



Socio-economic status and problems of banana growers in Bangladesh

Md. Shah Kamal^{1*}, Md. Arshad Ali², Md. Ferdous Alam³

¹Department of Agricultural Finance, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh

²Department of Entomology, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh

³Department of Agricultural Finance, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh

ABSTRACT

Banana is a year-round crop which is valued for energy, vitamin and mineral contents. The climate and soil of Bangladesh are favorable for cultivation of year round fruits and vegetables. To meet nutritional needs and increase employment opportunities of the farmers, demand for producing year round crop is increasing. Banana cultivation, therefore, plays a vital role in providing nutrition, extra income and employment as well as in poverty alleviation. With a view to popularizing banana farming on commercial basis and to meet the increasing demand for nutrition such as carbohydrate, protein, fat, energy etc, large number of unemployed youth have already come forward to initiate banana farming. However, the social economic status of the banana growers is still unknown. The present study aimed to determine the socio economic status of banana growers in Bangladesh. For this purpose, 60 loanee farmers were selected from four villages of Shibgong upazila in Bogra district. As regards the socio-economic characteristics, the findings of the study revealed that the average family sizes were 6.78, 4.71, 6.67 and 5.80 for small, medium, large and all farms respectively. About 50.93 % farm owners belong to age group of 31 to 40 years. Only 12.67 % of banana growers were illiterate. About 62 % of farm owners dealt with agriculture as their main occupation. The overall average farm size was 237.29 decimal. However, for small, medium and large farms, the farm sizes were 83, 224 and 405 decimals respectively. Family income derived from non-farm sources was greater than those from farm income. The overall annual income was Tk. 55414.7 in which banana farming contributed 35.32 %. A number of problems of banana growers have been identified in this study. Among them problems of credit, non-availability or insufficiency of credit, high interest rate and loan transaction cost, low prices of output, high prices of inputs, lack of sucker/seed of banana, high prices of fertilizer and insecticides, lack of storage facilities are major problem faced by the farmers in the study areas. The study suggests addressing the identified problem to take sustainable solutions for the banana growers.

Key words: Social economic status, banana growers, problems, Bogra, Bangladesh

*Corresponding author. Tel.: +8801755593724

E-mail address: pannabogra@yahoo.com (MS Kamal)

@2014 Int. J. Nat. Soc. Sci. all right reserved.

INTRODUCTION

Banana, one of the most important commercial and oldest fruits of the tropical area of the world, belongs to the family Musaceae. The actual place where it had originated cannot be precisely circumscribed but generally agreed that all the edible bananas and plantains are indigenous to the warm, moist region of tropical Asia, probably in the mountainous regions where Assam, Myanmar, Thailand and Indo-China meet (Singh 1990). Banana is also grown in many other countries of the world, namely, Bangladesh, the Caribbean Islands, Egypt, Israel, Ghana, Congo, Sri Lanka

etc. the highest acreage of banana is in Africa, where greater importance is given to banana as starch food. It is a staple food of some people in Uganda (Hossain 2000). Now-a-days it is found in every tropical country among which Brazil, India, Philippines, Ecuador, Thailand, Indonesia, Mexico, Honduras, Columbia and Panama are the major banana producing country.

Banana is the most important fruit in Bangladesh comprising 42 per cent of the total fruit production in Bangladesh (BBS 2004). It occupies an important position among the fruits of the country not only for its wide cultivation all over

Bangladesh but also from the standpoint of food value and availability throughout the year. Other important fruit crops such as mango, litchis, jackfruits and pineapples have the disadvantages of being seasonal in nature (USAID 1969).

Banana is grown in well drained high land which is also suitable for growing other important cash crops. The area and production of banana in the country has slightly increased during the last decade. In order to meet the demand for fruits and vegetables for the increasing population, the government of Bangladesh has given much more emphasis on year-round crop like banana cultivation to achieve overall nutritional self-sufficiency.

