Report on The Productivity Survey of Banana Crop

2013

Productivity Assessment Survey of Different Agricultural Crops Programme

BANGLADESH BUREAU OF STATISTICS

Statistics and Informatics Division

Ministry of Planning

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August 2014

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BANGLADESH BUREAU OF STATISTICS (BBS)
Statistics and Informatics Division (SID)
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Secretary
Statistics and Informatics Division (SID)
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Foreword

Agriculture plays a pivotal role in the economy of Bangladesh. This sector alone contributes 17% of annual GDP of the country. On the other hand, it offers both the opportunities of employment and livelihood to a large extent. It is worthy to mention that the country has a strong agriculture structure to maintain a sustainable development of the agriculture production of major and minor crops. As such the country enjoys the food security, sometimes with a buffer stock of major crops. Farmers of Bangladesh simultaneously produce various minor crops which also fulfill the demand of internal consumption of bulk population. In persuasion of the demand of statistics on production, cost of production and market price of various crops, Bangladesh Bureau of Statistics (BBS), apart from major crops, has also been putting efforts in conducting surveys on a series of minor crops.

I am happy that the Survey on Banana, the first of this series of nine minor crops, was conducted successfully and the report is being brought out timely. In Bangladesh banana is the only fruit crop, which is available throughout the year and it's consumption rate is also higher than any other fruits. It has been associated with humankind for centuries and many people consider banana as one of the finest fruits. Banana is a delicious fruit crop grows widely all over Bangladesh and also the most important fruit in the country from the point of food value and availability, throughout the year. Banana production offers suitable options for consumption and income generation in Bangladesh.

I would like to take this opportunity to extend my thanks to the Director General, BBS and his colleagues who were involved in different stages of the survey and finalizing the report. I believe that the policy makers, researchers, consumers and all other stakeholders will find this report very useful.

Dhaka
August, 2014

Md. Nojibur Rahman
Secretary

Director General
Bangladesh Bureau of Statistics (BBS)

Preface

Bangladesh is predominantly an agriculture country. Agriculture being the engine of growth of the economy, there is no other alternative but to develop agriculture sector for alleviation of poverty. Since provision of food security, improvement of the living standard and generation of employment opportunity of our population are directly linked to the development of agriculture, there have been continued efforts by the government for the overall development of this sector.

Production of crops cost of production of crops and market price of both major and minor crops are directly interrelated. Government has to give proper attention on these three factors so that the farmer get fair price of the crops produced during the harvest time.

In order to formulate proper policy and planning for the development of agriculture sector reliable and realistic data regarding production cost of crops in different phases such as cost relating to land preparation, seeds, weeding, insecticides, fertilizers, harvesting, transportation, leasing of land etc. are needed. Keeping these in view, the Productivity Assessment Survey of different Agricultural Crops (PASDAC) Program under the Bangladesh Bureau of Statistics has conducted survey on nine minor crops to obtain cost of production of each individual crop by following the scientific survey methods. This report contains the findings of the survey on Banana conducted during May-June 2013.

I express my sincere gratitude to the members of the Technical Committee and the Working Committee of the PASDAC Program for providing technical guidance for choosing spices crops for study, sample design, finalizing questionnaire and other related matters. I would like to convey thanks to Mr. Md. Nurul Islam, Joint Secretary (Rtd), Local consultant, Ms. Salima Sultana, Director, Agriculture wing, BBS and Mr. Md. Akhter Hassan Khan, Programme Director of this study and other officers/staff who worked hard in bringing out this report in time.

Any comments or constructive suggestions for improvement of such report in future will be appreciated.

Dhaka
August, 2014

Golam Mostafa Kamal
Director General

Acknowledgement

Now-a-days agriculture production statistics and cost of production statistics of different crops have wide demand among the users. This statistics provide necessary information to development planners & Policy makers. It also helps business community with market related information. The report on "The Productivity Survey of Banana Crop-2013" will be of great informative publication relating to minor crops production and cost of production.

I would like to express my gratitude to the honorable Secretary, Statistics and Informatics Division for his valuable guidance and directions provided during the survey Programme. I would also remain grateful to Mr. Golam Mostafa Kamal, Director General, BBS for his continued suggestions and support to me in doing all the things during the survey and for preparing the report.

I would like to appreciate Mr. Md. Nurul Islam, Joint Secretary (Rtd) for developing the methodology of the survey as well as the report and also thanks to Ms Salima Sultana, Director of Agriculture Wing, BBS for her valuable guidance and support that helped to conduct the survey. My thanks also go to Mr Md. Rezaul Karim, Assistant Statistical Officer for his works in data processing. I acknowledge the valuable suggestions and hard work of officials and staff of Agriculture Wing.

I am also grateful to the respondents who extended their cooperation for filling questionnaire and spending their valuable time in spite of their busy occupations. My sincere thanks to the field officials and staff involved in the survey.

Finally I acknowledge the work of the officers and staff who were involved in typing questionnaire, manuals and this report.

Dhaka
August, 2014

Md. Akhter Hassan Khan
Programme Director

Contents

Key Findings

SL. No.	Items	Bangladesh	Statatum-1 (Cox's bazar, Chittagong & CH districts)	Stratum-2 (Rest of the 59 districts)
1	**2**	**3**	**4**	**5**
1.	Area under banana producing in acre (Banana farm holding)	172872	39184	133688
2.	Percentage of household growing Banana by tenancy ;	100.00	17.91	82.09
	a. Own	86.97	17.43	69.57
	b. Share cropping	3.33	0.01	3.31
	c. Mortgage	1.38	0.07	1.31
	d. Lease	7.90	0.10	7.80
	e. Others	0.42	0.30	0.12
3.	Percentage of area growing Banana by farming year/land type	100.00	22.67	77.33
	a. First year	43.75	7.04	36.70
	b. Second year	27.18	5.52	21.66
	c. Third year and above year	28.94	10.05	18.89
	d. Homestead area	0.14	0.05	0.08
4.	Percentage of area growing Banana by varieties (excluding homestead area)	100.00	22.64	77.36
	a.Anaji	2.48	0.16	2.32
	b.Atia	0.88	0.13	0.75
	d. Bangla	20.39	17.15	3.24
	b. Champa	15.46	4.82	10.64
	c. Sabri	31.68	0.04	31.64
	a. Shagor	24.13	0.22	23.91
	g. Others	4.97	0.11	4.86
5.	Percentage of area growing Banana by cultivation type (excluding homestead area)			
	a. Single	73.55	6.12	67.42
	b. Mixed	26.45	16.51	9.93
6.	Number of labourers employed by component for per acre production of Banana			
	a. Planting	7.29	4.14	8.20
	b. Weeding.	21.63	7.45	25.79
	c. Harvesting	7.50	10.94	6.49
	Total	28.92	22.53	40.48
7.	Per acre leasing value	21614	8091	21624

SL. No.	Items	Bangladesh	Statatum-1 (Cox's bazar, Chittagong & CH districts)	Stratum-2 (Rest of the 59 districts)
1	**2**	**3**	**4**	**5**
8.	Per acre production cost (Tk.) by varieties			
	a. Anaji	37184	10952	39275
	b. Atia	9381	8065	9612
	c. Bangla	12087	10253	21749
	d. Champa	35373	10459	46682
	e. Sabri	40804	8469	40843
	f. Shagor	55558	11388	55967
	g. Others	42365	12319	43042
9.	Per acre production cost by farming year/land type	37364	10307	45294
	a. First year	47486	15107	53700
	b. Second year	32427	7475	38784
	c. Third year and above	26793	8474	36540
	d. Farm land			
	e. Homestead area	17151	14852	18685
10	Per acre production cost by type of input			
	a. Land preparation	4478	1044	5485
	b. Seedling	2975	1123	3517
	c. Trans-plant	1568	1029	1727
	d. Weeding	3861	1641	4512
	e. Irrigation	3392	13	4382
	d. Pesticide/insecticide	1881	31	2423
	e. Fertilizer	13803	258	17773
	f. Harvesting	1736	2731	1444
	g. Ripen	16	13	17
	i. Transport	813	1692	556
	j. Others	2841	733	3460
	Total	37364	10307	45294
11.	Per acre yield rate by farming year/land type			
	a. First year	9285	2819	10525
	b. Second year	11951	3756	14039
	c. Third year and above	9506	3825	12529
	d. Homestead area	5746	2861	7669
	All	10327	3497	12394
12.	Per acre production value by farming year/land type			
	a. First year	107039	27925	122221
	b. Second year	126846	30684	152344
	c. Third year and above	104929	28517	145586
	d. Homestead area	50865	24834	68217

SL. No.	Items	Bangladesh	Statatum-1 (Cox's bazar, Chittagong & CH districts)	Stratum-2 (Rest of the 59 districts)
1	**2**	**3**	**4**	**5**
	All	114606	28878	140582
13	Per acre production value by varieties			
	a. Anaji	110962	39137	116662
	b. Atia	27851	12084	30631
	c. Bangla	37324	27356	91656
	d. Champa	108532	34452	143422
	e. Sabri	137929	23677	138073
	f. Shagor	158382	30047	159581
	g. Others	117316	24552	119422
14.	Per acre productivity by varieties			
	a. Anaji	2.76	5.18	2.97
	b. Atia	2.97	1.50	3.18
	c. Bangla	3.08	2.67	4.21
	d. Champa	3.06	3.29	3.07
	e. Sabri	3.38	2.79	3.38
	f. Shagor	2.73	2.63	2.85
	g. Others	2.77	3.11	2.77

Chapter-1

Introduction

Introduction

Bangladesh is an agricultural country and most of the inhabitants are involved in agriculture directly or indirectly for their livelihood. The country possesses very fertile land in which diversified crops grow very easily. Among more than 118 minor crops in Bangladesh, banana is one of the top listed fruit crops, which is available throughout the year and consumption rate is higher than any other fruits. It has great economic importance as well as nutritional value.

Banana is a very popular fruit due to its low price and is used both as vegetable and as a dessert fruit. It is a rich source of carbohydrate and having plenty of vitamins particularly vitamin B. It is also a good source of potassium, phosphorus, calcium and magnesium. Ripe banana mixed with rice and milk is the traditional dish for the Bangladeshis. Banana powder is used as the first baby food. It helps in reducing risk of heart diseases when used regularly and is recommended for patients suffering from high blood pressure, arthritis, ulcer, gastroenteritis and kidney disorders.

The Banana is the most essential and important fruit crop which shares about 20% of total fruits production with 36% share in area (BBS estimate 2009-10). The production of Banana largely depends on the use of fertilizers, irrigation, pesticide etc. The government of Bangladesh has, therefore, provided priority to the agriculture sector to increase the production of Banana by giving subsidy to the farmers on different inputs such as fertilizer, irrigation etc. to achieve self sufficiency in Banana production.

It is believed that, poverty cannot be reduced to a desired level without increasing productivity of agriculture sector and at the same time it has to be assured that farmers get fair price of the crops. Natural calamities like draught, flood, cyclone, tornado etc. are a very regular phenomenon which hinders the production of agriculture to a great extent. Cultivable land is being decreased due to the pressure of massive population. As a result, food security is being threatened.

The government is highly concerned about agriculture sector. Notable portion of annual budget has consistently been allocated for the last couple of years for the development of the sector. Government has taken up many programmes one after another in order to boost up the agriculture production.

Production of crops, cost of production and market price of crops are directly interrelated. Government has to give proper attention on these three factors so that the farmer get fair price of the crop produced during the harvest time. If procurement price is lower than the production cost, producers get looser and become discouraged to produce more crops and if procurement price is higher than the production cost, producers get

profit and are inspired. This type of loss and profit influence the cultivation of next year's crops. So, an objective survey is necessary to know the cost of production of crops at farmer's level. In view of this, the Productivity Assessment Survey of Different Agricultural Crops (PASDAC) Program has undertaken the survey on the yield and cost of production of the banana crop.

1.1 Production of Banana

Considering the year round availability, popularity and production, banana is considered to be the number one fruit in Bangladesh. The Banana, basically a tropical crop, grows well in a temperature range of 15ºC – 35ºC with relative humidity of 75-85%. It prefers tropical humid lowlands and is grown from the sea level to an elevation of 2000m. above m.s.l. In Bangladesh, this crop is being cultivated in climate ranging from humid tropical to dry mild subtropics through selection of appropriate varieties. Chilling injury occurs at temperature below 12ºC. high velocity of wind which exceeds 80 km /hr. damages the crop. Four months of monsoon (June to September) with an average 650-750 mm. rainfall are most important for vigorous vegetative growth of banana. At higher altitudes, banana cultivation is restricted to a few varieties like 'Hill banana".

Deep, rich loamy soil with pH between 6.5– 7.5 is most preferred for banana cultivation. Soil for banana must have good drainage, adequate fertility and moisture. Saline solid, calcareous soils are not suitable for banana cultivation. A soil which is neither too acidic nor too alkaline, rich in organic material with high nitrogen content, adequate phosphorus level and plenty of potash is good for Banana cultivation.

The Banana grows almost everywhere in the country throughout the year. The principal Banana growing areas however, are Rangamati, Noakhali, Barisal, Khulna, Kustia, Faridpur Dhaka and Rangpur. Important varieties of banana cultivated in different areas of Bangladesh are- Shagar, Sabri, Champa, Bangla, Atia, Anaji, Kanthali, Singapuri, Nepali etc.

The average yield of Banana is 14 M.tones/hector, which is lower compared to other Banana-producing countries in the world. But in commercial orchard, yield is not less than 30 M.tones/hector. The total cultivation area and annual production of Banana in Bangladesh during last nine years are shown in the following table:

Table: Acreage, Production and Yield rate of Banana during the year 2003-04 to 2011-12

Year	Acreage (in '000')	Production (in '000' M. Tons)	Yield rate (M. tons)
2003-04	121.7	706.6	5.8
2004-05	133.0	898.7	6.8
2005-06	138.4	909.1	6.6
2006-07	145.3	1004.5	6.9
2007-08	131.6	877.1	6.7
2008-09	132.4	836.2	6.3
2009-10	133.3	818.3	6.1
2010-11	130.6	779.4	6.0
2011-12	121.7	745.9	6.1

Source: Yearbook of Agricultural Statistics of Bangladesh-2008, 2011 & 2012) BBS.

The above table shows that Banana crop is normally cultivated in an area of about 130 thousand acres. But the floods and super cyclone Sidor in 2007-08 damaged the crop area to a significant extent. The figures in the table show that acreage under Banana are erratic and follow no pattern. Increase in area under Boro paddy, occupation of agricultural land for new house building and industrialization are also responsible for decrease in area under Banana.

1.2 Scope and coverage of the survey

The productivity survey of Banana crop 2013 is a household based survey. Under the purview of this survey the target population was having at least five decimal area of land under banana cultivation of all dwelling households. The survey covers the whole country. A total of hundred PSUs were taken from two strata on the basis of production cost. Stratum-1 covered five districts such as Chittagong, Cox's Bazar, Rangamati, Bandarban, and Khagrachhari. And stratum-2 consists of rest of the fifty nine districts.
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1.3 Objectives of the Survey

The Banana Survey-2013 is designed to provide national estimates for various indicators those are needed for national accounts and policy purposes.

The objectives of the survey are to estimate

(a) Per acre production cost
(b) Per acre yield rate
(c) Per acre production value and
(d) The total area under Banana cultivation

Chapter-2

Methodology

Methodology

2.1 Sample Design

The Banana Survey has been conducted in the whole country excluding the City Corporation areas using the Agriculture Census-2008. According to the Banana cultivation procedure, namely traditional and scientific, the whole country has been divided into two strata; Hill tracts based areas and the rest of the country. The first stratum includes five out of 64 districts namely Chittagong, Cox's Bazaar, Rangamati, Bandarban and Khagrachari and the second stratum covers the rest of 59 districts. In both the strata, households having at least 5 decimal area of land under banana cultivation were considered as the ultimate sampling units. A two stage stratified cluster sampling method has been used to conduct the survey, where a mauza having at least 25 banana farm holdings was treated as the primary sampling unit (PSU) and within the selected mauzas, banana farm households were chosen as the ultimate sampling units. In each stratum, a mauza has been selected following the probability proportional to size (PPS) method taking land under banana cultivation as measure of size. In the second stage, all the banana households were listed and then 30 households were selected following the systematic random sampling. From the first stratum, 30 mauzas and from the second stratum 70 mauzas were selected. From the selected mauzas having more than 250 households, 250 of them were listed from either southwest corner or north-east corner of a mauza. The south west corner approach was followed if selected mauzas carry even numbers and north east corner approach was applied if selected mauzas were of odd numbers. However, if a selected mauza posses less than 25 banana producing farm households then the remaining households were taken from the adjacent mauza or mauzas.

2.2. Data Collection:

As data collection has a noteworthy impact on the quality of survey results, it is treated as a significant part of a survey. Considering its importance, the following measures were taken during the preparation of questionnaire as the tool of data collection:

- Questionnaire Design;
- Questionnaire has been pre-tested;
- Comprehensive manual of data collection with clearly defined concepts and definitions have been made;
- Training programme for the enumerators and supervisors were conducted;

- Required number of field survey staff were set up in order to ensure smooth data collection;
- Extra-care was taken for the data collection activity, sufficient number of supervisors was assigned.

2.2.1. Questionnaire Design:

A questionnaire is a powerful evaluation tool that allows the collection of data through the use of multi-dimensional questions. A questionnaire written without a clear goal and purpose is inevitably going to overlook important issues and waste enumerators' as well as respondents' time by asking and responding useless questions. All these matters were addressed to the extent possible for developing the questionnaire of survey.

2.2.2. Process of questionnaire design:

A working committee comprising of all the Directors of Bangladesh Bureau of Statistics (BBS), headed by the Deputy Director General was formed in order to facilitate the questionnaire development activity. Programme Director and some other members of the working committee had paid several visits to the field with a view to be knowledgeable about the factors of production and the pros and cons of the whole process of the production of banana. They discussed the matter with the farmers who grow banana. After having the knowledge on the issue, they provided feedback to the meeting of the working committee. working committee had thoroughly examined the feedback and selected the topics of the survey. Programmme Director was assigned to form a questionnaire on the selected topics and eventually, he developed a questionnaire with seven questions. Subsequently the questionnaire was brought forward to the Technical Committee, the highest statistical body comprising of representatives from different Ministries, Universities and BBS, which had finally approved the questionnaire.

2.2.3. Pre-testing the questionnaire:

The questionnaire was pre-tested to examine the time necessary to complete the interview, test the reliability i.e. whether it captured the information desired, and also investigated the consistency whether the information gathered by it was related to the whole purpose of the survey. The test had also targeted to check the logistics required for successful operation of the survey.

In order to ensure the best performance of the questionnaire in respect of data collection, processing and analyzing, the pre-testing was carried out during the month of

March 2013 prior to the survey at rural area of Shibganj Upazila under Bogra District and Gobindoganj Upazila belonging to Gaibandha District. A group including Programme Director, some members of the working committee had gone to the two places mentioned to take part in testing the questionnaire. They had chosen some of the farmers at random as the respondents.

2.2.4. Findings of the Pre-test:

Depending on the findings of the pretest, modifications to the questionnaire have been made in the structure and wording of the questionnaire. It has also taken care of semblance of the question, that is, the meaning and clarity which yields the intended information from the respondent. Furthermore, considerable amendment has also taken place in the enumerator's manual in view of ensuring proper questionnaire administration.

After pre-testing some significant suggestions from the respective team had been made, this had been eventually adopted properly in the final questionnaire. During the pre-test, it had been found that farmers, the respondents did not feel comfortable to respond to the questions relating to the total area of the land under banana crop. Considering the fact, the structure of the questionnaire had been changed. Deleting the aggregate area in a single row, the new concept, area by farming year/land type had been incorporated.

2.2.5. Finalization of the Questionnaire:

After addressing all the changes following the recommendations evolved from the pre-test, the questionnaire was placed to the Technical Committee. The committee also put notable contribution to the questionnaire. Eventually, the questionnaire had been finalized with the approval of the Technical Committee.

2.2.6. Training of the Supervisors and Enumerators:

A two days training had been arranged in order to make the Supervisors and Enumerators perfectly conceptualized with the concepts and definitions of each word of the questionnaire as well as to convey the proper way of data collection. Two days training programme conducted by the Programme Director had been arranged at the head office of BBS in Dhaka. On the first day the participants received rigorous training on the concepts, definitions and the questionnaire and on the next day they had gone to the rural area of Savar Upazila with a view to having hands-on exercise on the questionnaire. In the second phase, Enumerators had been trained for two days by the Master Trainers at the Regional Statistical Offices (RSOs) following the same sequence as the training arranged at the first phase. At first, Enumerators received training on the questionnaire

and in the next day they also visited field at remote area of the respective region in order to have experience on hand. However, most of the trainees- both Supervisors and Enumerators actively participated in the training and also made some suggestions which were subsequently taken into consideration.

2.2.7. Method of Data Collection:

Face to face interview had been carried out following Paper and Pencil (PAPI) method.

2.2.8. Data Collection and Supervision:

Data collection had taken place during May-June 2013 at the homestead of the household. Usually the respondents are the head of household. The total of 100 enumerators, who were the employees of BBS and had proven experience in this field, had been engaged in data collection from the farm households and the total of 29 Supervising Officers named Regional Coordinators were responsible for supervising the data collection task. All Supervising Officers had been directed to stay at the respective region during the period of data collection so that they could extensively supervise data collection task and address instantly any untoward problem arising during data collection. Four Divisional Coordinators including Program Director were also responsible to oversee all activities at field level relating to data collection. Furthermore, all possible measures had been taken to obtain a good quality of data.

2.2.9. Data Editing and Coding:

Data editing and coding were other vital phases of the survey, which were indispensable for data processing. It should be completed before data processing. In case of this survey coding had been done along with questionnaire development so that the enumerator could easily and accurately mark the right answers.

Data editing referred to the activity of checking and cleaning data that had already been collected from the field. A group of experienced staff from Agriculture Wing under the supervision of two officers from the same Wing had carried out the work of data editing with careful attention.

2.3 Data Processing:

Data processing involved many steps that were very important because it affected survey results according to the involved steps. During data processing following steps had been taken.

- Data entry
- Appending and Merging files

- ❖ Data validation (further computer checking, editing, and imputation)
- ❖ Final decision on errors
- ❖ Completion of data processing and generation of data files
- ❖ Final documentations
- ❖ Conversion of data files to another software.
- ❖ Storage of all files.

2.3.1 Data Entry:

After editing, all questionnaires had been sent to Computer Lab of Agriculture Wing of BBS in order to do all works of data processing. Programmer had maintained the steps as mentioned aiming to ensure perfect data processing:

(1). Software Used: Five software namely CSPro, FoxPro, Oracle (SQL), SPSS and Excel had been used for processing the survey data. CSPro had been used for data entry, FoxPro for editing, Oracle for tabulation, SPSS for data analysis and Excel for printing output.

(2). Designing data entry application:

The first thing to do was to create the data dictionary based on the questionnaire. The data dictionary had consisted of ID items, records, items of the records, and also values of the items. Logic check was also maintained to avoid errors of inconsistency. After finishing the data dictionary, the data entry forms had been developed depending on data dictionary. After that, the data entry form were tested and, therefore, readily available for use.

(3). Data capturing and Preliminary Validation:

Just after the completion of data editing manually, data had been captured in computer. During data capturing, a variety of common errors had been identified. As a result data had been checked and cross checked with questionnaire depending on error message. During data processing, the appropriate corrective measures mentioned below have been used to have clean data.

- **Wrong data and out of range codes:** Firstly, the data collection instrument restricted the enumerator to a set of codes within the acceptable range for most of the questions. Secondly, the values had been set for avoiding wild codes for most of the questions. For example, the code for ownership of land had been set 1 to 5.

- **Inconsistency checking:** It had been done during designing the data entry program to avoid errors and inconsistency.
- **Treatment of Missing values:** The data entry program had been designed not to allow blanks that ensure not having missing values in the data.
- **Incomplete records and dropped cases:** The data entry program had designed to accept the complete data case; otherwise, it would not be saved. This had been set to avoid incomplete records and dropped cases.
- **Duplication of entries:** The data entry program had been designed in view of rejecting duplication of entries based on the identifiers.

(4). Appending and Merging files:

After data entry, files had properly been appended and merged in order to bring all data in a single file.

(5). Data Validation:

Validation had been accomplished after appending and merging files by checking the number of variables, the cases, wild codes, missing value and consistency. It had been made sure that the number of variables generated matched with the number of variables in the data set.

(6). Final decision on errors:

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.

(7). Completion of data processing and generation of data file:

Addressing the final decision on error, data processing task had been completed and generated a data file which contained micro data.

(8). Data preservation:

After completion of processing, data had been stored in ASCII format. The data had also been converted to Microsoft Excel format in order to have the print out. Both original and new format had been preserved. The questionnaires had also been filed for safe storage. A copy of the data set had been put forward to the survey authority for tabulation and analysis.

2.4 Tabulation:

Twenty five tables focusing on the vital components such as total number of labours engaged in production of banana, cost of land preparation, seedlings used and

their price, fertilizer used and their price, cost of insecticides, cost of production by phases etc. had been generated. All these tables had been given in the part of analysis and annexure.

2.5 Data Analysis:

Survey results had been analyzed in tabular form. Major variable was explained vertically (columns) and cross tabulation by another related variable(s) horizontally. In the analysis, it had described the variation of the magnitude of the major variables by national. Many aspects of production and the cost of production of banana had also been explained nationally.

2.6. Data Dissemination:

The final report had been disseminated both in electronic form and hard copy as book. Results are available in the website of BBS. Some data may also be published in other publications of BBS such as Statistical Year Book of Bangladesh, Year Book of Agriculture Statistics of Bangladesh, and Monthly Statistical Bulletin etc.

Chapter-3

Area and Household

Area and Household

This chapter contains cultivation of banana households their producing area, single and mixed crop pattern, varieties, land tenure of banana cultivation with leasing value of the cultivated land etc.

Table-3.1: Percentage distribution of banana cultivation area by land tenureship and farming year.

