)
Land preparation	3273	13.27	40.91
Seed/seedling & plantation	4217	17.10	52.71
Weeding	2094	8.49	26.18
Irrigation	2371	9.61	29.64
Pesticides/ insecticides	2078	8.43	25.98
Fertilizer	5308	21.52	66.35
Hormone	501	2.03	6.26
Harvesting	3058	12.40	38.23
Transport	1431	5.80	17.89
Others	332	1.35	4.15
Total	24663	100.00	308.29

Annual survey on cost of production

1. Cost of production on Aus rice
2. Cost of production on Amam rice
3. Cost of production on Boro rice
4. Cost of production on Potato rice
5. Cost of production on Jute rice
6. Cost of production on Wheat rice

Methodologies

1. Farmers Interview in Cluster Area

- Total number of cluster in Bangladesh-10348 Area for each cluster 3-7 acres (average 5) Prepared in 80s based on census frame of agriculture census 1960
- Four cluster from each Upzilla
- Ten farmers are interviewed from each cluster

2. Validation

3. compilation

4. dissemination in Agricultural Yearbook

Scope

- six major crops for both cost and net profit estimates
- surveys are conducted after harvesting period
- Adhoc survey on important minor crops

Quality Checks

- If there had been found any error during data validation, it was checked and rechecked; and sometimes it had been sent back to the survey authority to decide how it would be treated
- Crosse recheck the data by sample survey

Weakness

- Availability of the farmer
- cost involvement at different phases
- Used fertilizer & seeds are produced by farmer
- Recall method
- Insufficient of **skilled personnel**

Steps Should be taken

- Collect monthly data from field level
- Collect farmer mobile no and communicate time to time
- More local and foreign training should be arranged for BBS personnel
- BBS Infrastructure Development in field level
- Proper Coordination & supervision

Importance

1. Food related decision making
2. Estimation of GDP
3. Agricultural extension policy making and monitoring
4. Input cost assessment (value chain assessment)
5. Market stability
6. Diversification of cropping pattern

Future Plan/ Proposed Projects

- Agriculture (Crops, Fisheries and Livestock) Census-2018 (2016-17 to 2019-20),
- Agricultural and Rural Statistics Survey -2018
- Livestock Survey 2018
- Forty Five Year Major Crops Statistics (1971-2015)
- New Sampling Frames for crop, fisheries and Livestock Survey from 2018 (AC)
- Automation of data entry and Compilation

Global/National Initiatives to Improve AS

1. National Strategy for Development of Statistics (NSDS)
2. Global Strategy to Improve Agricultural and Rural Statistics
3. In-depth Capacity Assessment of ARS
4. Strategic Plan to improve Agricultural and Rural Statistics-SPARS
6. Improvement of Yield Statistics
7. Improvement of Area Statistics, Forecasts and
8. Generating Private Stock of Food Grain Statistics

Important Publications

1. Yearbook of Agriculture Statistics, 2010, 2011, 2012, 2013, 2014, 2015
2. Cost of Production Survey report:
Aus, Aman, Boro, Wheat, Maize, Potato,
Jute, Onion, Oilseeds & Pulses
3. Cost of production Survey report (2011-12):
Papaya, Brinjal, Tomato, Water-melon
4. Report on the productivity Survey, 2013-15:
Banana, Turmeric, Pineapple, Pumpkin, Cauliflower, Chili, Maize, Onion
& Giger
5. In-depth Capacity Assessment report, 2014

Important Publications (con..)

6. Analytical Report on Methodologies of Crops Estimation & Forecast and Private Stock of Food Grain Survey 2016-17

7. Methodology on Sample Crop Cutting (manual in English and Bengali in all Upazila Statistics and agriculture offices)-2014

8. Bangladesh Food Balance Sheet 2009-13

9. 45 Years of Agriculture Statistics on Major Crops (Aus, Aman, Boro, Jute, and Wheat) (draft)

10. Bangladesh Strategic Plan on Agricultural and Rural Statistics (2016-2030)



Thank you