There are some important varieties of commercial bananas, namely, Amritsagar, Mehersagar, Chinichampa, Dudhsar, Sabri, Kathali, Singapuri, Gerasundari, Kabri, Basri and Green Bananas (used as vegetables) grown much in Bangladesh. Among these Amritsagar, Sabri and Chinichampa are the leading commercial varieties of banana in this country. Again, of these three varieties, Amritsagar occupies the top position in respect of area, production and trade. The optimum time of planting of this variety is September-October (Haque 1983). The low temperature prevailing during December to February retards its vegetative growth to a minimum. Usually bananas are harvested after 9-12 month of plantation. The space between the young plants specially during the first few months of crop growth, provides a scope for temporal and spatial complementarity by growing short duration, early maturing winter cash crops (Shil and Mondal 1990).

Banana plays a significant role in the economy of Bangladesh. Production of banana on commercial scale has been increasing in different areas of Bangladesh. The Government of Bangladesh has given much emphasis on intensive cultivation of fruits and vegetables by year round production to meet the nutritional needs of the growing population and to increase employment opportunities and income of the farmers. Banana is of considerable significance in the economy of Bangladesh. But until recently little efforts have been made to study the socio-economic characteristics of the banana growers and identify problems of banana production which could help

policy guideline regarding banana production in Bangladesh.

METHODOLOGY

Selection of the study area

To achieve the objectives of the present study, a preliminary survey was conducted in two unions under Shibganj upazila of Bogra district. On the basis of preliminary information four villages namely Rahabal, Voria, Dauli and Goneshpur were selected for the study.

Period of study

The survey for this study was conducted during the period of September to October 2006. Repeated visits were made for collecting necessary information.

Collection of data

In this study, data were collected by the author himself through personal interviews with the 60 selected banana growers. A survey schedule was used for collecting information against the socio-economic variables of the banana growers viz. family income, land ownership pattern, assets value. Before going to make an actual interview, the academic purpose of the study was clearly explained to the sample farmers. Initially the farmers hesitated to answer the questions. But when they were assured that the study was purely an academic one and was not likely to have any adverse effect on them, they provided cooperation to the researcher. At the time of interview the researcher asked the questions systematically and explained wherever it was felt necessary. In order to make the information reliable and to minimize error, data were collected in local units. The local units were later converted into international standard units.

Analysis of data

Data were analyzed with a view to achieving the objectives of the study. For this study, tabular analysis was applied to classify data in order to derive meaningful findings by using simple statistical measures like means, percentage and ratios.

RESULTS AND DISCUSSION

Socio-economic characteristics of the banana growers

The study represents a brief description of the socio-economic characteristics of the selected banana growers. Decision making behavior of individual is determined to a large extent by his socio-economic characteristics. Socio-economic environment also largely determines the nature and extent of participation of people in national development programmes. The socio-economic variables of the banana growers are given below.

Distribution of banana growers by age

Age distribution of the selected banana growers is presented in Table 1. It shows that the highest number of banana growers (60.87 %) belonged to the age group 31-40 years for small farm while medium farm and large farm represent 42.86 and 44.44 % respectively. The table also indicates that the lowest number of banana growers belonged to the age group 20-30 years (18.33 %) while the highest proportion represents 31-40 years (50.90%).

Education Level of the banana growers

The educational status of the banana growers were classified into (i) Illiterate (ii) Primary (iii) Secondary up to SSC (iv) HSC up to above.

Table 1
Age distribution of banana growers

| Age of group (Years) | Small | | Medium | | Large | | All | |
|----------------------|-------|-------|--------|-------|-------|-------|-----|-------|
| | No. | % | No. | % | No. | % | No. | % |
| 20-30 | 3 | 13.04 | 6 | 21.42 | 2 | 22.22 | 11 | 18.33 |
| 31-40 | 14 | 60.87 | 12 | 42.86 | 4 | 44.44 | 30 | 50.93 |
| 41 to above | 6 | 26.09 | 10 | 35.72 | 3 | 33.34 | 19 | 31.67 |
| Total | 23 | 100 | 28 | 100 | 9 | 100 | 60 | 100 |