Farming Year /land type	Land tenureship											
	Total		Owned		Crop Share		Mortgage		Lease		Other	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
All Areas												
Total	172872	100.0	143571	83.05	5415	3.13	2714	1.57	20844	12.06	327	0.19
First Year	75626	43.75	60895	35.23	3692	2.14	1514	0.88	9429	5.45	96	0.06
2nd Year	46978	27.18	38613	22.34	1033	0.60	839	0.49	6367	3.68	126	0.07
3rd /more	50033	28.94	43870	25.38	690	0.40	361	0.21	5006	2.90	105	0.06
Farm Land	172636	99.86	143378	82.94	5415	3.13	2714	1.57	20802	12.03	327	0.19
Homestead	236	0.14	194	0.11	-	-	-	-	42	0.02	-	-
Stratum-1												
Total	39184	22.67	38573	22.31	15	0.01	131	0.08	268	0.16	197	0.11
First Year	12176	7.04	12021	6.95	-	-	43	0.02	58	0.03	54	0.03
2nd Year	9538	5.52	9283	5.37	15	0.01	15	0.01	158	0.09	67	0.04
3rd/more	17376	10.05	17174	9.93	-	-	74	0.04	52	0.03	77	0.04
Farm Land	39090	22.61	38478	22.26	15	0.01	131	0.08	268	0.16	198	0.11
Homestead	94	0.05	94	0.05	-	-	-	-	-	-	-	-
Stratum-2												
Total	133688	77.33	104998	60.74	5401	3.12	2583	1.49	20576	11.90	130	0.08
First Year	63450	36.70	48874	28.27	3692	2.14	1471	0.85	9371	5.42	42	0.02
2nd Year	37440	21.66	29329	16.97	1018	0.59	825	0.48	6209	3.59	59	0.03
3rd/more	32657	18.89	26696	15.44	690	0.40	288	0.17	4955	2.87	29	0.02
Farm Land	133547	77.25	104899	60.68	5401	3.12	2583	1.49	20534	11.91	130	0.08
Homestead	141	0.08	99	0.06	-	-	-	-	42	0.02	-	-

* 1 hector=2.47 acre, * Stratum-1 = Chittagong, Cox's bazar & CH districts, * Stratum-2= Rest of the 59 districts

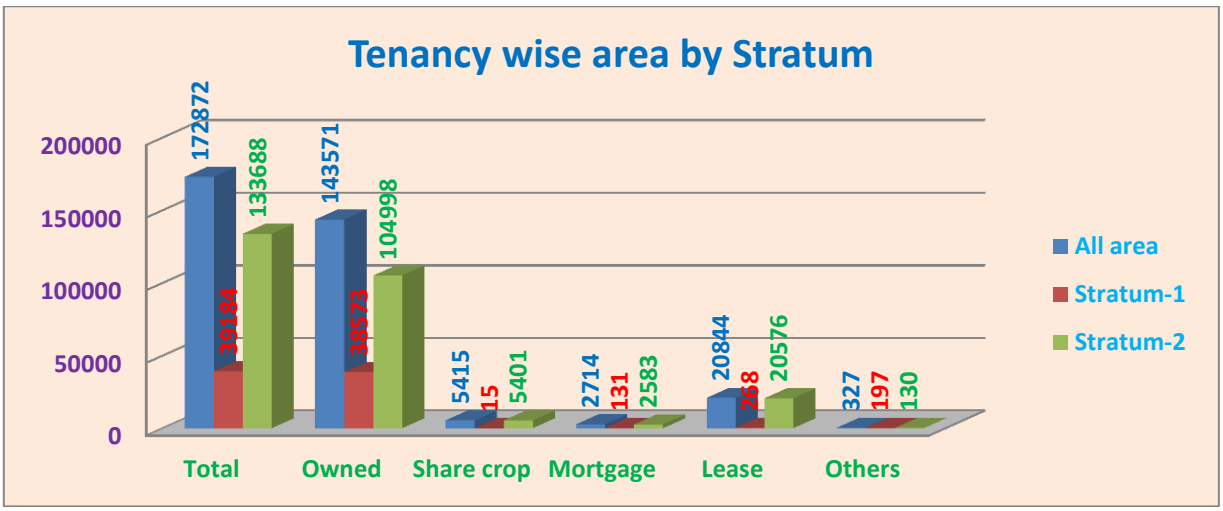


Table-3.1 presents area under banana crops in all land tenureship of Bangladesh by categories of owned land, share crop, mortgage, lease and others separately for farming

years (first, second, third year and above year) for all area, Stratum-1 and 2 for the year 2012-13. Percentage distribution of farming area is also shown in the table. The table shows that out of a total of 172872 acres under banana crops an over whelming majority of 143571 acres are owned land (83.05%) followed by 20844 acres lease land (12.06%), 5415 acres share crops land, 2714 acres mortgage land (1.51%) and 327 acres others land (0.19%). On the other hand the table shows that 75626 acres of land are under farming in the first year (43.75%) followed by 50033 acres in third year and above (28.94%), 46978 acres in second year (27.18%) and only 236 acres under homestead area (0.14%). The table also shows that 133688 acres of land are under stratum-2 (77.33%) and 39184 acres (22.67%) are stratum-1 of the total land.

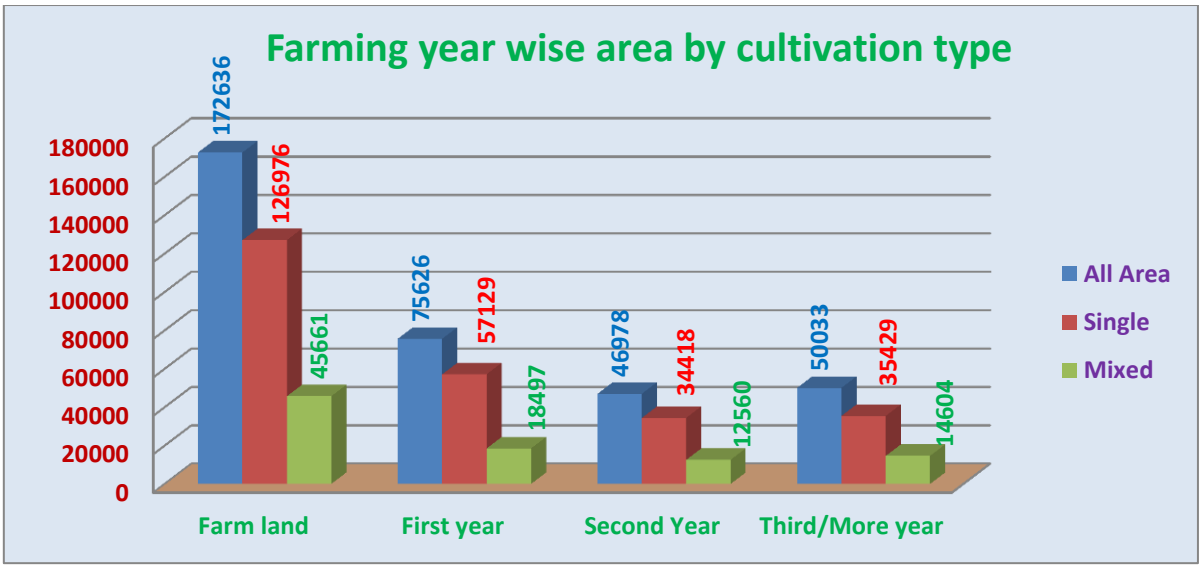
Table-3.2: Percentage distribution of banana cultivation household by tenancy & farming year.

Farming year/land type	Tenancy											
	Total		Owned		Share crop		Mortgage		Lease		Other	
	H/H	%	H/H	%	H/H	%	H/H	%	H/H	%	H/H	%
All Areas												
Total	563181	100.00	489772	86.97	18755	3.33	7773	1.38	44515	7.90	2367	0.42
First year	259334	46.05	220321	39.12	11949	2.12	5533	0.98	20922	3.71	610	0.11
2nd Year	149773	26.59	130125	23.10	4954	0.88	915	0.16	13012	2.31	757	0.13
3rd / more	142251	25.26	128672	22.85	1851	0.33	1325	0.24	9404	1.67	999	0.18
Farm land	551358	97.90	479127	85.08	18755	3.33	7773	1.38	43337	7.70	2367	0.42
Homestead	11823	2.10	10644	1.89	-	-	-	-	1178	-	-	-
Stratum-1												
Total	100864	17.91	98140	17.43	74	0.01	368	0.07	589	0.10	1693	0.30
First year	38358	6.81	37548	6.67	-	-	147	0.03	221	0.04	442	0.08
2ndYear	25400	4.51	24443	4.34	74	0.01	74	0.01	221	0.04	589	0.10
3rd / more	32689	5.80	31732	5.63	-	-	147	0.03	147	0.03	663	0.12
Farm land	96447	17.13	93722	16.64	74	0.01	368	0.07	589	0.10	1694	0.30
Homestead	4417	0.78	4417	0.78	-	-	-	-	-	-	-	-
Tratum-2												
Total	462317	82.09	391632	69.57	18681	3.31	7405	1.31	43926	7.80	673	0.12
First year	220977	39.24	182773	32.45	11949	2.12	5386	0.95	20701	3.68	168	0.03
2nd Year	124373	22.08	105692	18.77	4881	0.87	841	0.15	12791	2.27	168	0.03
3rd / more	109563	19.45	96940	17.21	1851	0.33	1178	0.21	9256	1.64	337	0.06
Farm land	454913	80.78	385405	68.43	18681	3.32	7405	1.31	42748	7.59	673	012
Homestead	7405	1.31	6227	1.11	-	-	-	-	1178	0.21	-	-

The table shows that out of 563181 banana producing households 86.97% have own households, 7.90% have households of lease tenureship, 3.33% have share cropping households, 1.38% have mortgage and the rest 0.42% have other category of households. On the other hand, 82.09% and 17.91% households in stratum-2 and stratum-1 are producing banana.

Table-3.3: Percentage distribution of banana producing area by cultivation type & farming year.

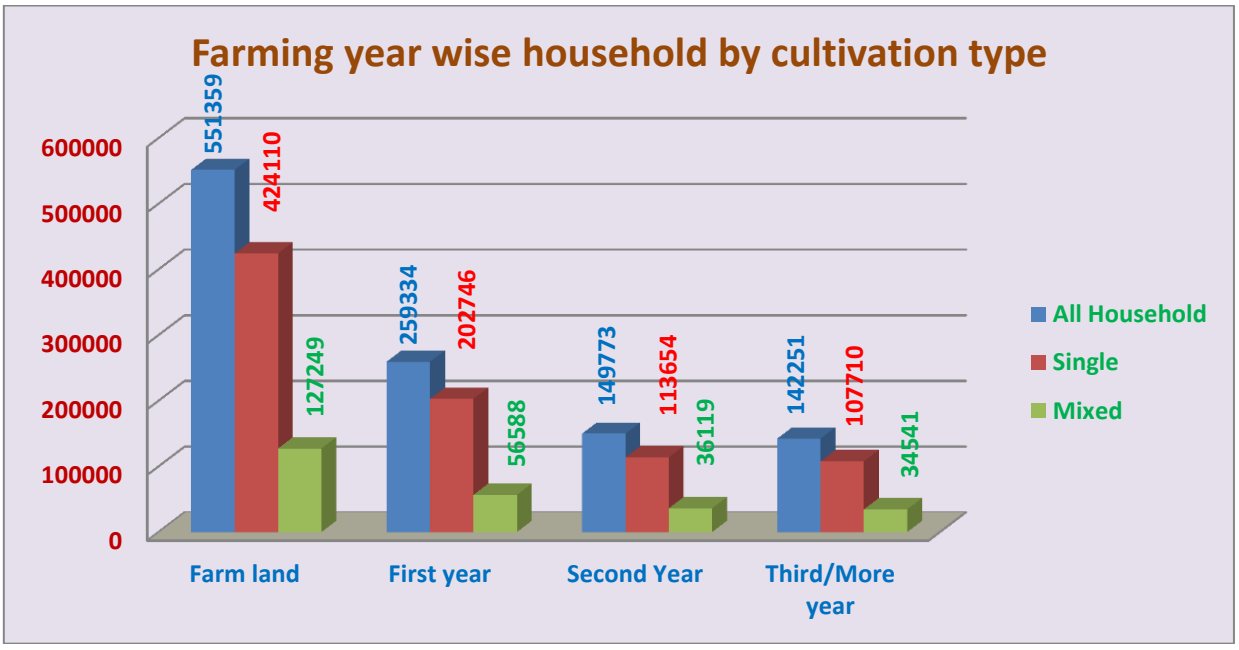
Farming year	Type of cultivation					
	Total		Single		Mixed	
	Area	%	Area	%	Area	%
All Areas						
Farm land	172636	100.00	126976	73.55	45661	26.45
First year	75626	43.81	57129	33.09	18497	10.71
Second Year	46978	27.21	34418	19.94	12560	7.28
Third/More year	50033	28.98	35429	20.52	14604	8.46
Stratum-1						
Farm land	39090	22.64	10580	6.12	28509	16.51
First year	12176	7.05	2728	1.58	9447	5.47
Second Year	9538	5.52	1428	0.83	8110	4.70
Third/More year	17376	10.07	6424	3.72	10951	6.34
Stratum-2						
Farm land	133547	77.36	116396	67.42	17151	9.93
First year	63450	36.75	54401	31.51	9049	5.24
Second Year	37440	21.69	32990	19.11	4450	2.58
Third/More year	32657	18.92	29005	16.80	3652	2.12



The above table shows that the highest (73.55%) of the banana cultivated area are single crop area and only 26.45% are mixed crop. And in the mixed crop areas cultivation is 16.51% in stratum-1and 9.93% in stratum-2. On the other hand, banana cultivation is in single crop area 67.42% in stratum-2 and only 6.12% in stratum-1.

Table-3.4: Percentage distribution of banana producing households by cultivation type and farming year.

Farming year	Type of cultivation					
	Total		**Single**		**Mixed**	
	Household	%	Household	%	Household	%
All Areas						
Farm land	551359	100.00	424110	76.92	127249	23.08
First year	259334	47.04	202746	36.77	56588	10.26
Second Year	149773	27.16	113654	20.61	36119	6.55
Third/More year	142251	25.80	107710	19.54	34541	6.26
Stratum-1						
Farm land	96447	17.49	36517	6.62	59929	10.87
First year	38358	6.96	13915	2.52	24443	4.43
Second Year	25400	4.61	8467	1.54	16933	3.07
Third/More year	32689	5.93	14136	2.56	18553	3.36
Stratum-2						
Farm land	454912	82.50	387593	70.30	67320	12.21
First year	220977	40.08	188831	34.25	32145	5.83
Second Year	124373	22.56	105187	19.08	19186	3.48
Third/More year	109563	19.87	93574	16.97	15988	2.90



The table-3.4 indicates that 76.92% of the households are producing only banana crops and 23.08% households are producing banana along with other crops. In stratum-1 59959 households (62.14%) are producing banana with other crops of the total 96447 households. On the other hand, in stratum-2 only 67320 households (14.80%) are producing banana along with other crops of the total 454912 households.

Table-3.5: Percentage distribution of varieties of banana (area) by framing year.

Farming year	Varieties of banana							
	Total	Anaji	Aita	Bangla	Champa	Sabri	Shagor	Others
All Areas								
Farm land	100.00	2.48	0.88	20.39	15.46	31.68	24.13	4.97
First year	43.81	1.52	0.11	6.24	7.41	14.14	12.24	2.14
Second Year	27.21	0.41	0.03	5.64	3.60	5.64	5.94	1.63
Third/More year	28.98	0.55	0.74	8.51	4.45	8.51	5.96	1.94
Stratum-1								
Farm land	22.64	0.16	0.13	17.15	4.82	0.04	0.22	0.11
First year	7.05	0.05	0.04	4.77	1.96	0.03	0.13	0.08
Second Year	5.52	0.05	0.00	4.51	0.94		0.02	0.01
Third/More year	10.07	0.06	0.09	7.87	1.92	0.01	0.08	0.02
Stratum-2								
Farm land	77.36	2.32	0.75	3.24	10.64	31.64	23.91	4.86
First year	36.75	1.48	0.07	1.47	5.45	14.11	12.12	2.06
Second Year	21.69	0.36	0.03	1.14	2.66	9.96	5.92	1.63
Third/More year	18.92	0.48	0.65	0.64	2.53	7.56	5.88	1.18

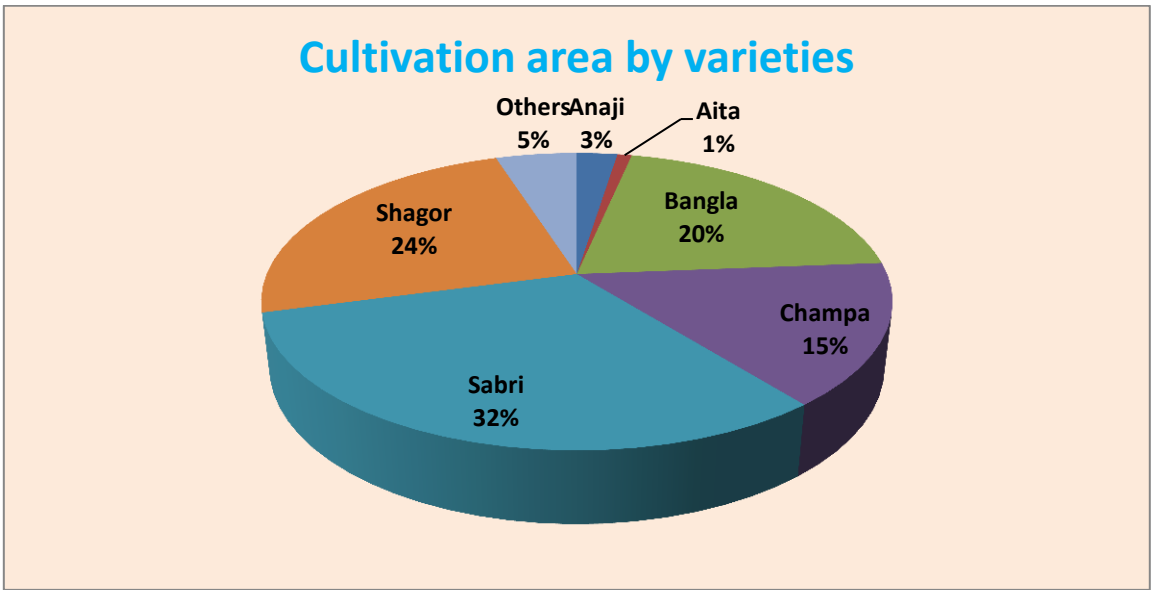


Table-3.5 provides the percentage distribution of farming year by varieties of banana crops land and by stratum-1 and 2. The table shows that the percentage of banana product are in descending order Sabri (31.68%), Shagor (24.13%), Bangla (20.39%), Champa (15.46%), others (4.97%), Anaji (2.48%) and Atia (0.88%) respectively of the total. In stratum-1, the highest percentage of banana product is Bangla banana (17.15%) followed by Champa (4.82%) and rest of the varieties are (0.66%) of the total. In stratum-2 the highest percentage of banana produced is Sabri (31.64%) followed by Shagor (23.91%), Champa (10.64%), others (4.86%), Bangla (3.24%), Anaji (2.32%) and Aita (0.75%) respectively of the total area.

Table-3.6:Percentage distribution of varieties of banana household by farming year.

Farming Year	Varieties of banana							
	Total	Anaji	Aita	Bangla	Champa	Sabri	Shagor	Others
All Areas								
Farm land	100.00	7.22	1.32	10.10	16.14	27.89	23.57	4.76
First year	47.04	3.20	0.29	7.84	7.83	13.26	12.06	2.56
Second Year	27.16	2.29	0.15	5.32	4.39	8.30	5.76	0.95
Third/More year	25.80	1.74	0.88	5.93	3.92	6.33	5.73	1.25
Stratum-1								
Farm land	17.49	0.11	0.04	12.02	4.75	0.08	0.28	0.21
First year	6.96	0.05	0.01	4.82	1.84	0.04	0.16	0.03
Second Year	4.61	0.03	0.0	3.12	1.34	0.00	0.05	0.07
Third/More year	5.93	0.03	0.03	4.07	1.58	0.04	0.07	0.12
Stratum-2								
Farm land	82.51	7.11	1.28	7.08	11.38	27.81	23.29	4.55
First year	40.08	3.14	0.27	3.02	5.98	13.22	11.90	2.53
Second Year	22.56	2.26	0.15	2.20	3.05	8.30	5.70	0.87
Third/More year	19.87	1.71	0.85	1.86	2.35	6.29	5.68	1.13

Table-3.6 gives the percentage distribution of farming year by stratum wise household under banana cultivation and by variety of Banana for the year 2013.The table shows that the highest percentage (27.89%) of banana producing households is sabri, followed by shagor (23.57%) and champa (16.14%) of the total household for the year 2013. For the stratum-1 the highest percentage (12.02%) of households are producing Bangla banana and smallest percentage (0.04%) of households are producing Aita banana. Whereas in Stratum-2 the highest percentage of the households are producing Sabri banana (27.81%) followed by Shagor (23.29%), Champa (11.38%), Anaji (7.11%), Bangla (7.08%), others (4.55%), and Atia (1.28%) respectively of the total.

Table-3.7: Per acre leasing cost of banana crop by farming year.

Farming year	**Per acre leasing cost (Tk.)**		
	All Areas	**Stratum-1**	**Stratum-2**
Total	21614	8091	21624
First year	21103	8091	21125
Second year	22623	-	22623
Third year or more	21346	-	21346

Leasing means the land taken by the household for the cultivation of banana crop only on payment of money to the land owner. Leasing value per acre is found to be significantly different between two areas. Local leasing value has also been collected in case of households who cultivated the crop in their own lands. The average per acre leasing cost of banana crops in Bangladesh is Taka 21614. Leasing is a usual system in stratum-2 and now a day it is being introduced to stratum-1 too.

Chapter-4

Production Cost

Production Cost

This chapter deals with data on per acre production cost by farming year, tenure ship and varieties of banana used in the productivity survey. This includes per acre production cost, per kg production cost and size of land planted by farming year, tenureship and varieties of banana. The various ingredients of banana production viz land preparation, seedling, plantation, weeding, irrigation, pesticide, fertilizer, harvesting, transport, other have been taken into consideration in obtaining the cost of production.

Table-4.1: Per acre production cost (Tk.) by farming year.

Farming Year/land type	Production cost											
	Total	Land Preparation	Seedling	Plantation	Weeding	Irrigation	Pesticides	Fertilizer	Harvesting	Ripen	Trans Port	Others
All Areas												
All	37364	4478	2975	1568	3861	3392	1881	13803	1736	16	813	2841
1st Year	47486	5879	6796	3492	4527	3826	1826	15894	1221	12	677	3337
2nd Year	32427	3561	-	44	3609	3689	2250	13780	1799	17	824	2853
3rd year or more	26793	3220	-	90	3101	2471	1626	10722	2451	20	1009	2083
Homestead	17151	4632	1359	2109	1880	71	-	1389	2409		1089	1221
Stratum-1												
All	10307	1044	1123	1029	1641	13	31	258	2731	13	1692	723
1st Year	15107	2005	3610	3279	1771	4	14	445	1935	6	1294	744
2nd Year	7475	645		9	1305	25	10	170	2731	16	1824	750
3rd year or more	8474	575		8	1726	14	54	175	3289	15	1905	714
Homestead	14852	3438	664	1680	3094	-	-	227	2934	-	1652	1165
Stratum-2												
All	45294	5485	3517	1727	4512	4382	2423	17773	1444	17	556	3460
1st Year	53700	6623	7407	3532	5056	4559	2174	18858	1084	13	558	3834
2nd Year	38784	4304		53	4196	4623	2820	17248	1562	18	572	3388
3rd year or more	36540	4627		133	3833	3779	2463	16334	2005	22	532	2812
Homestead	18744	5488	1821	2395	1071	119	-	2164	2060	-	714	2911

* 1 hector=2.47 acre, * Stratum-1 = Chittagong, Cox's bazar & CH districts, * Stratum-2= Rest of the 59 districts

From table-4.1, it appears that the average per acre production cost in Bangladesh is Taka 37364 for the year 2013. The highest per acre production cost in first year is Taka 47486 followed by second year cost of Taka 32427 and the third year & above Taka 26793 with regard to the types of production cost, the highest cost is found in fertilizer Taka 13803 followed by land preparation Taka 4478, weeding Taka 3861, irrigation Taka 3392 etc. On the other hand per acre seedling cost is Taka 6796 and plantation cost is Taka 3492 in first year. Mentionable that per acre plantation cost of the first year is Taka 3492 whereas the cost of second year and third year are Taka 44 and Taka 90 respectively. For stratum-2, the average per acre production cost is Taka 45294 whereas the per acre production cost in stratum-1 is only Taka 10307.

Table-4.2: Per acre production cost (TK) by land tenureship.

Tenure ship	Per acre production cost(Tk.)											
	Total	Land Preparation	Seedling	Plantation	Weeding	Irrigation	Pesticides	Fertilizer	Harvesting	Lipen	Transport	Others
All Areas												
All	37364	4478	2975	1568	3861	3392	1881	13803	1736	16	813	2841
Owned	35369	4231	2736	1533	3684	3085	1721	12865	1863	16	890	2745
Share crop	47324	4482	5129	2043	5900	44447	1864	18047	676	11	402	4323
Mortgage	45263	4601	3812	1893	5699	4191	2207	17466	1218	59	1320	2796
Lease	47729	6213	3976	1620	4341	5154	2957	18800	1207	9	310	3142
Other	22050	1428	1328	3113	2241	1384	1001	6435	1645	67	1808	1601
Stratum-1												
All	10307	1044	1123	1029	1641	13	31	258	2731	13	1692	733
Owned	10307	1043	1132	1018	1636	11	29	251	2739	10	1703	736
Share crop	9950	1125	-	-	2500	250	-	855	2100	50	2500	570
Mortgage	11864	1644	1101	1517	1236	652	427	1716	2351	685	463	442
Lease	7661	984	131	549	2283	-	-	387	2492	-	442	393
Others	13002	890	890	3537	1777	246	123	482	1873	111	2142	931
Stratum-2												
All	45294	5485	3517	1727	4512	4382	2423	17773	1444	17	556	3460
Owned	44576	5402	3325	1723	4436	4215	2343	17449	1541	18	592	3483
Share crop	47426	4491	5143	2048	5910	4458	1869	18094	672	11	396	4334
Mortgage	46957	4751	3950	1912	5926	4389	2298	18264	1161	27	1364	2916
Lease	48250	6281	4026	1634	4368	5221	2996	19040	1190	9	308	3178
Others	35827	2247	1995	2468	2948	3117	2338	15497	1299	-	1299	2621

It is found from the above table that the average cost of per acre production in Bangladesh is Taka 37364 in 2013.However, in the lease tenure ship category the average cost of per acre production is the highest of Taka 47729 followed by share crop tenancy of Taka 47324, mortgage is taka 45263, owned is taka 35369 and other category of land tenure ship is only Taka 22050 respectively. For stratum-1 the highest average cost of per acre production for other categories of tenure ship is Taka 13002 followed by mortgage Taka 11864 and lowest in lease category of tenure ship is Taka 7661. On the other hand for stratum-2, other categories of tenureship, the lowest average cost of per acre production is Taka 35827.

Table-4.3: Per acre production cost (TK) by varieties of banana.

Varieties of Banana	Per acre production cost(Tk.)											
	Total	Land Preparation	Seedling	Plantation	Weeding	Irrigation	Pesticides	Fertilizer	Harvesting	Ripen	Transport	Others
All Areas												
All	37364	4478	2975	1568	3861	3392	1881	13803	1736	16	813	2841
Anaji	37184	5922	4770	2218	4051	3006	1585	6785	4103	-	1851	2892
Atia	9381	2196	371	782	2059	-	88	292	1765	-	951	876
Bangla	12087	1412	1493	1233	1924	91	78	741	2824	10	1571	710
Champa	35373	4407	3600	1494	3752	2122	939	11315	2169	21	993	4561
Sabri	40804	4995	3472	1369	3052	4553	2087	17403	1067	11	350	2444
Shagor	55558	5893	3298	2051	6547	5371	3710	22623	1104	25	602	4339
Others	42365	6813	1952	1918	4514	4700	2502	15462	2044	18	574	1868
Stratum-1												
All	10307	1044	1123	1029	1641	13	31	258	2731	13	1692	733
Anaji	10952	2377	381	1310	2053	147	57	298	1782	-	1528	1019
Atia	8035	728	324	854	2437	-	-	-	2073	-	1146	503
Bangla	10253	918	1080	1014	1595	14	28	257	2897	12	1728	710
Champa	10459	1402	1308	1025	1765	2	41	226	2227	9	1463	810
Sabri	8469	1944	1080	667	2000	-	-	133	1556	-	589	499
Shagor	11388	1640	1474	1493	1561	116	5	764	2382	99	938	917
Others	12316	1475	1333	2442	1671	85	62	996	2578	159	1118	429
Stratum-2												
All	45294	5485	3517	1727	4512	4382	2423	17773	1444	17	556	3460
Anaji	39275	6205	5119	2291	4211	3234	1707	7302	4288	-	1877	3041
Atia	9612	2454	379	770	1993	-	104	344	1711	-	917	941
Bangla	21749	4013	3667	2386	3633	502	342	3289	2441	-	741	712
Champa	46682	5771	4640	1707	4653	3085	1347	16348	2143	27	697	6264
Sabri	40843	4999	3475	1370	3053	4558	2089	17424	1066	11	349	2447
Shagor	58967	5932	3314	2056	6593	5520	3745	23826	1092	24	599	4364
Others	42042	6933	1966	1906	4578	4804	2557	15788	2033	15	561	1902

Table-4.3 highlights that the highest average cost of per acre production for Shagor variety is Taka 55558 followed by other categories of banana of Taka 42365 and the lowest per acre production cost of Atia variety is Taka 9381. The table shows that the average cost of per acre production in stratum-2 Taka 45294 is 4.4 times higher than in stratum-1 Taka 10307 and the average cost per acre production for Shagor variety in stratum-2 Taka 58967 is 5.2 times higher than that in stratum-1 Taka 11388 followed by a difference of 4.8 times for Sabri variety and the minimum difference of 1.2 times for Aita variety. The average cost of per acre production of any banana variety has involved the maximum cost of Taka 17773 for fertilizer trailing far behind by land preparation Taka 5485 in stratum-2

Table-4.4: Per acre production cost by farming year and size of land.

Size of land (acre)	Farming Year											
	All	1st Year	2nd year	3rd year & above	Total	1st Year	2nd year	3rd year & above	Total	1st Year	2nd year	3rd year & above
	All Areas				**Stratum-1**				**Stratum-2**			
Total	37391	47486	32427	26793	10296	15107	7475	8474	45322	53700	38784	36540
<= 0.04	19850	20544	21213	15667	15111	20016	8775	12122	40504	52900	40374	38150
0.05 – 0.49	43908	52627	36729	34325	14973	21748	9371	11389	48360	56300	40190	40419
0.50 – 0.99	40454	48555	34827	29359	11692	15972	9109	8480	44070	51822	37288	33993
1.00 – 1.49	25756	32200	25091	20960	8888	11226	6538	8534	39198	50784	37394	31435
1.50 – 2.49	20135	28704	19671	15741	6980	7913	6370	6975	37831	45970	36884	31745
2.50 – 4.99	27744	35673	36462	14986	6484	8409		5981	37352	41080	36462	30331
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-4.4 presents that per acre production cost and size of land planted by farming year for the year 2012-13. For stratum-1, beginning with size of land 0.05 to 0.49 as the size of land increased, the cost of per acre production decreased. Similar tendency is found in stratum-2 except in size of land <= 0.04 acre.

Table-4.5: Per Kg Production cost (Tk.), per acre production cost (Tk.) and quantity (Kg) of Banana and by farming year.

Farming Year /land type	Per KG Production cost (TK) , per acre production cost and quantity (KG)								
	All Areas			Stratum-1			Stratum-2		
	Per KG production cost	Production cost	Production (KG)	Per KG production cost	production cost	Production (KG)	Per KG production cost	production cost	Production (KG)
All	3.71	37364	10069	2.95	10307	3494	3.78	45294	11996
First year	5.11	47486	9285	5.36	15107	2819	5.10	53700	10525
2nd year	2.71	32427	11951	1.99	7475	3756	2.76	38784	14039
3rd year & above	2.82	26793	9506	2.22	8474	3825	2.92	36540	12529
Farm land	3.71	37391	10074	3.03	10296	3395	3.78	45322	12000
Homestead	2.63	16937	6423	5.19	14852	2861	2.39	18327	7669

Table-4.5 shows the average per KG production cost, per acre production cost and quantity (KG) of production by farming year in the year 2013. The average per kilogram production cost of Bangladesh is Taka 3.71 whereas the cost of stratum-2 is Taka 3.78 and stratum-1 is Taka 2.95 respectively. For first year the average cost of per kilogram production is Taka 5.11 where as in stratum-2 is Taka 5.10 and stratum-1 is Taka 5.36. Second and third years per kilogram per acre of production cost are almost half compared to the first year.

Table-4.6: Per Kg Production cost (Tk.), per acre production cost (Tk.) and quantity (Kg) by varieties of banana

Varieties of Banana	Per KG Production cost (TK) , per acre production cost and quantity (KG)								
	All			Stratum-1			Stratum-2		
	Per KG production cost	Per acre production cost	Per acre production (KG)	Per KG production cost	Per acre production Cost	Per acre production (KG)	Per KG production cost	Per acre production cost	Per acre production (KG)
All	3.62	37364	10327	2.95	10307	3497	3.65	45294	12394
Anaji	3.16	37184	11756	2.98	10952	3669	3.17	39275	12398
Atia	1.34	9381	6965	2.18	8065	3703	1.27	9612	7541
Bangla	2.67	12087	4425	3.11	10253	3295	2.05	21749	10581
Champa	3.45	35373	10240	2.46	10459	4244	3.57	46682	13064
Sabri	4.02	40804	10146	2.54	8469	3333	4.02	40843	10155
Shagor	3.58	55558	15514	3.69	11388	3087	3.58	55967	15630
Others	3.75	42365	11290	4.99	12319	2471	3.74	43042	11490

The above table reveals that the highest average production cost per kilogram of Sabri variety is Taka 4.02 followed by others variety Taka 3.75, Shagor variety Taka 3.58, Champa variety Taka 3.45, etc. and the lowest average production cost of per kilogram of aita variety is Taka 1.27 for stratum-2. For stratum-1 the highest production cost of per kilogram of others variety is Taka 4.99 followed by Shagor Taka 3.69**.**

Table-4.7: Per KG Production cost (TK), per acre production cost & quantity (Kg) by tenancy.

Tenure Ship	Per KG Production cost (TK) , per acre production cost and quantity (KG)								
	All Areas			Stratum-1			Stratum-2		
	Per KG production cost	Per acre production cost	Per acre production (KG)	Per KG production cost	Per acre production Cost	Per acre production (KG)	Per KG production cost	Per acre production cost	Per acre production (KG)
All	3.62	37364	10327	2.95	10307	3497	3.74	46294	12394
Owned	3.66	35369	9657	3.04	10307	3396	3.71	44576	11991
Share crop	3.80	47324	12467	2.49	9950	4000	3.80	47426	12492
Mortgage	4.13	45263	10957	2.85	11864	4156	4.15	46957	11302
Lease	3.31	47729	14401	3.13	7661	2447	3.31	48250	14561
Others	2.96	22050	7439	2.85	13002	4565	3.03	35827	11816

The highest production cost per kilogram of mortgage tenure ship is Taka 4.13 followed by share cropping Taka 3.80. It is also found that in the different type of land tenure ship, the production cost of per kilogram is nearly the same at the country level and the stratum-2. Slightly different production cost of per kilogram is found in stratum-1.

Chapter-5

Labour and Labourer’s Cost

Labour and Labourer's Cost

Information related to number and cost of labourers of plantation, weeding and harvesting have been discussed in this chapter.

Table-5.1: Per acre number of labour engaged and cost of plantation by farming year.

Farming Year/land type	All Areas				Stratum-1				Stratum-2			
	Number of Labour			Labour cost	Number of Labour			Labour cost	Number of Labour			Labour cost
	Family	Hired	Total		Family	Hired	Total		Family	Hired	Total	
All	2.73	4.56	7.29	1568	2.73	1.41	4.14	1029	2.72	5.48	8.20	1727
1st year	6.02	10.22	16.24	3492	8.68	4.50	13.18	3279	5.51	11.32	16.83	3532
2nd year	0.09	0.11	0.20	44	0.02	0.01	0.03	9	0.11	0.13	0.25	53
3rd year & above	0.18	0.20	0.48	90	0.01	0.02	0.03	8	0.27	0.30	0.57	133
Farm land	2.71	4.56	7.27	1568	2.71	1.41	4.12	1027	2.71	5.49	8.20	1726
Homestead	10.58	3.48	14.06	2109	8.59	1.56	10.15	1680	11.90	4.76	16.66	2395

* Stratum-1 = Chittagong, Cox's bazar & CH districts, * Stratum-2= Rest of the 59 districts

In the above table it is observed that the average number of labourers required for per acre plantation at national level is 7.29 persons and their cost is Taka 1568. The highest number of labourers required in first year is 16.24 persons followed by third year & above 0.48 persons and the second year 0.20 persons in the farming year. Between the two strata the average required number of labourers is significantly different. The average number of labourers required is 8.20 persons in stratum-2 and 4.12 persons in stratum-1. It is noticed that almost double labour is required in stratum-2 than that in stratum-1.

Table-5.2: Per acre number of labour engaged and cost of weeding by farming year.

Farming Year/land type	All Areas				Stratum-1				Stratum-2			
	Number of Labour			Labour cost	Number of Labour			Labour cost	Number of Labour			Labour cost
	Family	Hired	Total		Family	Hired	Total		Family	Hired	Total	
All	7.30	14.33	21.63	3861	4.90	2.55	7.45	1641	8.01	17.78	25.79	4512
1st year	7.10	17.57	24.67	4527	5.04	2.55	7.59	1771	7.49	20.46	27.95	5056
2nd year	6.55	14.08	20.63	3609	4.89	1.85	8.57	1305	6.98	17.19	24.17	4196
3rd year & above	8.31	9.72	18.03	3101	4.73	2.96	7.69	1726	10.21	13.31	23.52	3833
Farm land	7.30	14.34	21.64	3864	4.87	2.56	7.43	1637	8.01	17.79	25.80	4516
Homestead	9.33	0.71	10.04	1880	17.97	0.00	17.97	3094	3.57	1.19	4.76	1071

Table 5.2 shows that the average number of labourer required for per acre weeding at national level is 21.63 persons and their cost is Taka 3861. The highest number of labourer required is in the first year 24.67 persons and their cost is Taka 4527 followed by the second year requiring 20.63 persons and their cost is Taka 3609. The average number of labour required for per acre weeding in stratum-1 is 7.45 persons and

their cost is Taka 1641. On the other hand, the average number of labour required is 25.79 persons and their cost is Taka 4512 in stratum-2. The required number of labourers for per acre weeding is significantly different between the two strata.

Table-5.3: Per acre number of labour engaged and cost of harvesting by farming year.

Farming Year/land type	All Areas				Stratum-1				Stratum-2			
	Number of Labour			Labour cost	Number of Labour			Labour cost	Number of Labour			Labour cost
	Family	Hired	Total		Family	Hired	Total		Family	Hired	Total	
All	4.64	2.86	7.50	1736	8.25	2.69	10.94	2731	3.58	2.91	6.49	1444
1st year	2.97	2.31	5.28	1221	6.17	1.71	7.88	1935	2.35	2.43	4.78	1084
2nd year	4.52	3.05	7.57	1799	8.90	2.35	11.25	2731	3.40	3.23	6.63	1562
3rd year & above	7.16	3.51	10.67	2451	9.21	3.55	12.76	3289	6.08	3.48	9.56	2005
Farm land	4.60	2.86	7.46	1735	8.19	2.69	10.88	2731	3.56	2.91	6.47	1443
Homestead	28.44	3.39	31.78	2409	33.59	3.13	36.72	2934	25.00	3.57	28.57	2060

The above table provides the average number of labourers required for per acre harvesting at national level which is 7.50 persons and their cost is Taka 1736 during the survey years. The highest average number of labourers required is in the third year and above which is 10.67 persons and their cost is Taka 2451 followed second year which is 7.57 persons and their cost is Taka 1799 and the lowest number of labourers required is in first year 5.28 persons and their cost is Taka 1221. The average number of labourers required for per acre harvesting in stratum-1 is 10.94 persons and their cost is Taka 2731, which is 6.49 persons and their cost is Taka 1444 in stratum-2. The average number of labourers required is nearly double in stratum-1 compared to that in stratum-2.

Chapter-6

Production and Productivity

Production and Productivity

The estimated per kilogram production value (taka), per acre production (kilogram) and per acre production value (Taka) by farming year, tenureship and varieties of banana productivity in Bangladesh have been presented in this chapter.

Table-6.1: Per kg production value, per acre production (Kg) & value (Tk) by farming year.

Farming year /land type	All Areas			Stratum-1			Stratum-2		
	Per KG production Value(Tk.)	Production Qty. (Kg.)	Production Value (Tk.)	Per KG production Value(Tk.)	Production Qty. (Kg.)	Production Value (Tk.)	Per KG production Value(Tk.)	Production Qty. (Kg.)	Production Value (Tk.)
All	11.09	10327	114606	8.26	3497	28878	11.34	12394	140582
1st year	11.53	9285	107039	9.91	2819	27925	11.61	10525	122221
2nd year	10.61	11951	126846	8.17	3756	30684	10.85	14039	152344
3rd year & above	11.03	9506	104929	7.56	3825	28517	11.62	12529	145586
Farm land	11.09	10074	111818	8.26	3495	28861	11.34	12000	136099
Homestead	8.85	5746	50865	8.68	2861	24834	8.90	7669	68217

* Stratum-1 = Chittagong, Cox's bazar & CH districts, * Stratum-2= Rest of the 59 districts

Table-6.1 shows the per kilogram production value (Tk.), per acre production (Kg) and per acre production value (Tk.) by farming year. The average per acre production value, per acre kilogram production and per kilogram production value of banana crops in Bangladesh are estimated at Taka 114606, 10327 kilograms and Taka 11.09 respectively. The highest per acre production of 11951 kilograms and per acre production value of Taka 126846 is found in the second year. It is seen that the average per acre production (Kg) and per acre production value (Tk.) in stratum-1 is significantly lower than that of stratum-2.

Table-6.2: Per kg production value, per acre production (Kg) & value (Tk) by tenancy.

Tenancy	All Areas			Stratum-1			Sratum-2		
	Per KG production Value(Tk.)	Production Quantity (Kg.)	Production Value (Tk.)	Per KG production Value(Tk.)	Production Quantity (Kg.)	Production Value (Tk.)	Per KG production Value(Tk.)	Production Quantity (Kg.)	Production Value (Tk.)
All	11.09	10327	114606	8.26	3497	28878	11.34	12394	140582
Owned	11.23	9657	108443	8.50	3396	28872	11.56	11991	138589
Share crop	12.23	12467	134002	9.70	4000	38800	10.75	12492	134284
Mortgage	12.20	10957	134607	9.72	4156	40379	12.33	11302	139387
Lease	10.47	14401	150821	8.71	2447	21309	10.48	14561	152624
Others	7.03	7439	52272	7.00	4565	31954	7.04	11816	83208

Table-6.2 is shows the per KG production value, per acre production (KG) and value (Tk.) by tenancy. It is observed that the highest per acre production and value are

in lease land tenureship of 14401 kg and Taka 150821 respectively followed by share crop tenureship of 12467 kg and Taka 134002. It is seen from the table that per acre production kilogram and production value in per acre are significantly different in the two strata. Per acre production (KG) and value (Taka) for all type of tenureship in stratum-2 are 2.5 times to 6 times higher than that of stratum-1. Similarly per kilogram production value in taka is higher in stratum-2 than that of stratum-1 for all type of tenureship.

Table-6.3: Per kg production value, per acre production (Kg) and value (Tk) by variety of banana.

Varieties of Banana	All Areas			Stratum-1			Stratum-2		
	Per KG production Value(Tk.)	Production Quantity (Kg.)	Production Value (Tk.)	Per KG production Value(Tk.)	Production Quantity (Kg.)	Production Value(Tk.)	Per KG production Value(Tk.)	Production Quantity (Kg.)	Production Value(Tk.)
All	10.99	10327	113496	8.26	3497	28878	11.34	12394	140582
Anaji	9.43	11756	110962	10.67	3669	39137	9.41	12398	116662
Atia	4.00	6965	27851	3.26	3703	12084	4.06	7541	30631
Bangla	10.20	4425	37324	10.85	3295	27356	8.66	10581	91656
Champa	10.41	10240	108532	8.11	4244	34452	10.98	13064	143422
Sabri	13.59	10146	137929	7.10	3333	23677	13.60	10155	138073
Shagor	10.21	15514	158382	9.73	3087	30047	10.21	15630	159581
Others	10.39	11290	117316	9.94	2471	24552	10.39	11490	119422

It is seen from table-6.3 that the highest per acre yield rate of Shagor banana is 15514 kilograms and its value is recorded at Taka158382, followed by Anaji banana (11756 kilograms) with its value as Taka 110962. The lowest per kilogram production value is in Aita banana which is only Taka 4.00. The highest per kilogram production value is found in Sabri banana which is Taka 13.59. Per acre yield rate of Champa banana is 4244 kilograms in Stratum-1 with value of Taka 34452, followed by Aita banana (3703 kilograms) with value at Taka 12084. In this area the lowest per acre yield rate of others variety of banana is 2471 kilograms and its value is Taka 24552. Shagor banana in stratum-2 has the highest per acre yield rate at 15630 kilograms and its value is Taka 159581, followed by Champa banana with per acre yield rate of 13064 kilograms with value of Taka 143422. Per acre yield rate and its value for each banana variety are significantly different between Stratum-1 and stratum-2 which are 2(two) to 5 (five) times higher in stratum 2 than those of stratum-1.

Table-6.4: Per acre productivity of Banana crops by variety of banana.

Varieties of Banana	All Areas			Stratum-1			Stratum-2		
	Production cost (Tk.)	Production value (Tk.)	Productivity	Production cost (Tk.)	Production value (Tk.)	Productivity	Production cost (Tk.)	Production value (Tk.)	Productivity
All	37364	114606	3.06	10307	28878	2.80	45294	140542	3.13
Anaji	37184	110962	2.76	10952	39137	5.18	39275	116662	2.97
Atia	9381	27851	2.97	8065	12084	1.50	9612	30631	3.18
Bangla	12087	37324	3.08	10253	27356	2.67	21749	91656	4.21
Champa	35373	108532	3.06	10459	34452	3.29	46682	143422	3.07
Sabri	40804	137929	3.38	8469	23677	2.79	40843	138073	3.38
Shagar	55558	158382	2.73	11388	30047	2.63	55967	159581	2.85
Others	42365	117316	2.77	12319	34143	3.11	43042	119422	2.77

Table-6.4 exposes the productivity of the cost by varieties of banana in both stratum-1 and 2. It is the most significant component of production because it determines whether the producer will continue the production of the respective crops. If the productivity of a banana crop is greater than one it means that the producer will be benefited and he will be interested to continue the production of the crop; and if it is less than one it means that the producer will be looser and he will quit the production of the crop. It is unearthed from the table that productivity of banana crops at national level is 3.06, in stratum -1 is 2.80 and in stratum-2 is 3.13. This means that the productivity is greater than one in both the strata and farmers get some profit from the production of banana. At the national level the highest productivity is 3.38 for Sabri banana and minimum/lowest productivity is 2.73 in Shagor banana. On the other hand, the highest productivity (4.21) is found in Bangla banana.

Chapter-6

Sampling Error and Data Reliability

Sampling Error and Data Reliability

Using the Random Group Method the estimating variance of R, the following formula is used:

$$\text{Var®} = \frac{\sum_{g=1}(R_g - R)^2}{K(K-1)}$$

Where: R= the estimated average cost (land preparation / seedling/ fertilizer / Pesticide//harvesting)

R_g= the estimated mean for the g^{th} random group

K = the number of random group

Table-7.1: Estimated average per decimal production cost (excluding leasing value) for the Year 2013 in Stratum-1 & their standard errors by farming year.

Production Cost	Farming year											
	Stratum-1			First Year			Second Year			3rd Year & more		
	Cost	SE	RSE (%)	Cost	SE	RSE (%)	Cost	SE	RSE (%)	Cost	SE	RSE (%)
All	102.96	1.652	1.605	151.07	2.406	1.593	74.75	3.968	5.308	84.74	4.045	4.773
Land Preparation	10.38	0.483	4.653	20.05	0.644	3.212	6.45	0.813	12.605	5.75	0.363	6.313
Seedling,/Planting / Weeding	37.88	0.922	2.434	86.60	1.397	1.613	13.14	0.829	6.309	17.34	0.187	1.078
Irrigation/ Pesticide	0.44	0.014	3.182	0.18	0.071	39.444	0.25	0.089	35.600	0.68	0.005	0.735
Fertilizer	2.58	0.156	6.046	4.45	0.236	5.303	1.70	0.367	21.588	1.75	0.040	2.303
Harvesting and all other	51.69	0.934	1.807	39.79	1.209	3.038	53.10	2.432	4.580	59.23	3.477	5.870

Note: Farming year wise SE have been calculated as there are differences in cost of production in different farming years

The table shows that the average production cost per decimal for first year in stratum-1 of 102.96 taka is significantly different from the 74.75 taka average production for second year at 95% confidence interval. Similarly, the average production cost per decimal for first year of 151.07 taka is significantly different from the 84.74 taka average production cost for third year and above at 95% confidence interval. On the other hand the average production cost per decimal for second year 74.75 taka is significantly different from the 84.74 taka average production for third year and above at 95% confidence interval.

Although the estimated per decimal production cost for second year is subject to the higher standard error than for first year farming. Similarly the estimated production

cost per decimal for third year above is also subject to the higher standard error than for first year farming. Production cost per decimal for all estimates have acceptable reliability in terms of sampling error.

Table-7.2: Estimated average per decimal production cost (excluding leasing value) for the Year 2013 in Stratum-2 & their standard errors by farming year.

Production Cost	Farming Year											
	Stratum-2			First Year			Second Year			3rd Year & more		
	Cost	SE	RSE (%)	Cost	SE	RSE (%)	Cost	SE	RSE (%)	Cost	SE	RSE (%)
All	453.22	1.208	2.824	537.00	2.037	0.379	387.84	3.201	0.825	365.40	6.109	1.672
Land Preparation	54.85	0.389	0.709	66.23	0.575	0.868	43.04	0.685	1.592	46.27	0.792	1.712
Seedling,/Planting / Weeding	97.61	0.952	0.975	159.95	0.357	0.223	42.49	1.370	3.224	39.66	0.985	2.484
Irrigation/ Pesticide	68.05	0.726	1.067	67.33	0.880	1.307	74.43	1.153	1.549	62.42	1.976	3.166
Fertilizer	177.89	0.857	0.482	188.58	1.082	0.574	172.48	0.761	0.441	163.34	3.369	2.063
Harvesting and all other	54.77	0.218	0.398	54.89	0.298	0.543	55.41	0.646	1.658	53.71	0.541	1.007

Note: Farming year wise SE have been calculated as there are differences in cost of production in different farming years

From the above table the average production cost per decimal for first year of 537.00 taka is significantly different from the 387.84 taka average production cost for second year at 95% confidence interval. On the hand the average production cost per decimal for first year of 537.00 taka is significantly different from the 365.40 taka average production cost for third year and above at 95% confidence interval. Whereas, the average production per acre of second year for 387.84 taka is significantly different from the 365.40 taka average production for third year and above at 95% confidence interval.

However the estimated production cost per decimal for second year and third year & above production cost are subject to higher standard errors than for first year. Production cost per decimal for all estimates have acceptable reliability in terms of sampling error.

Table-7.3: Estimated average per decimal production cost (excluding leasing value) for the Year 2013 and their standard errors by farming year

Production Cost	Farming Year											
	Farm land			First Year			Second Year			3rd Year & more		
	Cost	SE	RSE (%)	Cost	SE	RSE (%)	Cost	SE	RSE (%)	Cost	SE	RSE (%)
All	373.91	2.330	0.623	474.86	3.891	0.819	324.27	6.048	1.865	267.93	6.719	2.508
Land Preparation	44.78	0.274	0.612	58.79	0.654	1.112	35.61	0.652	1.831	32.20	0.820	2.546
Seedling,/Planting / Weeding	84.09	0.275	0.327	148.15	0.739	0.499	36.53	1.403	3.841	31.91	0.452	1.416
Irrigation/ Pesticide	52.80	0.731	1.384	56.52	0.747	1.32	59.39	1.901	3.201	40.97	1.693	4.132
Fertilizer	138.20	1.018	0.737	158.94	2.286	1.438	137.80	2.657	1.928	107.22	2.573	2.400
Harvesting and all other	54.06	0.353	0.653	52.47	0.339	0.646	54.93	0.994	1.810	55.63	1.539	2.766

Note: Farming year wise SE have been calculated as there are differences in cost of production in different farming years

The averages per decimal average cost for farm land area of 373.91 taka are significantly different from the average production cost per decimal for three framing years at confidence 95% interval. Although the estimated average per decimal production cost for farm land area are subject to lower than that of the first farming years. Production cost per decimal for all estimates have acceptable reliability in terms of sampling error.

Table-7.4: Estimated average per decimal production value (excluding leasing value) for the Year 2013 and their standard errors by farming year.

Farming year	All Areas			Stratum-1			Stratum-2		
	Value	SE	RSE (%)	Value	SE	RSE (%)	Value	SE	RSE (%)
First Year	1070.39	20.615	1.926	279.25	10.312	3.693	1222.21	23.808	1.948
Second Year	1268.46	24.548	1.935	306.84	11.398	3.715	1513.44	28.948	1.913
3rd Year & more	1049.29	22.786	2.172	285.17	15.648	5.487	1455.86	17.386	1.194
Farm land	1118.18	11.675	1.044	288.61	6.479	2.245	1360.99	18.800	1.381

Note: Farming year wise SE have been calculated as there are differences in cost of production in different farming years

The estimated average production values per decimal for farm land area of 1118.18 taka are significantly different from the average production value for farming three years at 95% confidence interval. The highest average production values for second year of 1268.46 taka are significantly different from the other two years at 95% confidence interval. However the estimated averages per decimal production values for farm land area are subject to lower than that of the second farming years. Production values per decimal for all estimates have acceptable reliability in terms of sampling error

Annex

Annex-A: Statistical Table

Table-1: Distribution of area (acres) under banana cultivation by tenancy and farming year.

Farming year/land type	Tenancy					
	Total	Owned	Share crop	Mortgage	Lease	Other
1	2	3	4	5	6	7
All Areas						
Total	172872	143571	5415	2714	20844	327
First year	75626	60895	3692	1514	9429	96
Second Year	46978	38613	1033	839	6367	126
Third/More year	50033	43870	690	361	5006	105
Farm land	172637	143378	5415	2714	20802	327
Homestead	236	194	-	-	42	
Stratum-1						
Total	39184	38573	15	131	268	197
First year	12176	12021	-	43	58	54
Second Year	9538	9283	15	15	158	67
Third/More year	17376	17174	-	74	52	77
Farm land	39090	38478	15	132	268	197
Homestead	94	94	-	-	-	-
Stratum-2						
Total	133688	104998	5401	2583	20576	130
First year	63450	48874	3692	1471	9371	42
Second Year	37440	29329	1018	825	6209	59
Third/More year	32657	26696	690	288	4955	29
Farm land	133547	104899	5400	2583	20534	130
Homestead	141	99			42	

Table-2: Distribution of number households under banana cultivation by tenancy & farming year.

Farming year/land type	Tenancy					
	Total	Owned	Share crop	Mortgage	Lease	Other
1	2	3	4	5	6	7
All Areas						
Total	563181	489772	18755	7773	44515	2367
First year	259334	220321	11949	5533	20922	610
Second Year	149773	130125	4954	915	13012	757
Third/More year	142251	128672	1851	1325	9404	999
Farm land	551359	479127	18755	7773	43338	2366
Homestead	11823	10644	-	-	1178	-
Stratum-1						
Total	100864	98140	74	368	589	1693
First year	38358	37548	-	147	221	442
Second Year	25400	24443	74	74	221	589
Third/More year	32689	31732	-	147	147	663
Farm land	96447	93722	74	368	589	1694
Homestead	4417	4417	-	-	-	-
Stratum-2						
Total	462317	391832	18681	7405	43926	673
First year	220977	182773	11949	5386	20701	168
Second Year	124373	105692	4881	841	12791	168
Third/More year	109563	96940	1851	1178	9256	337
Farm land	454912	385405	18681	7405	42748	673
Homestead	7405	6227	-	-	1178	-

Table-3: Distribution of area (acres) under banana cultivation by variety and farming year.