Table 2
Education status of the banana growers

| Literacy status | Small | | Medium | | Large | | All | |
|---------------------|-------|-------|--------|-------|-------|-------|-----|-------|
| | No. | % | No. | % | No. | % | No. | % |
| Illiterate | 5 | 21.73 | 8 | 28.57 | 0 | 0 | 13 | 12.67 |
| Primary | 6 | 26.09 | 5 | 17.86 | 3 | 33.33 | 14 | 23.33 |
| Secondary up to SSC | 10 | 43.48 | 12 | 42.85 | 4 | 44.44 | 26 | 43.33 |
| HSC up to above | 2 | 8.70 | 3 | 10.72 | 3 | 22.23 | 7 | 11.67 |
| Total | 23 | 100 | 28 | 100 | 9 | 100 | 60 | 100 |

The educational status of the selected banana growers is presented in Table 2. The table shows that most of the banana growers were not well educated. It can be seen from the table that percentage of illiterate groups were 21.73 and 28.57 for the small and medium farms respectively. There were no illiterate banana growers in the large farm category. percentage of farms were 26.09, 17.86 and 33.33 % attending primary and 43.48, 42.85 and 44.44 % having secondary level and 8.7, 10.72 and 22.23 % attending up to HSC and above level of education for small, medium and large farm size categories respectively. Taking all farms 12.67 % banana growers were illiterate and 23.33 % had up to primary level of education, 43.33 % had education level up to SSC and 11.67 % of the total sample had level of education up to HSC and above.

Occupation of the banana growers

The occupation from which lion's share of the income is earned irrespective of time and labour devoted to it has been termed as the main occupation of the respondents in the present study. Agriculture was found to be the inherent and single major occupation of almost all the farmers during the study period. A bulk of the total labour force was engaged in agriculture. Only a small proportion of the farm families were found to have dealt with business, service and other occupation in addition to agriculture in the study area.

Table 3
Occupational status of banana growers

| Particulars | Small | | Medium | | Large | | All | |
|--------------------------|-------|-------|--------|-------|-------|-------|-----|-------|
| | No. | % | No. | % | No. | % | No. | % |
| Agriculture | 17 | 73.91 | 16 | 57.14 | 4 | 44.45 | 37 | 61.67 |
| Agriculture cum service | 2 | 8.70 | 4 | 14.29 | 2 | 22.22 | 8 | 13.33 |
| Agriculture cum business | 3 | 13.04 | 5 | 17.85 | 2 | 22.22 | 10 | 16.67 |
| Agriculture cum others | 1 | 4.35 | 3 | 10.72 | 1 | 11.11 | 5 | 8.33 |
| Total | 23 | 100 | 28 | 100 | 9 | 100 | 60 | 100 |

Table 4
Average family size and composition of family members

| Age group (year) | Particulars | Small | | Medium | | Large | | All | |
|---------------------|-------------|-------|-------|--------|-------|-------|-------|------|-------|
| | | No. | % | No. | % | No. | % | No. | % |
| Below 14 | Male | 27 | 50.94 | 16 | 55.17 | 8 | 47.06 | 51 | 51.52 |
| | Female | 26 | 49.06 | 13 | 44.83 | 9 | 52.94 | 48 | 48.48 |
| | All | 53 | 100 | 29 | 100 | 17 | 100 | 99 | 100 |
| 14-59 | Male | 68 | 75.56 | 59 | 67.04 | 23 | 60.53 | 150 | 69.44 |
| | Female | 22 | 24.44 | 29 | 32.96 | 15 | 39.47 | 66 | 30.56 |
| | All | 90 | 100 | 88 | 100 | 38 | 100 | 216 | 100 |
| 59 and above | Male | 7 | 53.85 | 8 | 53.33 | 3 | 60 | 18 | 54.55 |
| | Female | 6 | 46.15 | 7 | 46.67 | 2 | 40 | 15 | 45.45 |
| | All | 13 | 100 | 15 | 100 | 5 | 100 | 33 | 100 |
| Average family size | | 6.78 | | 4.71 | | 6.67 | | 5.80 | |

About 62 % of all banana growers dealt singly with agriculture which is their main occupation, 13 % dealt with agriculture cum service, 16.67 % with agriculture cum business and only 8.33 % dealt with agriculture cum other occupation (Table 3)

Average family size and composition

Family size (or family members) in this study has been defined as total number of persons living together and taking meal from the same kitchen under the administration of the same head of the family. The family member includes husband, wife, son, daughter, brother, father and mother. Again a person, who has been employed for household work of a family, for example, servant was not considered as the family members in the study. It appears from Table 4 that maximum family members belonged to the age group 14 to 59 years for all farms. The average family size of

the banana growers comprised 6.78, 4.71, 6.67 and 5.08 for the small, medium, large and all farms respectively during the year. It is evident that an average family size in the study area is higher than the national average of 4.92 (BBS 2004).