Farming year/land type	Varieties of banana							
	Total	Anaji	Aita	Bangla	Champa	Shagor	Sobri	Others
1	2	3	4	5	6	7	8	9
All Areas								
Total	172872	4338	1555	35287	26703	41671	54705	8613
First year	75626	2626	196	10775	12790	21130	24414	3695
Second Year	46978	709	45	9741	6219	10251	17193	2818
Third/More year	50033	948	1285	14692	7687	10281	13077	2063
Farm land	172637	4283	1526	35208	26696	41662	54684	8576
Homestead area	236	54	29	80	7	8	20	37
Stratum-1								
Total	39184	320	233	29656	8336	382	66	190
First year	12176	78	74	8238	3380	216	44	146
Second Year	9538	88	0	7778	1626	34	0	11
Third/More year	17376	113	159	13593	3323	133	22	33
Farm land	39090	279	233	29609	8329	383	66	190
Homestead area	94	40	0	46	7	0	0	0
Stratum-2								
Total	133688	4017	1323	5631	18366	41289	54638	8423
First year	63450	2548	123	2536	9410	20915	24370	3549
Second Year	37440	621	45	1962	4593	10217	17193	2807
Third/More year	32657	835	1126	1099	4364	10148	13055	2030
Farm land	133547	4004	1294	5597	18367	41280	54618	8386
Homestead area	141	13	29	34	0	8	20	37

Table-4: Distribution of households under banana cultivation by variety and farming year.

Farming year/land type	Varieties of banana							
	Total	Anaji	Aita	Bangla	Champa	Shagor	Sobri	Others
1	2	3	4	5	6	7	8	9
All Areas								
Total	563181	29105	8636	109777	89280	130463	154435	41486
First year	259334	14116	1588	43240	43147	66520	73094	17629
Second Year	149773	5249	841	29345	24192	31766	45777	12601
Third/More year	142251	6890	4860	32721	21647	31612	34890	9572
Farm land	551358	26255	7289	105306	88985	129958	153761	39802
Homestead area	11823	2850	1346	4470	294	505	673	1683
Stratum-1								
Total	100864	3019	221	68543	26504	1546	442	589
First year	38358	147	74	26578	10160	883	221	294
Second Year	25400	368	0	17228	7362	294	0	147
Third/More year	32689	683	147	22455	8688	368	221	147
Farm land	96447	1178	221	66261	26210	1545	442	588
Homestead area	4417	1841	0	2282	294	0	0	0
Stratum-2								
Total	462317	26086	8415	41233	62776	128917	153994	40897
First year	220977	13969	1515	16662	32987	65637	72873	17335
Second Year	124373	4881	841	12118	16830	31472	45777	12454
Third/More year	109563	6227	4712	10266	12959	31304	34670	9425
Farm land	454913	25077	7068	39046	62776	128413	153320	39214
Homestead area	7405	1010	1346	2188	0	505	673	1683

Table-5: Distribution of area (acres) and number of households by cultivation type and farming year.

Farming year/land type	Type of cultivation					
	Total		**Single**		**Multiple**	
	Area	Household	Area	Household	Area	Household
1	2	3	4	5	6	7
All Areas						
Total	172872	563181	127135	432461	45737	130720
First year	75626	259334	57129	202746	18497	56588
Second Year	46978	149773	34418	113654	12560	36119
Third/More year	50033	142251	35429	107710	14604	34541
Farm land	172637	551359	126976	424110	45661	127249
Homestead area	236	11823	159	8352	77	3471
Stratum-1						
Total	39184	100864	10613	38137	28571	62727
First year	12176	38358	2728	13915	9447	24443
Second Year	9538	25400	1428	8467	8110	16933
Third/More year	17376	32689	6424	14136	10951	18553
Farm land	39090	96447	10580	36518	28508	59929
Homestead area	94	4417	32	1620	62	2798
Stratum-2						
Total	133688	462317	116622	394325	17166	67993
First year	63450	220977	54401	188831	9049	32145
Second Year	37440	124373	32990	105187	4450	19186
Third/More year	32657	109563	29005	93574	3652	15988
Farm land	133547	454913	116396	387592	17151	67319
Homestead area	141	7405	126	6732	15	673

Table-6: Per acre land preparation cost (Tk.) by farming year.

Farming year/ land type	Area	Land preparation cost(Tk)					
		Total cost (Tk.)	Plough/kodal		Power tiller		Other Cost(Tk.)
			Number	Cost(Tk.)	Number	Cost(Tk.)	
1	2	3	4	5	6	7	8
All Areas							
Total	172872	4478	5.61	1912	3.72	1564	1002
First year	75626	5879	6.98	2450	6.54	2316	1114
Second Year	46978	3561	4.55	1474	1.85	1174	913
Third/More year	50033	3220	4.48	1507	1.22	802	911
Farm land	172636	4478	5.59	1911	3.72	1566	1001
Homestead area	236	4668	16.34	2795	0	0	1873
Stratum-1							
Total	39184	1044	0.82	476	-	-	568
First year	12176	2005	1.45	960	-	-	1045
Second Year	9538	645	0.69	200	-	-	445
Third/More year	17376	575	0.45	289	-	-	286
Farm land	39090	1038	0.82	476	-	-	561
Homestead area	94	3438	1.56	273	-	-	3164
Stratum-2							
Total	133688	5485	7.01	2333	4.81	2023	1129
First year	63450	6623	8.04	2735	7.80	2760	1127
Second Year	37440	4304	5.53	1798	2.32	1473	1032
Third/More year	32657	4627	6.62	2155	1.88	1229	1243
Farm land	133547	5485	6.99	2331	4.81	2025	1129
Homestead area	141	5488	26.19	4476	0.00	0	1012

Table-7: Per acre seedling and plantation cost (Tk.) by farming year.

Farming year /land type	Total cost (Tk.)	Seedling		Plantation		
		Number	Cost (Tk.)	Number of labour		Cost (Tk.)
				Family	Hired	
1	2	3	4	5	6	7
All Areas						
Total	4543	465	2975	2.73	4.56	1568
First year	10287	1063	6796	6.02	10.22	3492
Second Year	44	-	-	0.09	0.11	44
Third/More year	90	-	-	0.18	0.20	90
Farm land	4545	466	2977	2.71	4.56	1568
Homestead area	3468	291	1359	10.58	3.48	2109
Stratum-1						
Total	2152	191	1123	2.73	1.41	1029
First year	6889	612	3610	8.68	4.50	3279
Second Year	9	-	-	0.02	0.01	9
Third/More year	8	-	-	0.01	0.02	8
Farm land	2151	191	1124	2.71	1.41	1027
Homestead area	2344	151	664	8.59	1.56	1680
Stratum-2						
Total	5244	546	3517	2.72	5.48	1727
First year	10939	1150	7407	5.51	11.32	3532
Second Year	53	-	-	0.11	0.13	53
Third/More year	133	-	-	0.27	0.30	133
Farm land	5245	546	3519	2.71	5.49	1726
Homestead area	4217	385	1821	11.90	4.76	2395

Table-8: Per acre weeding, irrigation, pesticide & other cost (Tk.) by farming year.

Farming year /land type	Total Cost (TK.)	Weeding			Cost (Tk.)		
		Number of labour		Cost (Tk.)	Irrigation	Insecticides/ pesticides	Other
		Family	Hired				
1	2	3	4	5	6	7	8
All Areas							
Total	11587	7.30	14.33	3861	3392	1881	2453
First year	13174	7.10	17.57	4527	3826	1826	2997
Second Year	11859	6.55	14.08	3609	3689	2250	2311
Third/More year	8967	8.31	9.72	3101	2471	1626	1768
Farm land	11598	7.30	14.34	3864	3396	1884	2454
Homestead area	3562	9.33	0.71	1880	71	0	1611
Stratum-1							
Total	2140	4.90	2.55	1641	13	31	455
First year	2212	5.04	2.55	1771	4	14	423
Second Year	1764	4.89	1.85	1305	25	10	424
Third/More year	2286	4.73	2.96	1746	14	54	492
Farm land	2135	4.87	2.56	1637	13	31	454
Homestead area	3906	17.97	0.00	3092	0	0	813
Stratum-2							
Total	14356	8.01	17.78	4512	4382	2423	3039
First year	15280	7.49	20.46	5056	4559	2174	3490
Second Year	14431	6.98	17.19	4196	4623	2820	2792
Third/More year	12522	10.21	13.31	3833	3779	2463	2447
Farm land	14367	8.01	17.79	4516	4386	2426	3039
Homestead area	3333	3.57	1.19	1071	119	0	2143

Table-9: Per acre type of fertilizer used (kg) and Price (Tk.) by farming year

Farming year /land type	Total value	Urea		TSP		MOP		Cake		Khoil (Oil Cake)	
		Qty (kg)	Price (Tk.)	Qty (kg)	Price (Tk.)	Qty (kg)	Price (Tk.)	Qty (kg)	Price (Tk.)	Qty (kg)	Price (Tk.)
1	2	3	4	5	6	7	8	9	10	11	12
All Areas											
Total	13803	143	3337	123	4351	105	2408	1307	1948	13	260
First year	15894	154	3974	137	4778	110	2688	1568	2411	19	376
Second Year	13780	152	3289	128	4714	124	2798	1132	1304	9	191
Third/ More year	10722	117	2432	99	3387	79	1629	1082	1860	8	151
Farm land	13820	143	3341	123	4357	105	2411	1308	1950	13	260
Homestead	1389	31	747	1	107	2	97	159	224	0	0
Stratum-1											
Total	258	3	61	4	102	2	30	10	32	*	4
First year	445	5	103	8	191	3	47	25	71	-	-
Second Year	170	1	32	2	53	2	24	4	20	*	8
Third/ More year	175	2	47	2	67	1	23	2	9	*	5
Farm land	258	3	61	4	102	2	31	10	31	*	4
Homestead	227	1	23	0	0	0	0	41	203	-	0
Stratum-2											
Total	17773	184	4298	158	5597	135	3105	1687	2510	17	335
First year	18858	183	4717	161	5657	131	3195	1864	2860	23	448
Second Year	17248	190	4119	160	5901	155	3505	1419	1631	12	237
Third/ More year	16334	178	3701	151	5154	121	2484	1656	2845	12	229
Farm land	17789	184	4301	158	5602	135	3108	1689	2512	17	335
Homestead	2164	51	1229	2	179	4	162	238	238	-	-

(Continued)

Table-9: Per acre type fertilizer used (kg) and price (Tk.) by farming year.

Farming year /land type	Boron		Zink		Sulfur		Magnesium		Others	
	Qty (kg)	Price (Tk.)	Qty (kg)	Price (Tk.)	Qty (kg)	Price (Tk.)	Qty (kg)	Price (Tk.)	Qty (kg)	Price (Tk.)
1	13	14	15	16	17	18	19	20	21	22
All Areas										
Total	3	247	5	379	3	259	2	109	8	503
First year	3	256	5	390	4	283	2	117	9	621
Second Year	4	279	6	430	3	234	2	96	7	446
Third/More year	3	205	4	317	4	248	2	111	6	381
Farm land	3	248	5	380	3	259	2	110	8	504
Homestead	0	0	-	-	-	-	-	-	11	214
Stratum-1										
Total	*	*	*	7	*	13	*	2	*	8
First year			*	12	*	21				
Second Year	*	1	*	10	*	14	*	4	*	2
Third/More year			*	3	*	5	*	2	*	16
Farm land	*	*	*	8	*	13	*	2	*	8
Homestead	-	-	-	-	-	-	-	-	-	-
Stratum-2										
Total	4	320	6	488	4	331	3	141	10	649
First year	4	306	5	462	4	333	3	139	11	740
Second Year	5	350	7	537	3	291	3	120	9	559
Third/More year	4	315	6	485	5	377	4	169	10	575
Farm land	4	320	6	489	4	322	3	141	10	649
Homestead	-	-	-	-	-	-	-	-	18	357

Table-10: Per acre harvesting, ripen, transport and others cost (Tk.) by farming year.

Farming year /land type	Area	Harvesting			Ripen Cost (tk)	Transport cost (Tk.)	Others cost (tk.)	Total cost (tk.)
		Number of labour		Cost (tk.)				
		Family	Hired					
1	2	3	4	5	6	7	8	9
All Areas								
Total	172872	4.64	2.86	1736	16	813	388	2953
First year	75626	2.97	2.31	1221	12	677	340	2250
Second Year	46978	4.52	3.05	1799	17	824	542	3183
Third/More year	50033	7.16	3.51	2451	20	1009	315	3795
Farm land	172637	4.60	2.86	1735	16	813	388	2952
Homestead area	236	28.44	3.39	2409	0	1089	601	4100
Stratum-1								
Total	39184	8.25	2.69	2731	13	1692	278	4714
First year	12176	6.17	1.71	1935	6	1294	321	3555
Second Year	9538	8.90	2.35	2731	16	1814	326	4887
Third/More year	17376	9.21	3.55	3289	15	1905	222	5431
Farm land	39090	8.19	2.69	2731	13	1693	278	4714
Homestead area	94	33.59	3.13	2934	0	1652	352	4938
Stratum-2								
Total	133688	3.58	2.91	1444	17	556	421	2437
First year	63450	2.35	2.43	1084	13	558	344	2000
Second Year	37440	3.40	3.23	1562	18	572	597	2748
Third/More year	32657	6.08	3.48	2005	22	532	365	2924
Farm land	133547	3.56	2.91	1443	17	556	420	2436
Homestead area	141	25.00	3.57	2060	0	714	768	3542

Table-11.a: Per acre production cost (Tk.) by size of land and stratum.

Size of land planted (Acres)	Per acre production Cost (taka)											
	Total	Land Preparation	Seedling	Plantation	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
All Areas												
Total	37364	4478	2975	1568	3861	3392	1881	13803	1736	16	813	2841
<= 0.04	19326	3417	2179	2409	1911	404	409	2655	2848	20	1026	2028
0.05 – 0.49	43887	5394	3729	2093	4935	3431	2237	15449	2106	25	894	3595
0.50 – 0.99	40454	4840	3653	1572	3529	4198	1972	16260	1253	4	376	2797
1.00 – 1.49	25756	3000	1797	788	2533	2743	1231	9428	1439	6	1135	1654
1.50 – 2.49	20135	2024	580	471	1885	2301	905	7824	1761	6	1106	1273
2.50 – 4.99	27744	3059	766	730	2580	3684	1887	11604	823	25	448	2138
5.00 – 7.49	-	-	-	-	-	-	-	-	-	-	-	-
7.50 +	-	-	-	-	-	-	-	-	-	-	-	-
Stratum-1												
Total	10307	1044	1123	1029	1641	13	31	258	2731	13	1692	733
<= 0.04	15667	2454	2476	2544	1726	-	-	238	3391	32	1188	1617
0.05 – 0.49	14958	1730	2094	2014	2126	46	93	586	2960	41	1637	1632
0.50 – 0.99	11692	1220	1259	1334	2233	2	10	326	3373	4	1133	798
1.00 – 1.49	8888	755	772	766	1435	-	2	114	2506	-	2286	253
1.50 – 2.49	6980	582	501	251	1082	-	3	74	2627	-	1637	222
2.50 – 4.99	6484	636	459	331	1683	-	30	28	1861	-	879	577
5.00 – 7.49	-	-	-	-	-	-	-	-	-	-	-	-
7.50 +	-	-	-	-	-	-	-	-	-	-	-	-
Stratum-2												
Total	45294	5486	3517	1727	4512	4382	2423	17773	1444	17	556	3460
<= 0.04	25594	5120	1672	2176	2229	1095	1109	6794	1919	-	747	2732
0.05 – 0.49	48348	5959	3982	2105	5368	3953	2567	17740	1974	22	780	3898
0.50 – 0.99	44070	5296	3954	1602	3692	4726	2219	18264	986	4	281	3048
1.00 – 1.49	39198	4789	2614	806	3408	4929	2210	16851	589	11	219	2770
1.50 – 2.49	37831	3964	686	766	2964	5396	2119	18248	594	13	392	2689
2.50 – 4.99	37352	4153	905	911	2985	5348	2727	16835	355	36	254	2844
5.00 – 7.49	-	-	-	-	-	-	-	-	-	-	-	-
7.50 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-11.b: Per acre production quantity (Kg) & their value (Tk.) by size of land and type.

Size of land planted (Acres	Per acre production quantity (Kg.) and value (Tk.)								
	Total			Green			Ripe		
	No. of Kandi	Qty (Kg)	Value (tk)	No. Kandi	Qty (Kg)	Value (tk)	No. of Kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
All Areas									
Total	906	10327	114606	1036	11756	110962	903	10290	114702
<= 0.04	622	6339	63579	540	6136	66663	638	6339	62965
0.05 – 0.49	949	11470	125490	1095	12492	123053	942	11427	125593
0.50 – 0.99	1051	11521	135504	914	10760	78279	1054	11538	136761
1.00 – 1.49	768	8019	92121	600	3250	36136	770	8051	92501
1.50 – 2.49	633	8508	64489	-	-	-	633	6508	64489
2.50 – 4.99	853	8782	90837	-	-	-	853	8782	90837
5.00 – 7.49	-	-	-	-	-	-	-	-	-
7.50 +	-	-	-	-	-	-	-	-	-
Stratum-1									
Total	315	3497	28878	628	3669	39137	312	3495	28794
<= 0.04	344	3874	39028	442	3310	30627	330	3958	40281
0.05 – 0.49	310	3664	31890	770	4806	49524	307	3656	31768
0.50 – 0.99	280	3198	29360	625	3438	38115	276	3195	29237
1.00 – 1.49	342	3783	29933	600	3250	36136	338	3791	28938
1.50 – 2.49	299	3190	24880	-	-	-	299	3190	24880
2.50 – 4.99	352	3447	26855	-	-	-	352	3447	26855
5.00 – 7.49	-	-	-	-	-	-	-	-	-
7.50 +	-	-	-	-	-	-	-	-	-
Stratum-2									
Total	1085	12394	140542	1069	12398	116662	1086	12394	141308
<= 0.04	1116	10723	107246	638	8962	102695	1260	11251	108611
0.05 – 0.49	1051	12717	140450	1103	12675	124805	1048	12719	141202
0.50 – 0.99	1151	12608	149370	937	11345	81488	1156	12638	150932
1.00 – 1.49	1114	11451	142512	-	-	-	1114	11451	142512
1.50 – 2.49	1082	10970	117769	-	-	-	1082	10970	117769
2.50 – 4.99	1079	11193	119750	-	-	-	1079	11193	119750
5.00 – 7.49	-	-	-	-	-	-	-	-	-
7.50 +	-	-	-	-	-	-	-	-	-

Table-12.a: Per acre production cost (Tk.) by size land size of land and farming year.

Size of land planted (Acres)	Per acre production cost (taka)											
	Total	Land Preparation	Seedling	Plantation	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripening	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
All Areas												
Total	37364	4478	2987	1568	3861	3392	2453	13803	1736	16	813	2841
<= 0.04	19326	3417	2179	2409	1911	404	1372	2655	2848	20	1026	2028
0.05 – 0.49	43887	5394	3729	2093	4935	3431	3040	15449	2106	25	894	3595
0.50 – 0.99	40454	4840	3653	1572	3529	4198	2413	16260	1253	4	376	2797
1.00 – 1.49	25756	3000	1797	788	2533	2743	1522	9428	1439	6	1135	1654
1.50 – 2.49	20135	2024	580	471	1885	2301	1184	7823	1761	6	1106	1273
2.50 – 4.99	27744	3059	766	730	2580	3684	2088	11604	823	25	448	2138
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
First Year												
Total	47486	5879	6796	3492	4527	3826	2997	15894	1221	12	677	3337
<= 0.04	20544	1984	5983	5229	1096	80	885	307	3452	-	970	1403
0.05 – 0.49	52627	6482	7636	4166	5421	3662	3610	16737	1529	22	900	4052
0.50 – 0.99	48555	5928	7237	3068	4308	4463	2482	17392	1099	-	378	2844
1.00 – 1.49	32200	4054	5703	2501	2780	2985	1306	10197	747	-	662	1358
1.50 – 2.49	28704	3919	2383	1934	1909	3289	1723	11708	431	-	366	1729
2.50 – 4.99	35673	4711	1967	1875	1931	4864	3786	14882	57	-	46	3786
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Second Year												
Total	32427	3561	-	44	3609	3689	2250	13780	1799	17	824	2853
<= 0.04	21213	2533	-	-	2989	1266	1504	6857	2519		1047	2497
0.05 – 0.49	36729	4487	-	77	4622	3671	2650	14795	2158	27	993	3250
0.50 – 0.99	34827	3779	-	35	3030	4345	2192	16335	1260	5	258	3587
1.00 – 1.49	25091	2582	-	-	2308	3500	1519	10708	1627	7	882	1958
1.50 – 2.49	19671	1077	-	-	1854	2338	1268	8515	1836	18	1126	1642
2.50 – 4.99	36462	2837	-	-	4941	5769	3663	16715	712	8	558	1260
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Third Year and above												
Total	26793	3220	-	90	3101	2471	1626	10722	2451	20	1009	2083
<= 0.04	15667	1686	-	-	2349	511	511	2964	3974	179	596	2897
0.05 – 0.49	34325	4217	-	188	4314	2721	2190	13633	3196	29	775	3062
0.50 – 0.99	29359	3681	-	61	2417	3477	2025	13778	1569	10	498	1843
1.00 – 1.49	20960	2463	-	-	2507	1941	1015	7775	1861	11	1729	1658
1.50 – 2.49	15741	1657	-	-	1894	1729	574	5187	2440	-	1502	759
2.50 – 4.99	14986	1539	-	-	1904	1344	1228	5486	1648	59	787	991
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Farm land												
Total	37391	4478	2977	1568	3864	3396	1884	13820	1735	16	813	2842
<= 0.04	19850	2140	2482	2169	2079	626	702	3378	3191	35	926	2121
0.05 – 0.49	43908	5395	3732	2094	4937	3433	2238	15458	2106	25	894	3595
0.50 – 0.99	40454	4840	3653	1572	3529	4198	1972	16260	1253	4	376	2797
1.00 – 1.49	25756	3000	1797	788	2533	2743	1231	9428	1439	6	1135	1654
1.50 – 2.49	20135	2024	580	471	1885	2301	905	7824	1761	6	1106	1273
2.50 – 4.99	27744	3059	766	730	2580	3684	1887	11604	823	25	448	2138
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Homestead area												
Total	17151	4668	1359	2109	1880	71	-	1389	2409	-	1089	2212
<= 0.04	18596	5244	1758	2742	1678	93	-	1646	2372	-	1164	1889
0.05 – 0.49	12492	2747	27		2553		-	532	2534	-	841	3257
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-12.b: Per acre production quantity (Kg) and their value (Tk.) by size of land and farming year.

Size of land planted (Acres)	Total			Green			Ripen		
	No. of Kandi	Qty (Kg)	Value (tk)	No. Kandi	Qty (Kg)	Value (tk)	No. of Kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
All Areas									
Total	906	10327	114606	1036	11756	110962	903	10290	114702
<= 0.04	622	6339	63579	540	6136	66663	638	6379	62955
0.05 – 0.49	949	11470	125490	1095	12496	123053	942	11427	125593
0.50 – 0.99	1051	11521	135504	914	10760	78279	1054	11538	136761
1.00 – 1.49	768	8019	92121	600	3250	36136	770	8051	92501
1.50 – 2.49	633	6508	64489	-	-	-	633	6508	64489
2.50 – 4.99	853	8782	90837	-	-	-	853	8782	90837
5.00 +	-	-	-	-	-	-	-	-	-
First Year									
Total	932	9848	113528	1331	1187	11387	922	9789	113356
<= 0.04	246	3138	36403	-	-	-	246	3138	36403
0.05 – 0.49	956	9914	117479	1383	1213	12181	941	9780	117001
0.50 – 0.99	1029	11548	125727	1169	1155	8613	1026	11615	126472
1.00 – 1.49	692	7035	85737	710	600	3250	693	7077	86297
1.50 – 2.49	695	7120	82165	-	-	-	695	7120	82165
2.50 – 4.99	955	9576	103709	-	-	-	955	9576	103709
5.00 +	-	-	-	-	-	-	-	-	-
Second Year									
Total	926	11951	126846	722	10594	89714	929	11972	127416
<= 0.04	707	8434	92926	822	10111	132800	686	8128	85666
0.05 – 0.49	973	14334	141679	684	11394	93061	980	14407	142888
0.50 – 0.99	1090	11982	150210	851	7691	72964	1094	12047	151388
1.00 – 1.49	787	8970	98102	-	-	-	787	8970	98102
1.50 – 2.49	575	6331	64983	-	-	-	575	6331	64983
2.50 – 4.99	1144	12204	130588	-	-	-	1144	12204	130588
5.00 +	-	-	-	-	-	-	-	-	-
Third Year and above									
Total	853	9506	104929	885	14039	111212	853	9418	104808
<= 0.04	525	6541	67316	456	5528	73894	543	6811	65560
0.05 – 0.49	909	11281	123108	1056	14656	142072	905	11179	122530
0.50 – 0.99	1051	10970	138968	561	6071	57857	1065	10828	141230
1.00 – 1.49	815	8051	92484	600	3250	372724	817	8093	92972
1.50 – 2.49	640	6296	54387	-	-	-	640	6296	54387
2.50 – 4.99	588	6080	55814	-	-	-	588	6080	55814
5.00 +	-	-	-	-	-	-	-	-	-
Homestead area									
Total	713	5953	52700	463	4723	39631	789	6322	56621
<= 0.04	829	7028	62284	465	4942	42793	958	7764	69160
0.05 – 0.49	345	2533	22204	450	3380	20250	329	2400	22510
0.50 – 0.99	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Table-13.a: Per acre production cost (Tk.) for stratum-1 by size of land and farming year.

Size of land planted (Acres)	Per acre production cost (taka)											
	Total	Land Preparation	Seeding	Plantation	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripening	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
Stratum-1												
Total	10307	1044	1123	1029	1641	13	31	258	2731	13	1692	733
<= 0.04	15667	2454	2476	2544	1726	-	-	238	3391	32	1188	1617
0.05 – 0.49	14958	1730	2094	2014	2126	46	93	586	2960	41	1637	1632
0.50 – 0.99	11692	1220	1259	1334	2233	2	10	326	3373	4	1133	798
1.00 – 1.49	8888	755	772	766	1435	-	2	114	2506	-	2286	253
1.50 – 2.49	6980	582	501	251	1082	-	3	74	2627	-	1637	222
2.50 – 4.99	6484	636	459	331	1683	-	30	28	1861	-	879	577
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
First Year												
Total	15107	2005	3610	3379	3279	4	14	445	1935	6	1294	744
<= 0.04	20016	1929	5986	5225	5225	-	-	-	3479	-	986	1377
0.05 – 0.49	21748	2584	5386	5131	5131	12	36	848	2235	16	1685	1693
0.50 – 0.99	15972	1822	3058	3239	3239	-		464	3686	1	1054	416
1.00 – 1.49	11226	1637	2311	2295	2295	-	5	267	1490	-	1408	181
1.50 – 2.49	7973	1487	2600	1301	1301	-	-	-	855	-	768	7
2.50 – 4.99	8409	2171	2214	1600	1600	-	-	-	343	-	280	214
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Second Year												
Total	7745	645	-	9	1305	25	10	170	2731	16	1814	750
<= 0.04	8775	1920	-	-	1247	-	-	-	3025	-	1302	1281
0.05 – 0.49	9371	1421	-	35	1921	94	26	536	2182	61	1625	1472
0.50 – 0.99	9109	1036	-	-	2030	-	-	165	3013	-	1461	1404
1.00 – 1.49	6538	254	-	-	1014	-	-		2887	-	2092	292
1.50 – 2.49	6370	256	-	-	895	-	9	35	2867	-	1836	399
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Third Year or more												
Total	8874	575	-	8	1726	14	54	175	3289	15	1905	714
<= 0.04	12122	1164	-	-	2069	-	-	1028	4207	207	552	2896
0.05 – 0.49	11389	1056	-	30	2243	52	189	354	4141	55	1598	1670
0.50 – 0.99	8480	674	-	-	2341	4	27	262	3227	9	1047	890
1.00 – 1.49	8534	354	-	-	1558	-	-	64	3104	-	3165	288
1.50 – 2.49	6975	435	-	-	1249	-	-	128	3120	-	1850	193
2.50 – 4.99	5981	235	-	-	1708	-	37	36	2257	-	1036	672
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Farm land												
Total	10296	1038	1124	1027	1637	13	31	258	2731	13	1693	732
<= 0.04	15111	1767	3004	2622	1312	-	-	214	3498	43	987	1665
0.05 – 0.49	14973	1733	2098	2018	2123	46	93	587	2961	41	1638	1635
0.50 – 0.99	11692	1220	1259	1334	2233	2	10	326	3373	4	1133	798
1.00 – 1.49	8888	755	772	766	1435	-	2	114	2506	-	2286	253
1.50 – 2.49	6980	582	501	251	1082	-	3	74	2627	-	1637	222
2.50 – 4.99	6484	636	459	331	1683	-	30	28	1861	-	879	577
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Homestead area												
Total	16852	3438	664	1680	3094	-	-	227	2934		1652	1165
<= 0.04	17333	4516	892	2312	2968	-	-	312	3070		1790	1473
0.05 – 0.49	8257	571	57		3429	-	-		2571		1286	343
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-13.b: Per acre production quantity (Kg.) & their value (Tk.) for stratum-1 by size of land and farming year.

Size of land planted (Acres)	Total			Green			Ripen		
	No. of Kandi	Qty (Kg)	Value (tk)	No. of Kandi	Qty (Kg)	Value (tk)	No. of Kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
Stratum-1									
Total	315	3497	28878	628	3669	39137	312	3495	28794
<= 0.04	344	3874	39028	442	3310	30627	330	3958	40281
0.05 – 0.49	310	3664	31890	770	4806	49524	307	3656	31768
0.50 – 0.99	280	3198	29360	625	3438	38115	276	3195	29237
1.00 – 1.49	342	3783	29933	600	3250	36136	338	3791	29838
1.50 – 2.49	299	3190	24880	-	-	-	299	3190	24880
2.50 – 4.99	352	3447	26855	-	-	-	352	3447	26855
5.00 +	-	-	-	-	-	-	-	-	-
First Year									
Total	256	2828	28005	608	3302	34906	254	2824	27960
<= 0.04	234	3013	34862	-	-	-	234	3013	34862
0.05 – 0.49	232	2516	25916	750	4167	33333	231	2514	25909
0.50 – 0.99	277	2879	29496	-	-	-	277	2879	29496
1.00 – 1.49	245	3116	27679	600	3250	35000	237	3113	27510
1.50 – 2.49	298	3002	32006	-	-	-	298	3002	32006
2.50 – 4.99	300	2714	24789	-	-	-	300	2714	24789
5.00 +	-	-	-	-	-	-	-	-	-
Second Year									
Total	313	3756	30684	887	4615	49139	307	3748	30511
<= 0.04	351	4115	39849	-	-	-	351	4115	39849
0.05 – 0.49	362	4541	41768	1410	6970	71187	350	4513	41422
0.50 – 0.99	360	4127	36123	625	3438	38115	340	4177	35976
1.00 – 1.49	303	3503	26977	-	-	-	303	3503	26977
1.50 – 2.49	271	3273	23856	-	-	-	271	3273	23856
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Third Year or more									
Total	356	3825	28517	504	3314	38391	355	3829	28452
<= 0.04	533	6540	63960	420	3660	47000	543	6811	65560
0.05 – 0.49	360	4313	32244	316	3408	39796	360	4321	32181
0.50 – 0.99	243	3056	25698	-	-	-	243	3056	25698
1.00 – 1.49	451	4544	33895	600	3250	37272	448	4569	33829
1.50 – 2.49	316	3212	22756	-	-	-	316	3212	22756
2.50 – 4.99	366	3838	27395	-	-	-	366	3638	27395
5.00 +	-	-	-	-	-	-	-	-	-
Farm land									
Total	315	3498	28887	654	3721	408130	312	3497	28801
<= 0.04	330	4066	42359	420	3660	47000	328	4073	42274
0.05 – 0.49	311	3668	31926	804	4956	52605	308	3660	31797
0.50 – 0.99	280	3198	29360	625	3438	38115	276	3195	29237
1.00 – 1.49	342	3783	29933	600	3250	36136	338	3791	29838
1.50 – 2.49	299	3190	24880	-	-	-	299	3190	24880
2.50 – 4.99	352	3447	26855	-	-	-	352	3447	26855
5.00 +	-	-	-	-	-	-	-	-	-
Homestead area									
Total	350	2906	25229	445	3291	27125	281	2627	23852
<= 0.04	388	3285	28816	444	3270	28723	338	3298	28900
0.05 – 0.49	251	1923	15900	450	3380	20250	172	1340	14160
0.50 – 0.99	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Table-14.a: Per acre production cost (Tk.) for stratum-2 by size of land and farming year

Size of land planted (Acres)	Per acre production cost (taka)											
	Total	Land Preparation	Seedling	Plantation	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
Stratum-2												
Total	45294	5486	3517	1727	4512	4382	2423	17773	1444	17	556	3460
<= 0.04	25594	5120	1672	2176	2229	1095	1109	6794	1919	-	747	2732
0.05 – 0.49	48348	5959	3982	2105	5368	3953	2567	17740	1974	22	780	3898
0.50 – 0.99	44070	5296	3954	1602	3692	4726	2219	18264	986	4	281	3048
1.00 – 1.49	39198	4789	2614	806	3408	4929	2210	16851	589	11	219	2770
1.50 – 2.49	37831	3964	686	766	2964	5396	2119	18248	594	13	392	2689
2.50 – 4.99	37352	4153	905	911	2985	5348	2727	16835	355	36	254	2844
5.00 +	45294	5486	3517	1727	4512	4382	2423	17773	1444	17	556	3460
First Year												
Total	53700	6623	7407	3532	5056	4559	2174	18858	1084	13	558	3834
<= 0.04	52900	5400	5800	5500	4800	5000	2500	19100	1800	-	-	3000
0.05 – 0.49	56300	6945	7903	4032	5813	4096	2277	18627	1445	17	807	4333
0.50 – 0.99	51822	6340	7657	3051	4517	4910	2020	19090	840	-	311	3087
1.00 – 1.49	50784	6196	8708	2683	3795	5630	2287	18996	90	-		2401
1.50 – 2.49	45970	5945	2203	2461	2703	6029	1897	21459	79	-	32	3163
2.50 – 4.99	41080	5215	1918	1930	2000	5829	1860	17833	-	-	-	4494
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Second Year												
Total	38784	4304	-	53	4196	4623	2820	17248	1562	18	572	3389
<= 0.04	40374	3478	-	-	5674	3217	3822	17422	1739		652	4369
0.05 – 0.49	40190	4875	-	82	4964	4123	2982	16599	2155	22	914	3475
0.50 – 0.99	37288	4041	-	39	3125	4761	2401	17882	1093	6	143	3796
1.00 – 1.49	37394	4125	-	-	3166	5822	2527	17809	793	11	79	3063
1.50 – 2.49	36884	2139	-	-	3094	5364	2898	19488	407	41	204	3250
2.50 – 4.99	36462	2837	-	-	4941	5769	3663	16715	712	8	558	1260
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Third Year or more												
Total	36540	4627	-	133	3833	3779	2463	16334	2005	22	532	2812
<= 0.04	38150	5000	-		4125	3750	3750	15250	2500	-	875	2900
0.05 – 0.49	40419	5056	-	230	4864	3430	2721	17161	2945	22	557	3433
0.50 – 0.99	33993	4348	-	75	2433	4248	2468	16778	1201	11	377	2055
1.00 – 1.49	31435	4240	-	-	3307	3577	1870	14276	814	21	518	2812
1.50 – 2.49	31745	3888	-	-	3071	4885	1622	14425	1198	-	866	1791
2.50 – 4.99	30331	3762	-	-	2238	3634	3256	14773	610	160	363	1535
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Farm land												
Total	45322	5485	3519	1726	4516	4386	2426	17789	1443	17	556	3459
<= 0.04	40504	3764	207	196	5421	3357	3764	17171	1850	-	661	4111
0.05 – 0.49	48360	5959	3983	2106	5369	3954	2568	17747	1974	22	780	3897
0.50 – 0.99	44070	5296	3954	1602	3692	4726	2219	18264	986	4	281	3048
1.00 – 1.49	39198	4789	2614	806	3408	4929	2210	16851	589	11	219	2770
1.50 – 2.49	37831	3964	686	766	2964	5396	2119	18248	594	13	392	2689
2.50 – 4.99	37352	4153	905	911	2985	5348	2729	16835	355	36	254	2844
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Homestead area												
Total	18744	5488	1821	2395	1071	119	-	2164	2060	-	714	2911
<= 0.04	19363	5687	2284	3003	896	149	-	2457	1948	-	784	2157
0.05 – 0.49	16306	4706	-	-	1765	-	-	1012	2500	-	441	5882
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-14.b: Per acre production quantity (Kg.) and their value (Tk.) for stratum-2 by size of land and farming year.

Size of land planted (Acres)	Per acre production quantity (Kg.) and value(Tk.)								
	Total			Green			Ripen		
	No. of kandi	Qty (Kg)	Value (tk)	No. Kandi	Qty (Kg)	Value (tk)	No. of Kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
Stratum-2									
Total	1085	12394	140542	1069	12398	116662	1086	12394	141308
<= 0.04	1116	10723	107246	638	8962	102695	1260	11251	108611
0.05 – 0.49	1051	12717	140450	1103	12675	124805	1048	12719	141202
0.50 – 0.99	1151	12608	149370	937	11345	81488	1156	12638	150932
1.00 – 1.49	1114	11451	142512	-	-	-	1114	11451	142512
1.50 – 2.49	1082	10970	117769	-	-	-	1082	10970	117769
2.50 – 4.99	1079	11193	119750	-	-	-	1079	11193	119750
5.00 +	-	-	-	-	-	-	-	-	-
First Year									
Total	1070	11288	131080	1205	11634	120584	1064	11273	131552
<= 0.04	1000	10800	130800	-	-	-	1000	10800	130800
0.05 – 0.49	1049	10858	129173	1214	12198	125756	1038	10769	129401
0.50 – 0.99	1111	12485	136130	1155	8613	92857	1109	12583	137220
1.00 – 1.49	1111	10710	140170	-	-	-	1111	10710	140170
1.50 – 2.49	1025	10551	123939	-	-	-	1025	10551	123939
2.50 – 4.99	1085	10937	119361	-	-	-	1085	10937	119361
5.00 +	-	-	-	-	-	-	-	-	-
Second Year									
Total	1082	14039	151344	699	11444	95486	1088	14083	152286
<= 0.04	1257	15087	174696	822	10111	132800	1536	18286	201629
0.05 – 0.49	1051	15572	154319	643	11647	94308	1061	15677	155912
0.50 – 0.99	1160	12733	161127	1000	10500	95975	1108	12756	161779
1.00 – 1.49	1108	12595	145267	-	-	-	1108	11595	145267
1.50 – 2.49	968	10288	118203	-	-	-	968	10288	118203
2.50 – 4.99	1144	12204	130588	-	-	-	1144	12204	130588
5.00 +	-	-	-	-	-	-	-	-	-
Third year or more									
Total	1118	12529	145586	936	15496	121102	1222	12451	146229
<= 0.04	475	6550	88600	475	6550	88600	-	-	-
0.05 – 0.49	1055	13133	147253	1102	15354	148427	1054	13052	147210
0.50 – 0.99	1231	12727	164112	561	16071	57857	1254	12612	167755
1.00 – 1.49	1122	11007	141871	-	-	-	1122	11007	141871
1.50 – 2.49	1131	11929	112138	-	-	-	1231	11929	112138
2.50 – 4.99	967	10241	104241	-	-	-	967	10241	104241
5.00 +	-	-	-	-	-	-	-	-	-
Farm land									
Total	1085	12398	140614	1070	12410	116799	1086	12398	141376
<= 0.04	1136	13714	160829	715	9015	119200	1500	17787	196907
0.05 – 0.49	1051	12721	140495	1103	12675	124805	1048	12724	141250
0.50 – 0.99	1151	12608	149370	937	11345	81488	1156	12638	150932
1.00 – 1.49	1114	11451	142512	-	-	-	1114	11451	142512
1.50 – 2.49	1082	10970	117769	-	-	-	1082	10970	117769
2.50 – 4.99	1079	11193	119750	-	-	-	1079	11193	119750
5.00 +	-	-	-	-	-	-	-	-	-
Homestead area									
Total	964	8052	71628	512	8875	75875	1014	7961	71156
<= 0.04	1108	9394	83432	512	8875	75875	1195	9469	84531
0.05 – 0.49	429	3082	27882				429	3082	27882
0.50 – 0.99	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Table-15.a: Per acre production cost (Tk.) by size of land and tenancy.

Size of land planted (Acres)	Per acre production cost (taka)											
	Total	Land Preparation	Seedling	Plantation	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
All Areas												
Total	37364	4478	2975	1568	3861	3392	1881	13803	1736	16	813	2841
<= 0.04	19307	3417	2179	2409	1911	404	409	2655	2848	20	1026	2028
0.05 – 0.49	43887	5394	3729	2093	4935	3431	2237	15449	2106	25	894	3595
0.50 – 0.99	40454	4840	3653	1572	3529	4198	1972	16260	1253	4	376	2797
1.00 – 1.49	25756	3000	1797	788	2533	2743	1231	9428	1439	6	1135	1654
1.50 – 2.49	20135	2024	580	471	1885	2301	905	7824	1761	6	1106	1273
2.50 – 4.99	27744	3059	766	730	2580	3684	1887	11604	739	25	448	2138
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Owned												
Total	35369	4231	2736	1533	3684	3085	1721	12865	1863	16	890	2745
<= 0.04	19317	3305	2246	2487	2013	425	431	2673	2867	21	978	1870
0.05 – 0.49	42920	5274	3531	2071	4816	3246	2157	15098	2202	27	934	3566
0.50 – 0.99	38700	4632	3155	1487	3425	4153	1903	15436	1293	2	404	2810
1.00 – 1.49	22985	2392	1409	817	2233	2502	1046	8149	1566	4	1274	1592
1.50 – 2.49	15208	1600	623	337	1341	1291	456	5404	2022	7	1282	845
2.50 – 4.99	19754	2336	637	598	2214	2400	1089	7778	1045	20	504	1132
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Share crop												
Total	47324	4496	5129	2043	5900	4447	1864	18047	676	11	402	4323
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	45765	3790	3682	2066	6682	4465	1834	16916	810	8	401	5109
0.50 – 0.99	50804	5734	5002	1894	4969	5061	1940	22576	211	22	530	2865
1.00 – 1.49	51380	7217	9680	2296	1252	2296	1913	24552	852			1322
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Mortgage												
Total	45263	4601	3812	1893	5699	4191	2207	17466	1218	59	1320	2796
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	47050	5208	5233	2550	5781	4034	2304	16388	1181	83	1413	2874
0.50 – 0.99	48729	4700	3872	2059	6698	3647	655	21059	1107	26	951	3954
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	37284	2903			4545	5114	3409	16943	1420	23	1420	1505
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Lease												
Total	47729	6213	3976	1620	4341	5154	2957	18800	1207	9	310	3142
<= 0.04	19500	5923	923	923	-	-	-	2308	2500	-	1923	5000
0.05 – 0.49	52912	7667	5529	2184	5149	4700	3295	18404	2047	2	598	3337
0.50 – 0.99	46907	5790	6042	1916	3471	4308	2484	18883	1278	6	132	2598
1.00 – 1.49	44561	7365	2046	296	5239	4824	2653	19229	485	26	171	2225
1.50 – 2.49	44555	4125	369	1134	4579	7306	3130	19817	464	-	234	3397
2.50 – 4.99	41829	4581	1219	1181	2849	5972	3156	18159	222	35	97	4358
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Total	22050	1428	1328	3113	2241	1384	1001	6435	1645	67	1808	1601
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	22050	1428	1328	3113	2241	1384	1001	6435	1645	67	1808	1601
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-15.b: Per acre production quantity (Kg.) and their value (Tk.) by size of land & tenancy.

Size of land planted (Acres)	Per acre production quantity (Kg.) and value (Tk.)								
	Total			Green			Ripen		
	No. of Kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
All Areas									
Total	906	10327	114606	1036	11736	110962	903	10290	114702
<= 0.04	622	6339	63579	540	6136	66663	638	6379	62965
0.05 – 0.49	949	11470	125490	1095	12492	123053	942	11427	125593
0.50 – 0.99	1051	11521	135504	914	10760	78279	1054	11538	136761
1.00 – 1.49	768	8019	92121	600	3250	36136	770	8051	92501
1.50 – 2.49	633	6508	64489	-	-	-	633	6508	64489
2.50 – 4.99	853	8782	90837	-	-	-	853	8782	90837
5.00 +	-	-	-	-	-	-	-	-	-
Owned									
Total	846	9657	108443	1044	12123	113320	841	9589	108308
<= 0.04	600	6374	63430	540	6136	66663	613	6425	62744
0.05 – 0.49	922	11121	121760	1118	12143	128746	914	11038	121473
0.50 – 0.99	990	10773	130787	914	10760	78279	992	10773	132229
1.00 – 1.49	695	7194	85433	600	3250	36136	696	7224	85816
1.50 – 2.49	492	5053	50721	-	-	-	492	5053	50721
2.50 – 4.99	655	6946	65269	-	-	-	655	6946	65269
5.00 +	-	-	-	-	-	-	-	-	-
Share crop									
Total	1019	12467	134002	1005	9209	82053	1020	12666	137187
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	1067	952	12829	1005	9209	82053	947	13170	141195
0.50 – 0.99	1099	10139	115256	-	-	-	1099	10139	115256
1.00 – 1.49	1337	16265	171938	-	-	-	1337	16265	175938
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Mortgage									
Total	1024	10957	134607	-	-	-	1024	10957	134607
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	968	10343	134063	-	-	-	968	10343	134063
0.50 – 0.99	1093	12255	140219	-	-	-	1093	12255	140219
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	1108	11364	130781	-	-	-	1108	11364	130781
5.00 +	-	-	-	-	-	-	-	-	-
Lease									
Total	1286	14401	150821	971	9483	110104	1290	14467	151373
<= 0.04	1023	5685	66323	-	-	-	1023	5685	66323
0.05 – 0.49	1234	14828	160089	971	9483	110104	1245	15050	162158
0.50 – 0.99	1368	15819	165414	-	-	-	1368	15819	165414
1.00 – 1.49	1278	13427	133270	-	-	-	1278	13427	133270
1.50 – 2.49	1331	13720	132052	-	-	-	1331	13720	132052
2.50 – 4.99	1196	11924	133605	-	-	-	1196	11924	133605
5.00 +	-	-	-	-	-	-	-	-	-
Others									
Total	517	7439	52272	750	4167	333333	514	7484	52531
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	517	7439	52272	750	4167	333333	514	7484	52531
0.50 – 0.99	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Table-16.a: Per acre production cost (Tk.) for stratum-1 by size of land and tenancy.

Size of land planted (Acres)	Per acre production cost (taka)											
	Total	Land Preparation	Seedling	Trans-plant	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
Stratum-1												
Total	10307	1044	1123	1029	1641	13	31	258	2731	13	1692	733
<= 0.04	15667	2454	2476	2544	1726	-	-	238	3391	32	1188	1617
0.05 – 0.49	14958	1730	2094	2014	2126	46	93	586	2960	41	1637	1632
0.50 – 0.99	11692	1220	1259	1334	2233	2	10	326	3373	4	1133	798
1.00 – 1.49	8888	755	772	766	1435	-	2	114	2506	-	2286	253
1.50 – 2.49	6980	582	501	251	1082	-	3	74	2627	-	1637	222
2.50 – 4.99	6484	636	459	331	1683	-	30	28	1861	-	879	577
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Owned												
Total	10307	1043	1132	1018	1018	11	29	251	2739	10	1703	736
<= 0.04	15667	2454	2476	2544	2544	-	-	238	3391	32	1188	1617
0.05 – 0.49	15041	1749	2133	1987	1987	40	93	582	2984	34	1643	1660
0.50 – 0.99	11768	1221	1286	1562	1362	-	-	306	3387	1	1153	815
1.00 – 1.49	8888	755	772	766	766	-	2	114	2506		2286	253
1.50 – 2.49	6991	578	508	254	254	-	3	69	2636		1653	219
2.50 – 4.99	6484	636	459	331	331	-	30	28	1861		879	577
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Share crop												
Total	9950	1125	-	-	2500	250	-	855	2100	50	2500	570
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	9950	1125	-	-	2500	250		855	2100	50	2500	570
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Mortgage												
Total	11864	1644	1101	1517	1236	281	427	1716	2351	685	463	442
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	13443	1802	1661	2288	1356	339	136	1377	2275	864	678	667
0.50 – 0.99	8758	1333	-	-	1000	167	1000	2383	2500	333	42	
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Lease												
Total	7661	984	131	549	2283	-	-	387	2492		442	393
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	10727	1231	458	1923	2462	-	-	404	3192		394	663
0.50 – 0.99	7367	1000	-	-	2917	-	-	150	2917		333	50
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	6155	850	-	-	2000	-	-	450	2000		500	355
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Total	13002	890	890	3537	1777	246	123	482	1873	111	2142	931
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	13002	890	890	3537	1777	246	123	482	1873	111	2142	931
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-16.b: Per acre production quantity (Kg.) & value (Tk.) for stratum-1 by size of land and tenancy.

Size of land planted (acres)	Per acre production quantity (Kg.) & value (Tk.)								
	Total			Green			Ripen		
	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
Stratum-1									
Total	315	3497	28878	628	3669	39137	312	3495	28794
<= 0.04	344	3874	39028	442	3310	30627	330	3958	40281
0.05 – 0.49	310	3664	31890	770	4806	49524	307	3656	31768
0.50 – 0.99	280	3198	29360	625	3438	38115	296	3195	29237
1.00 – 1.49	342	3783	29933	600	3250	36136	338	3791	29838
1.50 – 2.49	299	3190	24880	-	-	-	299	3190	24880
2.50 – 4.99	352	3447	26855	-	-	-	352	3447	26855
5.00 +	-	-	-	-	-	-	-	-	-
Owned									
Total	315	3496	28872	627	3662	39219	312	3495	28787
<= 0.04	344	3874	39028	442	3310	30627	330	3958	40281
0.05 – 0.49	310	3659	31940	772	4844	50505	307	3651	31815
0.50 – 0.99	280	3194	29326	625	3438	38115	275	3190	29200
1.00 – 1.49	342	3783	28833	600	3250	36136	338	3791	29838
1.50 – 2.49	300	3194	24876	-	-	-	300	3194	24876
2.50 – 4.99	352	3447	26855	-	-	-	352	3447	26855
5.00 +	-	-	-	-	-	-	-	-	-
Share crop									
Total	405	4000	38800	-	-	-	405	4000	38800
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	405	4000	38800	-	-	-	405	4000	38800
0.50 – 0.99	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Mortgage									
Total	331	4156	40379	-	-	-	331	4156	40379
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	245	3558	37140	-	-	-	245	3558	37140
0.50 – 0.99	300	5333	46750	-	-	-	300	5333	46750
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Lease									
Total	201	2447	21309	-	-	-	201	2447	21309
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	184	2074	17292	-	-	-	184	2074	17292
0.50 – 0.99	150	1500	15200	-	-	-	150	1500	15200
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	225	2925	25230				225	2925	25230
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Others									
Total	389	4565	31954	750	4167	33333	381	4574	31922
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	389	4565	31954	750	4167	33333	381	4574	31922
0.50 – 0.99	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Table-17.a: Per acre production cost (Tk.) for stratum-2 by size of land and tenancy.

Size of land planted (Acres)	Per acre production cost (Tk.)											
	Total	Land Preparation	Seedling	Trans-Plant	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripening	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
Stratum-2												
Total	45294	5485	3517	1727	4512	4382	2423	17773	1444	17	556	3460
<= 0.04	25594	5120	1672	2176	2229	1095	1109	6794	1919	-	747	2732
0.05 – 0.49	48348	5959	3982	2105	5368	3953	2567	17740	1974	22	780	3898
0.50 – 0.99	44070	5296	3954	1602	3692	4726	2219	18264	986	4	281	3048
1.00 – 1.49	39198	4789	2614	806	3408	4929	2210	16851	589	11	219	2770
1.50 – 2.49	37831	3964	684	766	2964	5396	2119	18248	594	13	392	2689
2.50 – 4.99	37352	4153	905	911	2985	5348	2727	16835	355	36	254	2844
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Owned												
Total	44576	5402	3325	1723	4436	4215	2343	17499	1541	18	592	3483
<= 0.04	26560	4993	1790	2374	2583	1268	1285	7505	1827	-	561	2373
0.05 – 0.49	47926	5906	3782	2086	5297	3822	2527	17704	2061	25	807	3908
0.50 – 0.99	42935	5168	3448	1506	3611	4806	2203	17816	963	3	287	3124
1.00 – 1.49	37403	4066	2061	869	3050	5062	2115	16367	604	8	239	2962
1.50 – 2.49	32679	3773	866	513	1917	4035	1421	16746	717	21	496	2174
2.50 – 4.99	33012	4035	815	865	2746	4797	2147	15520	230	41	128	1688
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Share crop												
Total	47426	4491	5143	2048	5910	4458	1869	18094	672	11	396	4334
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	45905	3801	3697	2074	6698	4482	1841	16979	805	8	393	5128
0.50 – 0.99	50804	5734	5002	1894	4969	5061	1940	22576	211	22	530	2865
1.00 – 1.49	51380	7217	9680	2296	1252	2296	1913	24552	852	-	-	1322
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Mortgage												
Total	46957	4751	3950	1912	5926	4389	2298	18264	1161	27	1364	2916
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	49024	5408	5442	1565	6041	4251	2431	17270	1117	38	1456	2741
0.50 – 0.99	52180	4991	4206	2237	7190	3947	625	22621	987		1030	4296
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	37284	2903			4545	5114	3409	16943	1420	23	1420	1505
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Lease												
Total	48250	6281	4026	1634	4368	5221	2996	19040	1190	9	308	3178
<= 0.04	19500	5923	923	923	-	-	-	2308	2500	-	1923	5000
0.05 – 0.49	53367	7737	5583	2186	5178	4751	3331	18598	2045	2	600	3366
0.50 – 0.99	47217	5828	6089	1931	3475	4342	2503	19030	1265	6	130	2618
1.00 – 1.49	44561	7365	2046	296	5239	4824	2653	19229	485	26	171	2225
1.50 – 2.49	46389	4281	387	1188	4702	7655	3279	20742	390	-	221	3543
2.50 – 4.99	41829	4581	1219	1181	2849	5972	3156	18159	222	35	97	4358
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Total	35827	2247	1995	2468	2948	3117	2338	15497	1299	-	1299	2621
<= 0.04	-	-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	35827	2247	1995	2468	2948	3117	2338	15497	1299		1299	2621
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-17.b: Per acre production quantity (Kg.) and value (Tk.) for stratum-2 by size of land and tenancy.

Size of land planted (Acres)	Per acre production quantity (Kg.) and value (Tk.)								
	Total			Green			Ripen		
	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
Stratum -2									
Total	1085	12394	140542	1069	12398	116662	1086	12394	141308
<= 0.04	1116	10723	107246	638	8962	102695	1260	11251	108611
0.05 – 0.49	1051	12717	140450	1103	12675	124805	1048	12719	141202
0.50 – 0.99	1151	12608	149370	937	11345	81488	1156	12638	150934
1.00 – 1.49	1114	11451	142512	-	-	-	1114	11451	142512
1.50 – 2.49	1082	10970	117969	-	-	-	1082	10970	117969
2.50 – 4.99	1079	11193	119750	-	-	-	1079	11193	119750
5.00 +	-	-	-	-	-	-	-	-	-
Owned									
Total	1047	11991	138589	1082	12892	120056	1046	11960	139241
<= 0.04	1132	11563	114067	638	8962	102695	1314	12521	118256
0.05 – 0.49	1035	12503	138386	1127	13368	130869	1031	12462	138744
0.50 – 0.99	1106	12014	147400	937	11345	81488	1111	12034	149354
1.00 – 1.49	1064	10757	143421	-	-	-	1064	10757	143421
1.50 – 2.49	901	9004	105673	-	-	-	901	9004	105673
2.50 – 4.99	958	10442	103646	-	-	-	958	10442	103646
5.00 +	-	-	-	-	-	-	-	-	-
Share crop									
Total	102	12492	134284	1005	9209	82053	1021	12694	137497
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	955	12868	136545	1005	9209	82053	950	13214	141690
0.50 – 0.99	1099	10277	115256	-	-	-	1099	10277	115256
1.00 – 1.49	1337	16265	175938	-	-	-	1337	16265	175938
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Mortgage									
Total	1059	11302	139387	-	-	-	1059	11302	139387
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	1010	10741	139754	-	-	-	1010	10741	139754
0.50 – 0.99	1145	12853	148289	-	-	-	1145	12853	148289
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	1108	11364	130781	-	-	-	1108	11364	130781
5.00 +	-	-	-	-	-	-	-	-	-
Lease									
Total	1300	14561	152557	971	9483	110104	1305	14631	153140
<= 0.04	1023	5685	66323	-	-	-	1023	5685	66323
0.05 – 0.49	1246	14973	161711	971	9483	110104	1257	15203	163873
0.50 – 0.99	1378	15936	166641	-	-	-	1378	14936	166641
1.00 – 1.49	1278	13427	133270	-	-	-	1278	13427	133270
1.50 – 2.49	1384	14236	137859	-	-	-	1384	14236	137859
2.50 – 4.99	1196	11924	133605	-	-	-	1196	11924	133605
5.00 +	-	-	-	-	-	-	-	-	-
Others									
Total	712	11816	83208	-	-	-	712	11816	83208
<= 0.04	-	-	-	-	-	-	-	-	-
0.05 – 0.49	712	11816	83208	-	-	-	712	11816	83208
0.50 – 0.99	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Table-18.a: Per acre production cost (Tk.) for banana by size of land and variety.

Size of land planted (Acres)	Per acre production cost (Tk.											
	Total	Land Preparation	Seedling	Trans-plant	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
All Areas												
Total	37364	4478	2975	1568	3861	3392	1881	13803	1736	16	813	2841
<= 0.04	19326	3437	2179	2409	1911	404	409	2655	2848	20	1026	2028
0.05 – 0.49	43887	5394	3729	2093	4935	3431	2237	15449	2106	25	894	3595
0.50 – 0.99	40454	4840	3653	1572	3529	4198	1972	16260	1253	4	376	2797
1.00 – 1.49	25756	3000	1797	788	2533	2743	1231	9428	1439	6	1135	1654
1.50 – 2.49	20135	2024	580	471	1885	2301	905	7824	1761	6	1106	1273
2.50 – 4.99	27744	3059	766	730	2580	3684	1887	11604	739	25	448	2138
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Anaji												
Total	37184	5922	4770	2218	4051	3006	1585	6785	4103	-	1851	2892
<= 0.04	24954	3759	1368	3075	3528	1050	1248	5558	2478	-	884	2007
0.05 – 0.49	39926	5781	5488	2609	4749	3120	1510	6804	4357	-	1842	3666
0.50 – 0.99	32069	7357	2882	660	1609	3264	2222	8074	3728	-	2109	164
1.00 – 1.49	8963	2400	438	1400	1775	-	-	-	1200	-	1150	600
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Atia												
Total	9381	2196	371	782	2059	-	88	292	1765	-	951	876
<= 0.04	15833	3750	1667	833	2083	-		2083	1667	-	1250	2500
0.05 – 0.49	13483	2994	924	1977	1970	-	270	815	2971	-	423	1139
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	11875	1500	1025	2700	2100	-	-	-	2400		2000	150
1.50 – 2.49	6877	1793			2104	-	-	-	1079		1144	758
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Bangla												
Total	12088	1412	1493	1233	1924	91	78	741	2824	10	1571	710
<= 0.04	15094	2904	2023	1937	1306	-	-	757	3412	27	966	1764
0.05 – 0.49	17857	2606	2744	2343	2770	257	199	1752	2665	27	1175	1318
0.50 – 0.99	13073	1839	2325	1539	2200	-	59	643	3090	1	800	577
1.00 – 1.49	8950	634	781	737	1401	-	2	103	2643	-	2407	242
1.50 – 2.49	6995	271			1010	-	-	42	3415	-	1959	299
2.50 – 4.99	6563	552	503	364	1717	-	-	31	1896	-	867	633
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Champa												
Total	35373	4407	3600	1494	3752	2122	939	11315	2169	21	993	4561
<= 0.04	16692	2087	3152	3069	1500	78	39	296	3501	41	1405	1524
0.05 – 0.49	40761	4964	3457	1860	4772	2477	895	12869	2507	32	1182	5746
0.50 – 0.99	48078	5748	6741	1516	3646	3232	2138	16046	2544	-	575	5887
1.00 – 1.49	23902	3470	2586	515	2373	927	650	8401	1449	-	688	2844
1.50 – 2.49	11833	1798	1643	789	1233	578	80	3450	1007	13	922	305
2.50 – 4.99	5667	1500	-	-	1333	-	333	-	1500	-	1000	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Sabri												
Total	40804	4995	3472	1369	3052	4553	2087	17403	1067	11	350	2444
<= 0.04	19300	5800	2000	1000	-	-	-	2000	2000	-	1500	5000
0.05 – 0.49	42863	5287	4100	1685	4141	3993	2273	16909	1512	18	568	2376
0.50 – 0.99	39956	4947	3253	1299	2147	4890	1967	17786	824	-	187	2657
1.00 – 1.49	38196	4568	3030	799	2108	5241	1725	17715	478	4	81	2446
1.50 – 2.49	39317	4539	1688	703	225	6115	1566	21502	574		308	2096
2.50 – 4.99	33703	3707	517	690	3379	4741	2629	15966	293	52	164	1565
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Shagor												
Total	55558	5893	3298	2051	6547	5371	3710	22643	1104	25	602	4333
<= 0.04	43767	5000	3333	3333	1783	2500	1667	15317	3333		833	6667

Size of land planted (Acres)	Per acre production cost (Tk.											
	Total	Land Preparation	Seedling	Trans-plant	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
0.05 – 0.49	61261	6526	3862	2340	7071	5272	4251	24544	1550	29	772	5044
0.50 – 0.99	52265	5447	3890	2168	7103	5240	2730	21792	544	14	350	2987
1.00 – 1.49	45316	5694	1057	863	7543	5921	4287	16049	338	23	576	2963
1.50 – 2.49	42820	3029	320	1285	2876	5966	2521	20976	477	28	247	5094
2.50 – 4.99	39356	4399	1118	1032	2768	5682	2780	17312	388	27	303	3546
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Total	42365	6813	1952	1918	4514	4700	2502	15462	2044	18	574	1868
<= 0.04	26683	6611	1772	2236	2666	1246	1258	7253	778	-	498	2365
0.05 – 0.49	45172	9731	3601	2871	4845	2909	2063	12476	4065	28	995	1587
0.50 – 0.99	32516	4295	1560	2239	2864	5065	2471	12262	41	-	14	1707
1.00 – 1.49	36750	3440	670	1973	3440	5166	2247	16526	1198	86	627	1377
1.50 – 2.49	43221	4702	346	688	4830	6669	3088	19897	440		243	2319
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-18.b: Per production quantity (Kg.) and their value (Tk.) by size of land and variety.

Size of land planted (acres)	Per production quantity (Kg.) and value (Tk.)								
	Total			Green			Ripen		
	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
All Areas									
Total	906	10327	114606	1036	11736	110962	903	10290	114702
<= 0.04	622	6339	63579	540	6136	66663	638	6379	62965
0.05 – 0.49	949	11470	125490	1095	12492	123053	942	11427	125593
0.50 – 0.99	1051	11521	135504	914	10760	78279	1054	11538	136761
1.00 – 1.49	768	8019	92121	600	3250	36136	770	8051	92501
1.50 – 2.49	633	6508	64489	-	-	-	633	6508	64489
2.50 – 4.99	853	8782	90837	-	-	-	853	8782	90837
5.00 +	-	-	-	-	-	-	-	-	-
Anaji									
Total	1036	11756	110962	1036	11756	110962	-	-	-
<= 0.04	540	6136	66663	540	6136	66663	-	-	-
0.05 – 0.49	1095	12492	123053	1095	12492	123053	-	-	-
0.50 – 0.99	914	10760	78279	914	10760	78279	-	-	-
1.00 – 1.49	600	5250	36136	600	5250	36136	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Atia									
Total	590	6965	27851	-	-	-	590	6965	27851
<= 0.04	970	8000	31210	-	-	-	970	8000	31210
0.05 – 0.49	618	7849	28924	-	-	-	618	7849	28924
0.50 – 0.99				-	-	-			
1.00 – 1.49	450	3800	14681	-	-	-	450	3800	14681
1.50 – 2.49	579	6723	28238	-	-	-	579	6723	28238
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Bangla									
Total	390	4425	37324	-	-	-	390	4425	37324
<= 0.04	649	5678	55718	-	-	-	649	5678	55718
0.05 – 0.49	480	5775	52053	-	-	-	480	5775	52053
0.50 – 0.99	385	4389	35235	-	-	-	385	4389	35235
1.00 – 1.49	347	3865	31041	-	-	-	347	3865	31041
1.50 – 2.49	300	3127	24268	-	-	-	300	3127	24268
2.50 – 4.99	351	3425	26435	-	-	-	351	3425	26435
5.00 +	-	-	-	-	-	-	-	-	-
Champa									
Total	893	10240	108532	-	-	-	893	10240	108532
<= 0.04	307	3711	43130	-	-	-	307	3711	43130
0.05 – 0.49	937	10970	116649	-	-	-	937	10970	116649
0.50 – 0.99	1307	14139	162660	-	-	-	1307	14139	162660
1.00 – 1.49	843	10367	96680	-	-	-	843	10367	96680
1.50 – 2.49	390	4206	38419	-	-	-	390	4206	38419
2.50 – 4.99	367	3667	31167	-	-	-	367	3667	31167
5.00 +	-	-	-	-	-	-	-	-	-
Sabri									
Total	952	10146	137929	-	-	-	952	10146	137929
<= 0.04	1467	10433	144000	-	-	-	1467	10433	144000
0.05 – 0.49	897	10649	134191	-	-	-	897	10649	134191
0.50 – 0.99	1012	9933	146848	-	-	-	1012	9933	146848
1.00 – 1.49	987	9248	139210	-	-	-	987	9248	139210
1.50 – 2.49	940	8137	131398	-	-	-	940	8137	131398
2.50 – 4.99	953	10737	103829	-	-	-	953	10737	103829
5.00 +	-	-	-	-	-	-	-	-	-

Size of land planted (acres)	Per production quantity (Kg.) and value (Tk.)								
	Total			Green			Ripen		
	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
Shagor									
Total	1264	15514	158382	-	-	-	1264	15514	158382
<= 0.04	1517	17500	165033	-	-	-	1517	17500	165033
0.05 – 0.49	1234	15764	165083	-	-	-	1234	15764	165083
0.50 – 0.99	1326	16730	154463	-	-	-	1326	16730	154463
1.00 – 1.49	1408	15629	162016	-	-	-	1408	15629	162016
1.50 – 2.49	1361	14131	145606	-	-	-	1361	14131	145606
2.50 – 4.99	1148	11444	128495	-	-	-	1148	11444	128495
5.00 +	-	-	-	-	-	-	-	-	-
Others									
Total	1086	11290	117316	-	-	-	1086	11290	117316
<= 0.04	933	10985	108841	-	-	-	933	10985	108841
0.05 – 0.49	999	10274	113810	-	-	-	999	10274	113810
0.50 – 0.99	1160	12866	129853	-	-	-	1160	12866	129853
1.00 – 1.49	1085	11153	76384	-	-	-	1085	11153	76384
1.50 – 2.49	1166	12011	124264	-	-	-	1166	12011	124264
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Table-19.a: Per acre production cost (Tk.) for stratum-1 by size of land and variety.

Size of land planted (Acres)	Per acre production cost (Tk.)											
	Total	Land Preparation	Seedling	Plantation	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
Stratum-1												
Total	10307	1044	1123	1029	1641	13	31	258	2731	13	1692	733
<= 0.04	15667	2454	2476	2544	1726	-	-	238	3391	32	1188	1617
0.05 – 0.49	14958	1730	2094	2014	2126	46	93	586	2960	41	1637	1632
0.50 – 0.99	11692	1220	1259	1334	2233	2	10	326	3373	4	1133	798
1.00 – 1.49	8888	755	772	766	1435	-	2	114	2506	-	2286	253
1.50 – 2.49	6980	582	501	251	1082	-	3	74	2627	-	1637	222
2.50 – 4.99	6484	636	459	331	1683	-	30	28	1861	-	879	577
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Anaji												
Total	16952	2377	381	1310	2053	147	57	298	1782		1528	1019
<= 0.04	16036	3940	966	3000	2800	-	-	-	2800		1230	1300
0.05 – 0.49	14742	1971	286	1333	2362	610	238	1235	2429		2581	1697
0.50 – 0.99	7775	1875		-	1875		-	-	1750		1275	1000
1.00 – 1.49	8963	2400	438	1400	1775		-	-	1200		1150	600
1.50 – 2.49		-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99		-	-	-	-	-	-	-	-	-	-	-
5.00 +		-	-	-	-	-	-	-	-	-	-	-
Atia												
Total	8065	728	324	854	2437		-		2073		1146	503
<= 0.04		-	-	-	-	-	-	-	-	-	-	-
0.05 – 0.49	17750	2500			3750		-		5625		3125	2750
0.50 – 0.99		-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	11875	1500	1025	2700	2100		-	3100	2400		2000	150
1.50 – 2.49	5385	200			2500		-		1625		560	500
2.50 – 4.99		-	-	-	-	-	-	-	-	-	-	-
5.00 +		-	-	-	-	-	-	-	-	-	-	-
Bangla												
Total	10253	918	1080	1014	1595	14	28	257	2897	12	1728	710
<= 0.04	15352	2420	2424	2052	1649			509	3448	34	983	1832
0.05 – 0.49	14899	1738	2443	2197	2021	50	104	644	2695	43	1381	1585
0.50 – 0.99	12028	1317	1322	1552	2296	-		352	3543	1	916	728
1.00 – 1.49	8950	634	781	737	1401	-	2	103	2643		2407	242
1.50 – 2.49	6996	271			1010	-	-	42	3415		1959	299
2.50 – 4.99	6563	552	503	364	1717	-	-	31	1896		867	633
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Champa												
Total	10459	1402	1308	1025	1765	2	41	226	2227	9	1643	810
<= 0.04	16121	2034	3110	3031	1448	-			3528	41	1428	1500
0.05 – 0.49	15483	1677	1199	1582	2497	-	68	359	3842	21	2397	1839
0.50 – 0.99	11371	813	1270	533	2075	9	56	296	2855	19	2230	1215
1.00 – 1.49	7801	1473	696	605	1610	-		136	1492		1464	325
1.50 – 2.49	7012	1268	1602	802	1177	-	9	148	974		990	42
2.50 – 4.99	5667	1500			1333	-	333		1500		1000	
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Sabri												
Total	8469	1944	1080	667	2000	-	-	133	1566		589	500
<= 0.04	-	-	-	-	-	-	-					
0.05 – 0.49	8469	1944	1080	667	2000	-	-	133	1566		589	500
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Size of land planted (Acres)	Per acre production cost (Tk.)											
	Total	Land Preparation	Seedling	Plantation	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
Shagor												
Total	11388	1640	1474	1493	1561	116	5	764	2382	99	938	917
<= 0.04												
0.05 – 0.49	13786	2040	2174	1626	1429	182	8	1205	2040	156	1480	1446
0.50 – 0.99	7237	947	263	1263	1789	-	-	-	2974			
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Total	12319	1475	1333	2442	1671	85	62	996	2548	159	1118	429
<= 0.04	5867	-	-	-	1667	-	-	-	3333		833	33
0.05 – 0.49	12230	1488	1542	2129	1587	142	103	690	2629	265	942	713
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	12650	1500	1050	3000	1800			1500	2400		1400	
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-19.b: Per acre production quantity (Kg.) and value (Tk.) for stratum-1 by size of land and variety.

Size of land planted (Acres)	Total			Green			Ripen		
	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
Stratum-1									
Total	315	3497	28878	628	3669	39137	312	3495	28794
<= 0.04	344	3874	39028	442	3310	30627	330	3958	40281
0.05 – 0.49	310	3664	31890	770	4806	49524	307	3656	31768
0.50 – 0.99	280	3198	29360	625	3438	38115	276	3195	29237
1.00 – 1.49	342	3783	29933	600	3250	36136	338	3791	29838
1.50 – 2.49	299	3190	24880	-	-	-	299	3190	24880
2.50 – 4.99	352	3447	26855	-	-	-	352	3447	26855
5.00 +	-	-	-	-	-	-	-	-	-
Anaji									
Total	628	3669	39137	628	3669	39137	-	-	-
<= 0.04	442	3310	30627	442	3310	30627	-	-	-
0.05 – 0.49	770	4806	49524	770	4806	49524	-	-	-
0.50 – 0.99	625	3438	38115	625	3438	38115	-	-	-
1.00 – 1.49	600	3250	36136	600	3250	36136	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Atia									
Total	377	3703	12084	-	-	-	377	3703	12084
<= 0.04	-	-	-	-	-	-			
0.05 – 0.49	575	4375	16538	-	-	-	575	4375	16538
0.50 – 0.99				-	-	-			
1.00 – 1.49	450	3800	14681	-	-	-	450	3800	14681
1.50 – 2.49	325	3600	10429	-	-	-	325	3600	10429
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Bangla									
Total	298	3295	27356	-	-	-	298	3295	27356
<= 0.04	356	4284	39333	-	-	-	356	4284	39333
0.05 – 0.49	258	3042	27719	-	-	-	258	3042	27719
0.50 – 0.99	226	2685	24081	-	-	-	226	2685	24081
1.00 – 1.49	347	3865	31041	-	-	-	347	3865	31041
1.50 – 2.49	300	3127	24268	-	-	-	300	3127	24268
2.50 – 4.99	351	3425	26435	-	-	-	351	3425	26435
5.00 +	-	-	-	-	-	-	-	-	-
Champa									
Total	366	4244	34452	-	-	-	366	4244	34452
<= 0.04	297	3599	41748	-	-	-	297	3599	41748
0.05 – 0.49	457	5464	43944	-	-	-	457	5464	43944
0.50 – 0.99	494	5446	50579	-	-	-	494	5446	50579
1.00 – 1.49	256	3233	20621	-	-	-	256	3233	20621
1.50 – 2.49	294	3308	26815	-	-	-	294	3308	26815
2.50 – 4.99	367	3667	31167	-	-	-	367	3667	31167
5.00 +	-	-	-	-	-	-	-	-	-
Sabri									
Total	203	3333	23677	-	-	-	203	3333	23677
<= 0.04	-	-	-	-	-	-			
0.05 – 0.49	203	3333	23677	-	-	-	203	3333	23677
0.50 – 0.99	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Size of land planted (Acres)	Total			Green			Ripen		
	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
Shagor									
Total	239	3087	30047	-	-	-	239	3087	30047
<= 0.04	-	-	-	-	-	-			
0.05 – 0.49	259	3422	29792	-	-	-	259	3422	29792
0.50 – 0.99	205	2526	30474	-	-	-	205	2526	30474
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Others									
Total	205	2471	24552	-	-	-	205	2471	24552
<= 0.04	400	2333	24367	-	-	-	400	2333	24367
0.05 – 0.49	217	2520	24525	-	-	-	217	2520	24525
0.50 – 0.99	-	-	-	-	-	-			
1.00 – 1.49	180	2400	24600	-	-	-	180	2400	24600
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Table-20.a: Per acre production cost (Tk.) for stratum-2 by size of land and variety.

Size of land planted (Acres)	Per acre production cost (Tk.)											
	Total	Land Preparation	Seedling	Plantation	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
Stratum-2												
Total	45294	5485	3517	1727	4512	4382	2423	17773	1444	17	556	3460
<= 0.04	25594	5120	1672	2176	2229	1095	1109	6794	1919		747	2732
0.05 – 0.49	48348	5959	3982	2105	5368	3953	2567	17740	1974	22	780	3898
0.50 – 0.99	44070	5296	3954	1602	3692	4726	2219	18264	986	4	281	3048
1.00 – 1.49	39198	4789	2614	806	3408	4929	2210	16851	589	11	219	2770
1.50 – 2.49	37831	3964	684	766	2964	5396	2119	18248	594	13	392	2689
2.50 – 4.99	37352	4153	905	911	2985	5348	2727	16835	355	36	254	2844
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Anaji												
Total	39275	6205	5119	2291	4211	3234	1707	7302	4288	-	1877	3041
<= 0.04	34243	3571	1786	3152	4286	2143	2548	11348	2143	-	524	2743
0.05 – 0.49	40526	5872	5612	2640	4806	3180	1540	6937	4402	-	1824	3713
0.50 – 0.99	34010	7795	3112	712	1587	3525	2400	8719	3886	-	2176	97
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Atia												
Total	9612	2454	379	770	1993		104	344	1711		917	941
<= 0.04	15833	3750	1667	833	2083			2083	1667		1250	2500
0.05 – 0.49	13381	3005	946	2024	1927		277	834	2908		359	1100
0.50 – 0.99	-	-	-	-	-	-	-	-	-	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	7149	2083			2031				979		1250	805
2.50 – 4.99		-	-	-	-	-	-	-	-	-	-	-
5.00 +		-	-	-	-	-	-	-	-	-	-	-
Bangla												
Total	21750	4014	3667	2386	3655	502	342	3289	2441		741	712
<= 0.04	14125	4750	500	1500				1700	3275		900	1500
0.05 – 0.49	23076	4138	3276	2601	4092	623	367	3708	2612		810	847
0.50 – 0.99	16321	3463	5442	1498	1901		244	1547	1683		437	106
1.00 – 1.49	-	-	-	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Champa												
Total	46682	5771	4640	1707	4653	3085	1347	16348	2143	27	697	6264
<= 0.04	52900	5400	5800	5500	4800	5000	2500	19100	1800			3000
0.05 – 0.49	46534	5715	3973	1924	5291	3042	1083	15726	2202	35	905	6638
0.50 – 0.99	56029	6817	7926	1729	3986	3932	2589	19457	2477		217	6899
1.00 – 1.49	33589	4671	3723	461	2832	1484	1041	13374	1423		222	4358
1.50 – 2.49	32438	4067	1818	733	1470	3050	383	17648	1146	67	629	1427
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Sabri												
Total	40843	4999	3475	1370	3053	4558	2089	17424	1066	11	349	2447
<= 0.04	19300	5800	2000	1000				2000	2000		1500	5000
0.05 – 0.49	42954	5296	4108	1688	4147	4004	2279	16954	1512	18	568	2381
0.50 – 0.99	39956	4947	3253	1299	2147	4890	1967	17786	824		187	2657
1.00 – 1.49	38196	4568	3030	799	2108	5241	1725	17715	478	4	81	2446
1.50 – 2.49	39317	4539	1688	703	225	6115	1566	21502	574		308	2096
2.50 – 4.99	33703	3707	517	690	3379	4741	2629	15966	293	52	164	1565
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Size of land planted (Acres)	Per acre production cost (Tk.)											
	Total	Land Preparation	Seedling	Plantation	Wedding	Irrigation	Pesticide	Fertilizer	Harvesting	Ripen	Transport	Others
1	2	3	4	5	6	7	8	9	10	11	12	13
Shagor												
Total	55967	5932	3314	2056	6593	5420	3745	22826	1092	24	599	4364
<= 0.04	43767	5000	3333	3333	1783	2500	1667	15317	3333		833	6667
0.05 – 0.49	61738	6571	3879	2347	7128	5323	4293	24779	1545	28	765	5080
0.50 – 0.99	52956	5516	3945	2182	7184	5321	2772	22126	507	14	355	3034
1.00 – 1.49	45316	5694	1057	863	7543	5921	4287	16049	338	23	576	2963
1.50 – 2.49	42820	3029	320	1285	2876	5966	2521	20975	477	28	247	5094
2.50 – 4.99	39356	4399	1118	1032	2768	5682	2780	17312	388	27	303	3546
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Total	43042	6933	1966	1906	4578	4804	2557	15788	2033	15	561	1902
<= 0.04	27593	6900	1850	2333	2710	1300	1313	7570	667		483	2467
0.05 – 0.49	46190	9986	3664	2894	4945	2995	2124	12841	4110	21	996	1614
0.50 – 0.99	32516	4295	1560	2239	2864	5065	2471	12262	41		14	1707
1.00 – 1.49	40713	3759	608	1805	3710	6015	2617	18997	1000	100	500	1603
1.50 – 2.49	43221	4702	346	688	4830	6669	3088	19897	440		243	2319
2.50 – 4.99	-	-	-	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-	-	-	-

Table-20.b: Per acre production quantity (Kg.) and their value (Tk.) for stratum-2 by size of land and variety.

Size of land planted (acres)	Per acre production quantity (Kg.) and value (Tk.)								
	Total			Green			Ripen		
	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
Statum-2									
Total	1085	12394	140542	1069	12398	116662	1086	12394	141308
<= 0.04	1116	10723	107246	638	8962	102695	1260	11251	108611
0.05 – 0.49	1051	12717	140450	1103	12675	124805	1048	12719	141202
0.50 – 0.99	1151	12608	149370	937	11345	81488	1156	12638	150934
1.00 – 1.49	1114	11451	142512	-	-	-	1114	11451	142512
1.50 – 2.49	1082	10970	117769	-	-	-	1082	10970	117769
2.50 – 4.99	1079	11193	119750	-	-	-	1079	11193	119750
5.00 +	-	-	-	-	-	-	-	-	-
Anaji									
Total	1069	12398	116662	1069	12398	116662	-	-	-
<= 0.04	638	8962	102695	638	8962	102695	-	-	-
0.05 – 0.49	1103	12675	124805	1103	12675	124805	-	-	-
0.50 – 0.99	937	11345	81488	937	11345	81488	-	-	-
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Atia									
Total	627	7541	30631	-	-	-	627	7541	30631
<= 0.04	970	8000	31210	-	-	-	970	8000	31210
0.05 – 0.49	619	7931	29219	-	-	-	619	7931	29219
0.50 – 0.99				-	-	-			
1.00 – 1.49				-	-	-			
1.50 – 2.49	625	7292	31484	-	-	-	625	7292	31484
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Bangla									
Total	892	10581	91656	-	-	-	892	10581	91656
<= 0.04	1765	10980	118080	-	-	-	1765	10980	118080
0.05 – 0.49	889	10797	96767	-	-	-	889	10797	96767
0.50 – 0.99	877	9683	69885	-	-	-	877	9683	69885
1.00 – 1.49	-	-	-	-	-	-	-	-	-
1.50 – 2.49	-	-	-	-	-	-	-	-	-
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Champa									
Total	1141	13064	143422	-	-	-	1141	13064	143422
<= 0.04	1000	10800	130800	-	-	-	1000	10800	130800
0.05 – 0.49	1052	12289	134062	-	-	-	1052	12289	134062
0.50 – 0.99	1488	16071	187570	-	-	-	1488	16071	187570
1.00 – 1.49	1195	14659	142438	-	-	-	1195	14659	142438
1.50 – 2.49	798	8042	88022	-	-	-	798	8042	88022
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-
Sabri									
Total	953	10155	138073	-	-	-	953	10155	138073
<= 0.04	1467	10433	144000	-	-	-	1467	10433	144000
0.05 – 0.49	899	10669	134495	-	-	-	899	10669	134495
0.50 – 0.99	1012	9933	146848	-	-	-	1012	9933	146848
1.00 – 1.49	987	9248	139210	-	-	-	987	9248	139210
1.50 – 2.49	940	8137	131398	-	-	-	940	8137	131398
2.50 – 4.99	953	10737	103829	-	-	-	953	10737	103829
5.00 +	-	-	-	-	-	-	-	-	-

Size of land planted (acres)	Per acre production quantity (Kg.) and value (Tk.)								
	Total			Green			Ripen		
	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)	No. of kandi	Qty (Kg)	Value (tk)
1	2	3	4	5	6	7	8	9	10
Shagor									
Total	1274	15630	159581	-	-	-	1274	15630	159581
<= 0.04	1517	17500	165033	-	-	-	1517	17500	165033
0.05 – 0.49	1244	15889	166454	-	-	-	1244	15889	166454
0.50 – 0.99	1343	16955	156420	-	-	-	1343	16955	156420
1.00 – 1.49	1408	15629	162016	-	-	-	1408	15629	162016
1.50 – 2.49	1361	14131	145606	-	-	-	1361	14131	145606
2.50 – 4.99	1148	11444	128495	-	-	-	1148	11444	128495
5.00 +	-	-	-	-	-	-	-	-	-
Others									
Total	1106	11490	119422	-	-	-	1106	11490	119422
<= 0.04	957	11363	112537	-	-	-	957	11363	112537
0.05 – 0.49	1024	10518	116614	-	-	-	1024	10518	116614
0.50 – 0.99	1160	12866	129853	-	-	-	1160	12866	129853
1.00 – 1.49	1234	12592	84900	-	-	-	1234	12592	84900
1.50 – 2.49	1166	12011	124264	-	-	-	1166	12011	124264
2.50 – 4.99	-	-	-	-	-	-	-	-	-
5.00 +	-	-	-	-	-	-	-	-	-

Annex-B: Concepts and Definitions

Mauza:

Mauza is the demarcated lowest administrative territorial unit having separate jurisdiction list (JL) number in the revenue records. Every mauza has its well demarcated Cadastral Survey (CS) map. Mauza should be distinguished from local village since a mauza may consist of one or more villages or part of a village.

Primary Sampling Unit (PSU):

PSU, here in this banana survey refers to one or more than one mauzas or any part of a mauza. For effective implementation of this survey, 100 primary sampling units have been selected from the whole country.

Stratum-1: Stratum-1 consists of five(5) districts namely Chittagong, Cox's Bazar, Bandarban, Rangamati and Khagrachhari

Stratum-2: Stratum-2 consists of the remaining 59 districts.

Ultimate Sampling Units (USUs):

All the households having at least 5 decimal area of land under banana cultivation were listed from the selected PSUs and then 30 households have been drawn following the systematic random sampling, where a mouza was treated as the primary sampling unit (PSU) and within the selected mouzas, Banana crop producing households were the ultimate sampling unit.

Household (HH):

A household means a group of persons normally living together and eating in one mess (i.e. with common arrangement of cooking) with their dependents, relatives, servants etc. A household may be a one person household or a multi-person household. In other words, when a group of persons living together generally maintain a family or family like relations and take meals from the same kitchen is termed as a household. Popularly, it is described as "*Khana*". In some cases there may be more than one household in a single house or in one dwelling arrangement. Similarly, a household may have more than one house or structure or shed.

The household must be distinguished from a family which consists of blood related members who may live in different places but members of the household must share the same kitchen and live together.

Owned land:

Owned land means the area of the land owned by the holder including members of this household having a title of land with the right to determine the nature and extent of its use and to transfer the same. Moreover, there might be some land over which the holder or any member of the households has owner-like possession.

Share crop:

Land under share cropping is treated as the land which is cultivated under the condition of sharing the crops between land owner and the cultivator. The ratio of share cropping might vary from place to place. It might be one third (1/3) or half (1/2) or two-thirds (2/3) between owner and cultivator.

Mortgage:

The land which is taken in exchange of money paid by the mortgagee to the land owner for a fixed period of time under the condition that land would be released upon refunding the money to the mortgagee by the owner is considered as the land under mortgage.

Lease:

The land which is taken by the cultivator from the owner in exchange of a certain amount of money for one year or for any period of time for the purpose of cultivating crop is treated as land under lease. Under this criterion, land will automatically be released from the occupancy of the cultivator after the certain period of time.

Others:

The land which does not satisfy any of the four criteria mentioned earlier is treated as the others category.

Homestead area:

This includes land under household residence with all its structures, court yard, and entrance & exit passage. The land adjacent to residence and used for temporary or perennial crops, ponds & tanks, and other compact plantation is excluded from homestead area.

Single cropped area:

Single cropped area means wherein one crop has been grown in survey year.

Mixed cropped area:

Mixed cropped area is defined an area where two or more crops are grown simultaneously in a survey year.

Reference period:

The year 2012, prior to the survey year 2013, was considered as reference period.

Banana farm holding:

The households having at least five decimal area of land under banana cultivation was considered as the banana farm holding.

Banana:

Banana is an edible fruit produced by several kinds of large herbaceous flowering plants in the genus Musa. There are a lot of varieties of banana in the world. Nearly seventy local varieties of banana are found in India. In Bangladesh more than thirty varieties of banana have been observed. On the basis of utilization, all varieties of banana can be divided into two broad categories viz. ripen banana and anaji banana.

Ripen banana (suitable for eating):

Based on banana tree this type of variety can be two types such as long and short (singapuri) type of banana tree. The banana that are produced in the long type of banana tree normally they are three forms and these are

1. Seed free banana: Sabri, omritosagar, agnisshir etc
2. Rare seed attached banana: Champa, Chini champa, jabkathali, Bangla etc
3. Seed attached banana : Aita kala

Anaji banana (Kancha / Green):

The mentionable varieties of this type of banana are varar vogue, choualopush, borobaghna, bahula, mondira, biyerbati etc

Aneex-C: Questionnaire (Bangla)

গোপনীয়

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
বাংলাদেশ পরিসংখ্যান ব্যুরো
এগ্রিকালচার উইং

প্রোডাক্টিভিটি এ্যাসেসমেন্ট সার্ভে অব ডিফারেন্ট
এগ্রিকালচারাল ক্রপস্ কর্মসূচি
ই-২৭/এ, আগারগাঁও, ঢাকা-১২০৭
কলা ফসলের উৎপাদনশীলতা জরিপ-২০১৩

প্রথম অংশ

১। খানার পরিচিতি

স্ট্র্যাটাম নং ☐ পিএসইউ ☐☐ কৃষি খানার ☐☐☐ ক্রমিক নং ☐☐
নির্বাচিত নমুনা খানার নম্বর

খানা প্রধানের নামঃ . . . . . পিতা/স্বামীর নামঃ . . . . . অঞ্চলঃ . . . . . চাষীর মোবাইল নম্বরঃ .							
জেলাঃ	কোড			উপজেলাঃ	কোড		
ইউনিয়নঃ	কোড			মৌজাঃ	কোড		

দ্বিতীয় অংশ

২। কলা ফসলের জমির পরিমাণ, মালিকানা, চাষের জন্য জমি প্রস্তুতি এবং খরচ (টাকায়)

চাষের বছর	জমির মালিকানা (কোড)	কলার জাত (কোড)	চাষের প্রকার (কোড)	জমির পরিমাণ		লীজ নেয়া হলে বাৎসরিক কত টাকা দিতে হয়	চাষের জন্য জমি প্রস্তুতি খরচ (নিজস্ব হলে বাজার দরে লিখতে হবে)					মোট খরচ (টাকায়) (৭+৯+১১+১২)
							লাঙ্গল/কোদাল		যান্ত্রিক (পাওয়ার টিলার/ট্রাক্টর)		অন্যান্য খরচ (টাকায়)	
				এশর	শতক		সংখ্যা	খরচ (টাকায়)	সংখ্যা	খরচ (টাকায়)		
১	২	৩	৪	৫	৬	৭	৮	৯	১০	১১	১২	১৩
১ম বছর												
২য় বছর												
৩ বা ততোধিক বছর												
বাড়ীর আঙ্গিনায়												

** মালিকানার কোডঃ নিজস্ব-১, বর্গা-২, বন্ধক-৩, লীজ-৪ এবং অন্যান্য-৫* ** চাষের প্রকার কোডঃ একক-১, মিশ্র-২*
** কলার জাতের কোডঃ সাগর কলা-১, চাম্পা কলা-২, সবরি-৩, বাংলা কলা-৪, বিচি কলা-৫, অন্যান্য কলা-৬ এবং কাঁচ কলা (সবজি)-৭*

৩। কলা ফসলের চারা রোপণ, নিড়ানি, সেচ, কীটনাশক ও বালাইনাশক(পোকামাকড় ও রোগ দমন) খরচ (টাকায়)

চাষের বছর	চারা		কলার চারা রোপণ			নিড়ানি			সেচ খরচ (টাকায়)	পোকা মাকড় ও রোগ দমন খরচ (টাকায়)	অন্যান্য খরচ (টাকায়)	মোট খরচ (টাকায়) (৩+৬+৯+১০+১১+১২)
	সংখ্যা	খরচ (টাকায়)	শ্রমিকের সংখ্যা		খরচ (টাকায়)	শ্রমিকের সংখ্যা		খরচ (টাকায়)				
			পারিঃ	ভাড়া		পারিঃ	ভাড়া					
১	২	৩	৪	৫	৬	৭	৮	৯	১০	১১	১২	১৩
১ম বছর												
২য় বছর												
৩ বা ততোধিক বছর												
বাড়ীর আঙ্গিনায়												

* পারিঃ পারিবারিক

* কীটনাশকের নামঃ ক্যারাটে, এমিয়ার,সবিক্রন, সেভিন-৮৫, কার্বোফুরান ইত্যাদি।

* ছত্রাকনাশকের(বালাইনাশক)নামঃ ডাইথেন-এম-৪৫,রিডোমিল এম জেড,নিউবেন,বর্দ্দো-মিকচার,সিকিউর,ইনডোফিল-এম-৪৫ ইত্যাদি।

৪। সার ব্যবহারের পরিমাণ (কেজিতে) ও মূল্য (টাকায়)

চাষের বছর	ইউরিয়া		টিএসপি/ডিএপি		এমওপি		গোবর/জৈব সার		খৈল	
	পরিমাণ	মূল্য(টাকায়)	পরিমাণ	মূল্য(টাকায়)	পরিমাণ	মূল্য(টাকায়)	পরিমাণ	মূল্য(টাকায়)	পরিমাণ	মূল্য(টাকায়)
১	২	৩	৪	৫	৬	৭	৮	৯	১০	১১
১ম বছর										
২য় বছর										
৩ বা ততোধিক বছর										
বাড়ীর আঙ্গিনায়										

বোরন		জিংক		সালফার		ম্যাগনেসিয়াম		অন্যান্য		মোট মূল্য (টাকায়) (৩+৫+৭+৯+১১+১৩+১৫+ ১৭+১৯+২১)
পরিমাণ	মূল্য(টাকায়)	পরিমাণ	মূল্য(টাকায়)	পরিমাণ	মূল্য(টাকায়)	পরিমাণ	মূল্য(টাকায়)	পরিমাণ	মূল্য(টাকায়)	
১২	১৩	১৪	১৫	১৬	১৭	১৮	১৯	২০	২১	২২

৫। কলা ফসল কর্তন, পাঁকানো ও পরিবহন খরচ(টাকায়)

চাষের বছর	কলা ফসলের ছড়ি/কাদি কর্তন			পাঁকানো খরচ (টাকায়)	পরিবহন খরচ (টাকায়)	অন্যান্য খরচ (টাকায়)	মোট খরচ (টাকায়) (৪+৫+৬+৭)
	শ্রমিকের সংখ্যা		খরচ (টাকায়)				
	পারিবারিক	ভাড়া					
১	২	৩	৪	৫	৬	৭	৮
১ম বছর							
২য় বছর							
৩ বা ততোধিক বছর							
বাড়ীর আঙ্গিনায়							

* পাকানোর জন্য ব্যবহৃত মেডিসিনঃ ইথোফেন, টমটম, কার্বাইড, রাইপেন ইত্যাদি।

৬। কলা ফসলের মোট উৎপাদন মূল্য(টাকায়)

চাষের বছর	জমিতে মোট উৎপাদিত কলা (কাঁচা)				জমিতে মোট উৎপাদিত কলা (**পাঁকা**)			
	গাছের সংখ্যা	কাদি/ছড়ি (সংখ্যা)	পরিমাণ (কেজি)	মূল্য (টাকায়)	গাছের সংখ্যা	কাদি/ছড়ি (সংখ্যা)	পরিমাণ (কেজি)	মূল্য (টাকায়)
১	২	৩	৪	৫	৬	৭	৮	৯
১ম বছর								
২য় বছর								
৩ বা ততোধিক বছর								
বাড়ীর আঙ্গিনায়								

(১মণ = ৪০ কেজি)

৭। কলা মৌসুমে কলা চাষের জন্য এক একর জমি লীজ নিতে মালিককে কত টাকা দিতে হয় টাকাঃ

তথ্য সংগ্রহকারীর নামঃ .....
পদবীঃ .....
তারিখঃ.....

সুপারভাইজারের নাম .....
পদবীঃ .....
তারিখঃ .....

Aneex-D: Questionnaire (English)

Confidential

Government of the People's Republic of Bangladesh
Bangladesh Bureau of Statistics
Agriculture wing
Productivity Assessment Survey of Different
Agricultural Crops Programme
E-27/A, Agargaon, Dhaka-1207
Banana Crops Productivity Survey-2013

First Part

10. Identification of Household

Stratum No. ☐ PSU No. ☐☐ Agriculture HH Sl No. ☐☐☐ Selected Sample HH No. ☐☐

Name of the Head of HH: . . . . . Father/Husband Name: . . . . . Region Name : . . . . . Farmer Mobile No.:								
District:	Code			Upazila:	Code			
Union:	Code			Mouza:	Code			

Second Part

2. Area Under Banana Cultivation,Land Tenure,Land Preparation and Cost (Tk.)

Farming Year	Owner-ship of land (Code)	Variety of Banana (Code)	Cultivation type (Code)	Land area		Yearly leasing value only for Banana	Land preparation and cost (Tk.) (Market price is shown when cultivated is own)				Total Cost (Tk.) (7+9+11+12)
				Acre	Decimal		Plough/Hoe		Mechanized (Power Tiller/Tracter)		Other Cost (Tk.)
							No.	Cost (Tk.)	No.	Cost (Tk.)	
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1 year												
2-Years												
3 or more year												
Homestead												

*Ownership Code: Owned-1, Share Crop-2, Mortgage-3, Laease-4 and Others-5 * Cultivation Type: Single-1 and Mixed-2

* Variety of Banana Code : Shagor-1, Champa-2, Sobri-3, Bangla-4, Atia-5, Others-6 and Anaji-7

3. Costs (Tk.) regarding seedlings, Planting, Weeding, Irrigation, Insecticide and Pesticide

Farming Year	Seedling		Plantation			Weeding			Irrigation Cost (Tk.)	Insecticide & Pesticide Cost (Tk.)	Others Cost (Tk.)	Total Cost 3+6+9+10+11+12)
	No.	Cost (Tk.)	No. Of labour		Cost (Tk.)	No. Of labour		Cost (Tk.)				
			Family	Hired		Family	Hired					
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1 year												
2-Years												
3 or more year												
Homestead												

* Name of insecticide: Karate, Admire, Shobicron, Sevin-85, Carbofuran etc
* Name of Pesticide: Daithane M-45,Ridomil MZ, Nuben, Bordeaux mixture, Indofil M-45 & others

4. Use of Fertilizer Quantity (Kg.) and Price (Tk.)

Farming Year	Urea		TSP/DAP		MOP		Cow dung/Organic		Khail	
	Qty. (Kg)	Price (Tk.)	Qty. (Kg)	Price (Tk.)	Qty. (Kg)	Price (Tk.)	Qty. (Kg)	Price (Tk.)	Qty. (Kg)	Price (Tk.)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
1 year										
2-Years										
3 or more year										
Homestead										

Boron		Zink		Sulfar		Magnesium		Others		Total Cost (Tk.) (3+5+7+9+11+13+15+17+19+21)
Qty. (Kg)	Price (Tk.)	Qty. (Kg)	Price (Tk.)	Qty. (Kg)	Price (Tk.)	Qty. (Kg)	Price (Tk.)	Qty. (Kg)	Price (Tk.)	
12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**

10. Harvesting, Ripen and Transport Cost (Tk.) of Banana crops

Farming Year	Kadi/Cluster of banana			Ripen Cost (Tk.)	Transport cost (Tk.)	Others Cost (Tk.)	Total Cost (Tk.) (4+5+6+7)
	No. Of labour		Cost (Tk.)				
	Family	Hired					
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1 year							
2-Years							
3 or more year							
Homestead							

* Use ripen medichine: Ethophen, Tomtom, Carbide, Ripen etc.

6. Quantity(Kg.) and Value(Tk.) of produced Banana

Farming Year	Total Produced Banana(Green)				Total Produced Banana(Ripen)			
	No.of tree	Kadi/ Cluster (No.)	Quantity (Kg.)	Value (Tk.)	No.of tree	Kadi/ Cluster (No.)	Quantity (Kg.)	Value (Tk.)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1 year								
2-Years								
3 or more year								
Homestead								

(1Mond = 40 Kg)

7. Per acre yearly leasing value for banana crops Taka: ☐

Data Collector Name : .....
Designation: .....
Date : .....

Supervisor Name: .....
Designation: .....
Date : .....

United Nations Statistics Division

STATISTICAL PRINCIPLES

Fundamental Principles of Official Statistics

Background

The need for a set of principles governing official statistics became apparent at the end of the 1980s when countries in Central Europe began to change from centrally planned economies to market- oriented democracies. It was essential to ensure that national statistical systems in such countries would be able to produce appropriate and reliable data that adhered to certain professional and scientific standards. Towards this end, the Conference of European Statisticians developed and adopted the Fundamental Principles of Official Statistics in 1992. Statisticians in other parts of the world soon realized that the principles were of much wider, global significance. Following an international consultation process, a milestone in the history of international statistics was reached when the United Nations Statistical Commission at its Special Session of 11-15 April 1994 adopted the very same set of principles – with a revised preamble- as the United Nations Fundamental Principles of Official Statistics.

At its forty-second session in 2011, the Statistical Commission discussed the Fundamental principles of Official Statistics and acknowledged that the Principles were still as relevant today as they had been in the past and that no revision of the 10 Principles themselves was necessary. The Commission recommended, however, that Friends of the Chair group revise and update the preamble of the Fundamental Principles in order to take into account new developments since the time when the Principles were first formulated. At its forty-fourth sessions in 2013, the Statistical Commission adopted the revised preamble.

On 24 July 2013, the Economic and Social Council endorsed the Fundamental Principles of official Statistics as they had been originally adopted by the Statistical Commission almost 20 years ago in 1994, and recently reaffirmed by the Commission with a new preamble. Endorsement by ECOSOC marks the first time the Fundamental Principles have received such high recognition at the global political level. ECOSOC further recommended that the General Assembly also endorse the Principle.

Principles:

Principle 1: Relevance, impartiality and equal access

. Official statistics provide an indispensable element in the information system of a demographic 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 honor citizens' entitlement to public information.

Principle 2: Professional standards and ethics

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: Accountability and transparency

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: Prevention of misuse

The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

Principle 5: Sources of Official Statistics

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: Confidentiality

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: Legislation

The laws, regulations and measures under which the statistical systems operate are to be made public.

Principle 8: National coordination

Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.

Principle 9: Use of international standards

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: International cooperation

Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.

Principles Governing International Statistical Activities

Bearing in mind that statistics are essential for sustainable economic, environmental and social development and that public trust in official statistics is anchored in professional independence and impartiality of statisticians, their use of scientific and transparent methods and equal access for all to official statistical information, the Chief Statisticians or coordinators of statistical activities of United Nations agencies and related organizations, agree that implementation of the following principles will enhance the functioning of the international statistical system.

In doing so, they note the endorsement of these principles by the Committee for the Coordination of Statistical Activities on 14 September, 2005; they further recall the adoption by the United *Nations Statistical Commission* of the Fundamental Principles of Official Statistics in its Special Session of 11-15 April 1994, and the endorsement of the *Declaration of Good Practices in Technical Cooperation in Statistics* in its 30th Session of 1-5 March 1999.

01. High quality international statistics, accessible for all, are a fundamental element of global information systems

Good practices include:

- Having regular consultations with key users both inside and outside the relevant organization to ascertain that their needs are met
- Periodic review of statistical programmes to ensure their relevance
- Compiling and disseminating international statistics based on impartiality
- Providing equal access to statistics for all users
- Ensuring free public accessibility of key statistics

02. To maintain the trust in international statistics, their production is to be impartial and strictly based on the highest professional standards

Good practices include:

- Using strictly professional considerations for decisions on methodology, terminology and data presentation
- Developing and using professional codes of conduct
- Making a clear distinction, in statistical publications, between statistical and analytical comments on the one hand and policy-prescriptive and advocacy comments on the other

03. The public has a right to be informed about the mandates for the statistical work of the organizations

Good practices include:

- Making decisions about statistical work programmes publicly available

- Making documents for and reports of statistical meetings publicly available

04. Concepts, definitions, classification, sources, methods and procedures employed in the production of international statistics are chosen to meet professional scientific standards and are made transparent for the users

Good practices include

- Aiming continuously to introduce methodological improvements and systems to manage and improve the quality and transparency of statistics
- Enhancing the professional level of staff by encouraging them to attend training course, to do analytical work, to publish scientific papers and to participate in seminars and conferences.
- Documenting the concepts, definitions and classification, as well as data collection and processing procedures used and the quality assessments carried out and making this information publicly accessible
- Documenting how data are collected, processed and disseminated, including information about editing mechanisms applied to country data
- Giving credit, in the dissemination of international statistics, to the original source and using agreed quotation standards when re-using statistics originally collected by others
- Making officially agreed standards publicly available

05. Sources and methods for data collection are appropriately chosen to ensure timeliness and other aspects of quality, to be cost- efficient and to minimize the reporting burden for data providers

Good practices include:

- Facilitating the provision of data by countries
- Working systematically on the improvement of the timeliness of international statistics
- Periodic review of statistical programmes to minimize the burden on data providers
- Sharing collected data with other organizations and collecting data jointly where appropriate
- Contributing to an integrated presentation of statistical programmes, including data collection plans, thereby making gaps or overlaps clearly visible

Ensuring that national statistical offices and other national organizations for official statistics are duly involved and advocating that the *Fundamental Principles of Official Statistics* are applied when data are collected in countries

06. **Individual data collected about natural persons and legal entities, or about small aggregates that are subject to national confidentiality rules, are to be dept strictly confidential and are to be used exclusively for statistical purposes or for purposes mandated legislation**

Good practices include:

- Putting measures in place to prevent the direct or indirect disclosure of data on persons, households, businesses and other individual respondents

Developing a framework describing methods and procedures to provide sets of anonymous micro-data for further analysis by bona fide researchers, maintaining the requirements of confidentiality

07. **Erroneous interpretation and misuse of statistics are to be immediately appropriately addressed**

Good practices include:

- Responding to perceived erroneous interpretation and misuse of statistics
- Enhancing the use of statistics by developing educational material for important user groups

08. **Standards for national and international statistics are to be developed on the basis of sound professional criteria, while also meeting the test of practical utility and feasibility**

Good practices include:

- Systematically involving national statistical offices and other national organizations for official statistics in the development of international statistical programmes, including the development and promulgation of methods, standards and good practices
- Ensuring that decisions on such standards are free from conflicts of interest, and are perceived to be so
- Advising countries on implementation issues concerning international standards
- Monitoring the implementation of agreed standards

09. **Coordination of international statistical programmes is essential to strengthen the quality, coherence and governance of international statistics, and avoiding duplication of work**

Good practices include:

- Designating one or more statistical units to implement statistical programmes, including one unit that coordinates the statistical work of the organization and represents the organization in international statistical meetings
- Participating in international statistical meetings and bilateral and multilateral consultations wherever necessary

- Working systematically towards agreements about common concepts, classifications, standards and methods
- Working systematically towards agreement on which series to consider as authoritative for each important set of statistics

Coordinating technical cooperation activities with countries between donors and between different organizations in the national statistical system to avoid duplication of effort and to encourage complementarities and synergy

10. Bilateral and multilateral cooperation in statistics contribute to the professional growth of the statisticians involved and to the improvement of statistics in the organizations and in countries

Good practices include:

- Cooperating and sharing knowledge among international organization and with countries and regions to further develop national and regional statistical systems
- Basing cooperation projects on user requirements, promoting full participation of the main stakeholders, taking account of local circumstances and stage of statistical development
- Empowering recipient national statistical systems and governments to take the lead
- Advocating the implementation of the Fundamental Principles of Official Statistics in countries

Setting cooperation projects within a balanced overall strategic framework for national development of official statistics

STATISTICS ACT

রেজিস্টার্ড নং ডি এ-১

বাংলাদেশ গেজেট

অতিরিক্ত সংখ্যা

কর্তৃপক্ষ কর্তৃক প্রকাশিত

রবিবার, মার্চ ৩, ২০১৩

বাংলাশে জাতীয় সংসদ

ঢাকা, ০৩ মার্চ, ২০১৩/১৯ ফাল্গুন, ১৪১৯

সংসদ কর্তৃক গৃহীত নিম্নলিখিত আইনটি ০২ মার্চ, ২০১৩/১৮ ফাল্গুন, ১৪১৯ তারিখে রাষ্টপতির সম্মতি লাভ করিয়াছে এবং এতদ্বারা এই আইনটি সর্বসাধারণের অবগতির জন্য প্রকাশ করা যাইতেছে ঃ—

২০১৩ সনের ১২ নং আইন

পরিসংখ্যান সম্পর্কিত কার্যক্রম গতিশীল, সমন্বিত, লক্ষ্যভিত্তিক এবং সংরক্ষণ করার লক্ষ্যে বিধান প্রণয়নের উদ্দেশ্যে প্রণীত আইন

যেহেতু বাংলাদেশের জনসংখ্যা, কৃষি, শিল্প, জনমিতি, অর্থনীতি, আর্থ-সামাজিক বিষয়াদি, প্রকৃতিক সম্পদ, পরিবেশ, ইত্যাদি সংক্রান্ত নঠিক ও নির্ভুল পরিসংখ্যান সম্পর্কিত কার্যক্রমকে গতিশীল, সমন্বিত, লক্ষ্যভিত্তিক এবং সংরক্ষণ করার লক্ষ্যে বিধান করা সমীচীন ও প্রয়োজনীয় ;

সেহেতু এতদ্দ্বারা নিম্নরূপ আইন করা হইল ঃ—

১। **সংক্ষিপ্ত শিরোনাম ও প্রবর্তন**। — (১) এই আইন পরিসংখ্যান আইন, ২০১৩ নামে অভিহিত হইবে।

(২) এই আইন অবিলম্বে কার্যকর হইবে।

২০১৩ (১৩৯৫)

মূল্য ঃ টাকা ১২.০০

২। সংজ্ঞা।–বিষয় বা প্রসঙ্গের পরিপন্থি কোন কিছু না থাকিলে, এই আইনে–

(১) "উপ-মহাপরিচালক" অর্থ ব্যুরোর উপ-মহাপরিচালক ;

(২) ''জরিপ অর্থ পরিসংখ্যান বিজ্ঞানসম্মত পদ্ধতিতে সমগ্রক হইতে নমুনা চয়নের মাধ্যমে তথ্য সংগ্রহ ;

(৩) ''পরিসংখ্যানঃ অর্থ পরিসংখ্যান বিজ্ঞান বা আন্তর্জাতিকভাবে স্বীকৃত পদ্ধতি অনুসরণক্রমে শুমারি বা সেন্সাস ও জরিপের মাধ্যমে সংগৃহীত ও প্রকাশিত তথ্য ;

(৪) "বিধি" অর্থ এই আইনের অধীন প্রণীত বিধি ;

(৫) "ব্যক্তি" অর্থ কোন ব্যক্তি বা ব্যক্তিবর্গ এবং কোম্পানি, সমিতি, অংশীদারী কারবার, সংবিধিবদ্ধ বা অন্যবিধ সংস্থা বা উহাদের প্রতিনিধিও উহার অন্তর্ভুক্ত হইবে ;

(৬) "ব্যুরো" অর্থ বাংলাদেশ পরিসংখ্যান ব্যুরো ;

(৭) ''মহাপরিচালক" অর্থ ব্যুরোর মহাপরিচালক ;

(৮) "শুমারি অথবা ''সেন্সাস" অর্থ একটি ভূখন্ডের সকল মানুষ ও বিভিন্ন সেক্টর বা ইউনিটকে গণনা করা : এবং

(৯) "সরকারি পরিসংখ্যান" অর্থ ব্যুরো কর্তৃক প্রণীত, সংরক্ষিত, প্রকাশিত ও প্রযোজ্য ক্ষেত্রে, ধারা ১১ এর অধীন অনুমোদিত পরিসংখ্যান।

৩। **আইনের প্রাধান্য**।–আপাততঃ বলবৎ অন্য কোন আইনে ভিন্নতর যাহা কিছুই থাকুক না কেন, এই আইনের বিধানাবলী প্রাধান্য পাইবে।

৪। **ব্যুরো প্রতিষ্ঠা**।–এই আইন বলবৎ হইবার পর, যতশীঘ্র সম্ভব, সরকার, সরকারি গেজেটে প্রজ্ঞাপন দ্বারা, এই আইনের উদ্দেশ্য পূরণকল্পে বাংলাদেশ পরিসংখ্যান ব্যুরো নামে একটি ব্যুরো প্রতিষ্ঠা করিবে।

৫। **ব্যুরোর কার্যালয়, ইত্যাদি**।–(১) ব্যুরোর প্রধান কার্যালয় ঢাকায় অবস্থিত হইবে।

(২) সরকার প্রয়োজনে, ঢাকার বাহিরে যে কোন স্থানে উহার শাখা কার্যালয় স্থাপন ও কর্মপরিধি নির্ধারণ করিতে পারিবে।

৬। **ব্যুরোর কার্যাবলী**।–এই আইনের উদ্দেশ্য পূরণকল্পে ব্যুরোর কার্যাবলী হইবে নিম্নরূপ, যথা :–

(ক) সঠিক, নির্ভুল ও সময়োপযোগী পরিসংখ্যান প্রণয়ন ও সংরক্ষণ ;

(খ) সঠিক, নির্ভুল ও সময়োপযোগী পরিসংখ্যান প্রণয়নের জন্য দেশের আর্থ-সামাজিক বিভিন্ন ক্ষেত্রে জরিপ পরিচালনা ;

(গ) জনশুমারি, কৃষিশুমারি, মৎস্য ও প্রাণিসম্পদ শুমারি, অর্থনৈতিক শুমারিসহ অন্যান্য শুমারি ও জরিপের লক্ষ্যে যাবতীয় কার্যক্রম গ্রহণ ;

(ঘ) সরকারি পর্যায়ে উন্নয়ন পরিকল্পনাবিদ, নীতি-নির্ধারক, গবেষণা ও শিক্ষা প্রতিষ্ঠান, জাতীয় ও আন্তর্জাতিক সংস্থা এবং অন্যান্য ব্যবহারকারীগণের চাহিদা অনুসারে দ্রুততার সহিত নির্ভরযোগ্য এবং ব্যবহারবান্ধব পরিসংখ্যান সরবরাহকরণ ;

(ঙ) পরিসংখ্যান বিষয়ক নীতিমালা ও পদ্ধতি প্রণয়ন ;

(চ) শাখা কার্যালয়ের কার্যাদি সরেজমিনে তদারক এবং প্রযোজ্য ক্ষেত্রে, উহার প্রতিবেদন পর্যালোচনা ও প্রকাশের ব্যবস্থা গ্রহণ ;

(ছ) জাতীয় পরিসংখ্যান উন্নয়ন কৌশলপত্র (National Strategy for Development of statistics) প্রবর্তন এবং সময় সময়, হালনাগাদকরণ ;

(জ) পরিসংখ্যান বিষয়ে দক্ষ জনশক্তি তৈরির লক্ষ্যে প্রয়োজনীয় প্রশিক্ষণ কর্মসূচী গ্রহণ ;

(ঝ) পরিসংখ্যানের ভূমিকা ও কার্যক্রমের গুরুত্ব সম্পর্কে জনসচেতনতা বৃদ্ধিকরণ ;

(ঞ) পরিসংখ্যান কার্যক্রম সম্পাদনে তথ্য-প্রযুক্তির ব্যবহার নিশ্চিতকরণ ;

(ট) যে কোন কর্তৃপক্ষ, পরামর্শ প্রদানকারী প্রতিষ্ঠান, বেসরকারি সংস্থা এবং আন্তর্জাতিক সংস্থার সাথে পরিসংখ্যান বিষয়ে প্রয়োজনীয় সমন্বয় ও সহযোগিতা প্রদান ;

(ঠ) ভোক্তার মূল্য-সূচকসহ অন্যান্য মূল্য-সূচক এবং জাতীয় হিসাব প্রস্তুতকরণ ;

(ড) অর্থনৈতিক, পরিবেশগত, সামাজিক ও জনমিতি সংক্রান্ত নির্দেশক প্রণয়ন ও প্রকাশকরণ ;

(ঢ) ভূমি ব্যবহারসহ বিভিন্নফসলের উৎপাদন, উৎপাদন-ব্যয় এবং ফসলাধীন জমির পরিমান প্রাক্কলন ;

(ণ) জিও-কোড সিস্টেম প্রণয়ন এবং একমাত্র সরকারি জিও-কোড সিস্টেম হিসাবে উহা হালনাগাদকরণ ও সংরক্ষণ এবং অন্যান্য সকল সরকারি সংস্থা বা প্রতিষ্ঠানকে ব্যবহারের জন্য উদ্বুদ্ধকরণ ;

(ত) জাতীয় জনসংখ্যা রেজিস্টার (National Population Register) প্রণয়ন ও সময় সময়, হালনাগাদকরণ ;

(থ) সমন্বিত সেন্ট্রাল জিওগ্রাফিক্যাল ইনফরমেশন সিস্টেম (Geographical Information System) প্রণয়ন ;

(দ) পরিসংখ্যানের প্রধান প্রধান কার্যক্রমসমূহ আন্তর্জাতিক মানে প্রমিতকরণ (standardization) ;

(ধ) সংরক্ষণের বিকল্প ব্যবস্থাসহ জাতীয় তথ্য ভান্ডার প্রণয়ন ও আধুনিক পদ্ধতিতে আর্কাইভে সংরক্ষণ;

(ন) জাতীয় ও আন্তর্জাতিক সংস্থার জন্য প্রণীত সরকারি পরিসংখ্যানের মান সত্যকরণ (Authentication) ;

(প) পরিসংখ্যান সংক্রান্ত পরামর্শ সেবা প্রদান ;

(ফ) সরকার কর্তৃক নির্দেশিত অন্যান্য দায়িত্ব পালন ; এবং

(ব) উপরি-উক্ত দায়িত্ব পালন ও কার্যাবলী সম্পাদানের জন্য প্রয়োজনীয় ব্যবস্থা গ্রহণ।

৭। **মহাপরিচালক ও উপ-মহাপরিচালক**।–(১) ব্যুরোর একজন মহাপরিচালক ও একজন উপ-মহাপরিচালক থাকিবে।

(২) মহাপরিচালক ও উপ-মহাপরিচালক সরকার কর্তৃক নিযুক্ত হইবেন ও তাহাদের যোগ্যতা, অভিজ্ঞতা ও চাকুরীর শর্তাদি সরকার কর্তৃক নির্ধারিত হইবে।

(৩) মহাপরিচালক ব্যুরোর প্রধান নির্বাহী হইবেন।

৮। **মহাপরিচালকের ক্ষমতা ও কার্যাবলী**।–(১) মহাপরিচালক–

(ক) ব্যুরোর সকল প্রশাসনিক ও অর্থ বিষয়ক কার্যাদি পরিচালনা করিবেন ;

(খ) ব্যুরোর কর্মকর্তা ও কর্মচারীদের কার্যাবলী তদারক করিবেন এবং পেশাগত দিক-নির্দেশনা প্রদান করিবেন ;

(গ) এই আইনের বিধানাবলী সাপেক্ষে এবং সময় সময়, সরকার কর্তৃক নির্দেশিত কার্যাবলী সম্পাদন, ক্ষমতা প্রয়োগ ও দায়িত্ব পালন করিবেন ; এবং

(ঘ) তৎকর্তৃক সমীচীন ও প্রয়োজনীয় বলিয়া বিবেচিত কার্যক্রম গ্রহণ করিতে পারিবেন।

(২) মহাপরিচালকের পদ শূন্য হইলে, বা অনুপস্থিতি, অসুস্থতা বা অন্য কোন কারণে মহাপরিচালক তাহার দায়িত্ব পালনে অসমর্থ হইলে, শূন্য পদে নবনিযুক্ত মহাপরিচালক কার্যভার গ্রহণ না করা পর্যন্ত বা মহাপরিচালক পুনরায় স্বীয় দায়িত্ব পালনে সমর্থ না হওয়া পর্যন্ত, উপ-মহাপরিচালক বা সরকার কর্তৃক নিযুক্ত কোন ব্যক্তি অস্থায়ীভাবে মহাপরিচালকের দায়িত্ব পালন করিবেন।

৯। **কমিটি**।–সরকার এই আইনের উদ্দেশ্য পূরণকল্পে, এক বা একাধিক কমিটি গঠন ও উহার কর্মপদ্ধতি নির্ধারণ করিতে পারিবে।

১০। **সরকারি পরিসংখ্যানের বাধ্যতামূলক ব্যবহার**।–যে কোন মন্ত্রণালয়, বিভাগ বা উহাদের অধীনস্থ দপ্তর, অধিদপ্তর বা সংস্থার পরিসংখ্যান সংক্রান্ত কর্মকান্ডে সরকারি পরিসংখ্যান বাধ্যতামূলকভাবে ব্যবহৃত হইবে।

১১। **ব্যুরো ব্যতীত অন্যান্য সংস্থা কর্তৃক পরিসংখ্যান প্রস্তুত**।–ব্যুরো যে সকল বিষয়ে পরিসংখ্যান প্রণয়ন করে না সে সকল বিষয়ে, যে কোন মন্ত্রণালয়, বিভাগ বা উহাদের অধীনস্থ দপ্তর, অধিদপ্তর বা সংস্থা, ব্যুরো কর্তৃক প্রণীত নীতিমালা অনুসরণক্রমে এবং বিধি দ্বারা নির্ধারিত পদ্ধতিতে ও সময়ে ব্যুরোর অনাপত্তি গ্রহণপূর্বক পরিসংখ্যান প্রস্তুত ও প্রকাশ করিতে পারিবে।

১২। **ব্যক্তি, সংস্থা, প্রতিষ্ঠান বা কর্তৃপক্ষের তথ্য প্রদানের দায়বদ্ধতা, ইত্যাদি**।–(১) এই আইনের উদ্দেশ্য পূরণকল্পে, ব্যুরোর চাহিদা অনুযায়ী যে কোন ব্যক্তি, সংস্থা, প্রতিষ্ঠান বা কর্তৃপক্ষ উহাদের নিকট সংরক্ষিত তথ্য, ইত্যাদি ব্যুরোকে প্রদান করিতে বাধ্য থাকিবে।

(২) ব্যুরোর কর্মকর্তা ও কর্মচারী উপ-ধারা (১) এর অধীন প্রাপ্ত তথ্যের গোপনীয়তা নিশ্চিত করিবে ;

তবে শর্ত থাকে যে, সংগৃহীত তথ্য সংশ্লিষ্ট ব্যক্তি, সংস্থা, প্রতিষ্ঠান বা কর্তৃপক্ষের সম্মতি সাপেক্ষে প্রকাশ করা যাইবে।

১৩। **প্রবেশ, ইত্যাদির ক্ষমতা**।–এই আইনের অন্য কোন বিধানে যাহা কিছুই থাকুক না কেন, অন্যান্য আইনের বিধানাবলী ও যথাযথভাবে অবহিতকরণ সাপেক্ষে, মহাপরিচালক বা তৎকর্তৃক সাধারণ বা বিশেষভাবে ক্ষমতাপ্রাপ্ত ব্যুরোর কোন কর্মকর্তা বা কর্মচারী এই আইন বা বিধির অধীন তাহার উপর অর্পিত দায়িত্ব সম্পাদন করিবার উদ্দেশ্যে কোন রেকর্ড, রেজিস্টার, দলিল বা এতদসংশ্লিষ্ট কোন গুরুত্বপূর্ণ তথ্য পরীক্ষা, যাচাই-বাছাই বা সংগ্রহ করিবার জন্য কোন ভবন বা স্থানে প্রবেশ করিবার অধিকারী হইবেন এবং সংশ্লিষ্ট ভবন বা স্থানের মালিক বা কর্তৃপক্ষ চাহিত তথ্য প্রদানে বাধ্য থাকিবে।

১৪। **প্রশিক্ষণ একাডেমী**।–(১) এই আইনের উদ্দেশ্য পূরণকল্পে, সরকার পরিসংখ্যান বিষয়ক এবং উহার সহিত সংশ্লিষ্ট বিষয়ে গবেষণা ও অন্যান্য কার্যক্রম গ্রহণের লক্ষ্যে, প্রয়োজনে, প্রশিক্ষণ একাডেমী প্রতিষ্ঠা করিতে পারিবে।

(২) প্রশিক্ষণ একাডেমীর দায়িত্ব ও কার্যাবলী বিধি দ্বারা নির্ধারিত হইবে।

১৫। **কর্মকর্তা ও কর্মচারী নিয়োগ**।–ব্যুরো উহার কার্যাবলী সুষ্ঠুভাবে সম্পাদনের উদ্দেশ্যে সরকার কর্তৃক অনুমোদিত সাংগঠনিক কাঠামো অনুযায়ী প্রয়োজনীয় সংখ্যক কর্মকর্তা ও কর্মচারী নিয়োগ করিতে পারিবে এবং তাহাদের চাকুরীর শর্তাবলী বিধি দ্বারা নির্ধারিত হইবে।

১৬। **প্রকাশনা**।–(১) ব্যুরো তৎকর্তৃক সংগৃহীত ও প্রস্তুতকৃত পরিসংখ্যান প্রকাশ করিবে।

(২) উপ-ধারা (১) এর অধীন প্রকাশিত প্রকাশনাসমূহ, সময় সময়, হালনাগাদক্রমে আধুনিক প্রযুক্তি ব্যবহার করিয়া লাইব্রেরীতে সংরক্ষণ করিতে হইবে।

১৭। **অবগতিমূলক কর্মসূচী**।–ব্যুরো উহার কার্যাবলী, কার্যপদ্ধতি ও প্রতিবেদন সম্পর্কে জনসাধারণকে সম্যক অবহিত করিবার লক্ষ্যে যথাযথ কর্মসূচী গ্রহণ করিবে।

১৮। **অপরাধ ও শাস্তি**।–কোন ব্যক্তি এই আইনের ধারা ১৩ এর বিধান লংঘন করিলে, তিনি এই আইনের অধীন অপরাধ করিয়াছেন বলিয়া গণ্য হইবে এবং উক্ত অপরাধের জন্য তিনি অনধিক ১ (এক) মাস কারাদন্ড বা অনধিক ১০,০০০ (দশ হাজার) টাকা অর্থদন্ড বা উভয়দন্ডে দন্ডিত হইবেন।

১৯। **অপরাধের আমলযোগ্যতা ও জামিনযোগ্যতা।**—এই আইনের অধীন অপরাধসমূহ অ-আমলযোগ্য (Non-cognizable) জামিনযোগ্য (Bailable) হইবে।

২০। **Act V of 1898 এর প্রয়োগ।**– এই আইনে ভিন্নরূপ কিছু না থাকিলে, কোন অপরাধের অভিযোগ দায়ের, তদন্ত, বিচার ও নিষ্পত্তির ক্ষেত্রে Code of Criminal Procedure, 1898 (Act V of 1898) এর বিধানাবলী প্রযোজ্য হইবে।

২১। **বাজেট।**–ব্যুরো প্রতি বৎসর সরকার কর্তৃক নির্ধারিত সময়ের মধ্যে পরবর্তী অর্থ-বৎসরের বার্ষিক বাজেট বিবরণী সরকার কর্তৃক নিধারিত ফরমে অনুমোদনের জন্য সরকারের নিকট পেশ করিবে এবং উহাতে উক্ত অর্থ-বৎসরের ব্যুরোর কি পরিমাণ অর্থের প্রয়োজন হইবে উহার উল্লেখ থাকিবে।

২২। **ক্ষমতা অর্পণ।**–মহাপরিচালক, প্রয়োজনবোধে, এই আইনের অধীন তাহার উপর অর্পিত যে কোন ক্ষমতা বা দায়িত্ব, লিখিত আদেশ দ্বারা, ব্যুরোর যে কোন কর্মকর্তা বা কর্মচারীকে অর্পণ করিতে পারিবেন এবং সরকারকে উহা যথাশীঘ্র সম্ভব অবহিত করিবেন।

২৩। **জনসেবক।**–মহাপরিচালক, ব্যুরোর কর্মকর্তা ও কর্মচারী এবং ব্যুরোর পক্ষে কাজ করিবার জন্য যথাযথ ক্ষমতাপ্রাপ্ত কোন ব্যক্তি, এই আইনের অধীন দায়িত্ব পালনকালে, Penal Code, 1860 (Act XLV of 1860) এর section 21 এ বর্ণিত অর্থে Public Servant বা জনসেবক বলিয়া গণ্য হইবেন।

২৪। **বার্ষিক প্রতিবেদন।**–(১) মহাপরিচালক প্রতি বৎসর ৩১ মার্চের মধ্যে পূর্ববর্তী ৩১ ডিসেম্বরে সমাপ্ত এক বৎসরের স্বীয় কার্যাবলীর বিবরণ সম্বলিত একটি বার্ষিক প্রতিবেদন সরকারের নিকট পেশ করিবেন।

(২) সরকার ব্যুরোকে যে কোন সময় উহার যে কোন কাজের প্রতিবেদন বা বিবরণী বা পরিসংখ্যান উহার নিকট প্রেরণের নির্দেশ দিতে পারিবেন এবং উক্তরূপ নির্দেশ প্রাপ্তির পর ব্যুরো উহা সরকারের নিকট প্রেরণে বাধ্য থাকিবে।

২৫। **ইংরেজিতে অনুদিত পাঠ প্রকাশ, ইত্যাদি।**–(১) এই আইন কার্যকর হইবার পর সরকার, প্রয়োজনে, সরকারি গেজেটে প্রজ্ঞাপন দ্বারা, এই আইনের ইংরেজিতে অনুদিত একটি নির্ভরযোগ্য পাঠ (Authentic English Text) প্রকাশ করিতে পারিবে।

(২) এই আইনের বাংলা ও ইংরেজি পাঠের মধ্যে বিরোধের ক্ষেত্রে বাংলা পাঠ প্রাধান্য পাইবে।

২৬। **বিধি প্রণয়নের ক্ষমতা।**–এই আইনের উদ্দেশ্য পূরণকল্পে, সরকার, সরকারি গেজেটে প্রজ্ঞাপন দ্বারা, বিধি প্রণয়ন করিতে পারিবে।

২৭। **নীতিমালা প্রণয়নের ক্ষমতা**।–এই আইনের ধারা ৬ এর দফা (ঙ) এর উদ্দেশ্য পূরণকল্পে, ব্যুরো সরকারের পূর্বানুমোদনক্রমে, সরকারি গেজেটে প্রজ্ঞাপন দ্বারা, নীতিমালা প্রণয়ন করিতে পারিবে।

২৮। **রহিতকরণ ও হেফাজত**।–(১) এই আইনের অধীন ব্যুরো প্রতিষ্ঠার সঙ্গে সঙ্গে মন্ত্রিপরিষদ বিভাগের ২৬ আগস্ট, ১৯৭৪ তারিখে জারিকৃত প্রজ্ঞাপন নং ৪/২৫/৭২-বিধি, অতঃপর উক্ত প্রজ্ঞাপন বলিয়া উল্লিখিত, বাতিল হইয়া যাইবে।

(২) **উক্ত প্রজ্ঞাপন বাতিল হইবার সঙ্গে সঙ্গে –**

(ক) উক্ত প্রজ্ঞাপনের অধীন গঠিত বাংলাদেশ পরিসংখ্যান ব্যুরো, অতঃপর বিলুপ্ত ব্যুরো বলিয়া উল্লিখিত, বিলুপ্ত হইবে ;

(খ) বিলুপ্ত ব্যুরোর–

(অ) সকল সম্পদ, অধিকার, ক্ষমতা, কর্তৃত্ব, সুবিধাদি এবং স্থাবর ও অস্থাবর সকল সম্পত্তিনগদ ও ব্যাংকে গচ্ছিত অর্থ এবং অন্য সকল দাবী ও অধিকার ব্যুরোর উপর হস্তান্তরিতহইবে এবং ব্যুরো উহার অধিকারী হইবে ;

(আ) বিরুদ্ধে বা উহা কর্তৃক দায়েরকৃত সকল মামলা-মোকদ্দমা ব্যুরোর বিরুদ্ধে বা ব্যুরো কর্তৃক দায়েরকৃত মামলা-মোকদ্দমা বলিয়া গণ্য হইবে ;

(ই) সকল ঋণ, দায় ও দায়িত্ব ব্যুরোর ঋণ ও দায়-দায়িত্ব হইবে ;

(ঈ) সকল কর্মকর্তা ও কর্মচারী ব্যুরোতে বদলী হইবেন এবং তাহারা ব্যুরো কর্তৃক নিযুক্তকর্মকর্তা ও কর্মচারী বলিয়া গণ্য হইবেন এবং উক্তরূপ বদলীর পূর্বে তাহারা যে শর্তে চাকুরীতে নিয়োজিত ছিলেন, ব্যুরো কর্তৃক পরিবর্তিত বা প্রেষণ প্রদানকারী কর্তৃপক্ষ কর্তৃক প্রত্যাহার না হওয়া পর্যন্ত, সেই একই শর্তে তাহারা ব্যুরোর চাকুরীতে নিয়োজিত থাকিবেন ;

(উ) সকল কমিটি বিলুপ্ত হইবে ও বিলুপ্ত কমিটি কর্তৃক গৃহীত কার্যক্রম, প্রদত্ত সিদ্ধান্ত, ইত্যাদি এই আইনের অধীন গঠিত কমিটি কর্তৃক গৃহীত কার্যক্রম ও প্রদত্ত সিদ্ধান্ত বলিয়া গণ্য হইবে এবং কোন সিদ্ধান্ত অবাস্তবায়িত থাকিলে বা উহার কোন কার্যক্রম অনিষ্পন্ন থাকিলে উক্তরূপ সিদ্ধান্ত বাস্তবায়ন ও নিষ্পন্নের লক্ষ্যে উহা এমনভাবে চলমান ও অব্যাহত থাকিবে যেন কমিটিসমূহ বিলুপ্ত হয় নাই ;

(ঊ) সকল রেকর্ড, নথিপত্র, দলিল-দস্তাবেজ, তথ্য-উপাত্ত ও পরিসংখ্যান ব্যুরোতে স্থানান্তরিত হইবে এবং উক্তরূপে স্থানান্তরিত রেকর্ড, নথিপত্র, দলিল-দস্তাবেজ, তথ্য-উপাত্ত ও পরিসংখ্যান এমনভাবে সংরক্ষণ করিতে হইবে যেন ব্যুরো বিলুপ্ত হয় নাই ;

(ঋ) অধীন প্রতিষ্ঠিত আঞ্চলিক, উপজেলা এবং থানা পরিসংখ্যান অফিসের কার্যক্রম এই আইনের অধীন শাখা কার্যালয় প্রতিষ্ঠিত না হওয়া পর্যন্ত এমনভাবে কার্যকর ও অব্যাহত থাকিবে যেন উহারা এই আইনের অধীন প্রতিষ্ঠিত হইয়াছে ;

(এ) জারিকৃত সকল আদেশ, নীতিমালা, দিক-নির্দেশনা, জাতীয় পরিসংখ্যান পদ্ধতি, ইত্যাদি, এই আইনের সহিত সংগতিপূর্ণ হওয়া সাপেক্ষে, পরবর্তী আদেশ, নীতিমালা, দিক-নির্দেশনা, জাতীয় পরিসংখ্যান পদ্ধতি জারি না হওয়া পর্যন্ত, একইরূপে চলমান, অব্যাহত ও কার্যকর থাকিবে যেন ব্যুরো বিলুপ্ত হয় নাই।

(৩) এই আইন প্রবর্তনের সঙ্গে সঙ্গে ১৩ আগস্ট, ১৯৭৭ তারিখের সরকারি আদেশ নং ১/এনএসসি/৭৭(২০০) মূলে গঠিত জাতীয় পরিসংখ্যান কাউন্সিল বিলুপ্ত হইবে এবং বিলুপ্ত কাউন্সিল কর্তৃক গৃহীত কার্যক্রম ও সিদ্ধান্ত, এই আইনের সহিত সংগতিপূর্ণ হওয়া সাপেক্ষে, এমনভাবে কার্যকর ও বাস্তবায়িত হইবে যেন উক্ত কাউন্সিল বিলুপ্ত হয় নাই।

মোঃ মাহ্‌ফুজুর রহমান
সচিব।

ড. মোঃ আলী আকবর (উপ সচিব), উপ পরিচালক, বাংলাদেশ সরকারি মুদ্রণালয়, তেজগাঁও, ঢাকা কর্তৃক মুদ্রিত।
আবদুর রশিদ (উপ সচিব), উপ পরিচালক, বাংলাদেশ ফরম ও প্রকাশনা অফিস,
তেজগাঁও, ঢাকা কর্তৃক প্রকাশিত। web site : www.bgpress.gov.bd

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Acronyms

BBS	Bangladesh Bureau of Statistics
CH	Chittagong Hill
GDP	Gross Domestic Product
GOB	Government of Bangladesh
HH	Household
Kg	Kilogram
M. Tons	Metric Tons
No.	Number
PASDAC	Productivity Assessment Survey of Different Agricultural Crops
PSU	Primary Sampling Unit
RSE	Relative Standard Error
SE	Standard Error
Tk	Taka
T/ha	Ton per hector
USUs	Ultimate Sampling Units
%	Percentage

List of personnel engaged in the preparation of the report

1. **Mr. Mohammad Shahin, Deputy Director**
2. **Mr. Bidhan Baral, Deputy Director.**
3. **Mr. Mostafa Ashrafuzzaman, Statistical Officer**
4. **Mr. Md. Rezaul Karim, Assistant Statistical Officer**
5. **Mr. Md. Mortuza Hossain, Assistant Statistical Officer**
6. **Mr. S M Anwar Husain, Statistical Investigator**
7. **Mr. Md. Shah Alam Miah, Statistical Investigator**
8. **Mr. Md. Iqbal Hossain, Enumerator.**
9. **Mr. A. K. M. Akther Hossain, Steno-Typist/Computer Operator.**

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