Distribution of family members by literacy

The study showed that maximum members were received primary level education which was 43.43%, 41.25% and 41.50% for the small, medium and large farms respectively (Table 5). Taking all farms together, 42.24 % of the family members have up to primary level of education, 30.75% have up to SSC and only 3.45% have HSC and above level of education. It also indicates that 25.00%, 16.98% and 20.01% of the total family members were illiterate having no formal education for small, medium and large farms respectively.

Table 5
Occupational status of banana growers

| Literacy status | Small | | Medium | | Large | | All | |
|------------------------|-------|-------|--------|-------|-------|-------|-----|-------|
| | No. | % | No. | % | No. | % | No. | % |
| Children below 6 years | 4 | 2.63 | 5 | 3.5 | 3 | 5.66 | 12 | 3.45 |
| Illiteracy | 38 | 25 | 23 | 16.08 | 9 | 16.98 | 70 | 2.01 |
| Primary | 66 | 43.43 | 59 | 41.25 | 22 | 41.50 | 147 | 42.24 |
| Secondary up to SSC | 40 | 26.31 | 50 | 36.97 | 17 | 32.07 | 107 | 30.75 |
| HSC up to above | 4 | 2.63 | 6 | 4.20 | 2 | 3.78 | 12 | 3.45 |
| Total | 152 | 100 | 143 | 100 | 53 | 100 | 348 | 100 |

Table 6
Average land holding of farm families (decimal)

| Land type | Small | | Medium | | Large | | All | |
|-------------------------|--------|-------|--------|-------|--------|-------|--------|-------|
| | Area | % | Area | % | Area | % | Area | % |
| Homestead area | 6.5 | 6.31 | 8.99 | 3.69 | 9.69 | 2.09 | 8.38 | 3.10 |
| Pond | 1.96 | 1.90 | 2.18 | 0.89 | 3.42 | 0.74 | 2.52 | 0.93 |
| Garden | 1.85 | 1.80 | 1.92 | 0.79 | 3.12 | 0.67 | 2.29 | 0.85 |
| Own land in cultivation | 57.75 | 56.10 | 190 | 78.08 | 392.7 | 84.85 | 213.50 | 79.16 |
| Rented in | 30.21 | 29.34 | 26.27 | 10.79 | 27.61 | 5.96 | 28.03 | 10.39 |
| Rented out | 00 | 00 | 00 | 00 | 15.75 | 3.40 | 5.25 | 1.95 |
| Mortgage in | 00 | 00 | 10.75 | 4.42 | 5.25 | 1.13 | 5.33 | 1.98 |
| Mortgage in | 4.68 | 4.55 | 3.2 | 1.31 | 5.29 | 1.14 | 4.32 | 1.60 |
| Total land | 102.95 | 100 | 243.31 | 100 | 462.9 | 100 | 269.71 | 100 |
| Average farm size | 83.28 | | 223.82 | | 404.59 | | 237.29 | |

Average size of land holding of the respondent households

In the present study, land ownership was classified into different categories i.e., cultivated own land, land rented in, land rented out, land mortgaged in, land mortgaged out, pond and homestead area. Average farm sizes of small, medium and large farms were 83.24, 223.82 and 404.59 decimals respectively with overall average being 237.29 decimal. Average farm size was calculated as:

Average farm size= Own land in cultivation + Rented in land + Mortgaged in land-Rented out land - Mortgaged out land.

Average value of assets of the respondents

Assets position plays a significant role in farm productivity and farm income. Types of assets which have been taken into consideration in the

present study were agricultural equipment (i.e., plough, yoke, ladder/rake, spade, nirani etc.), livestock (i.e., cows, goats, poultry birds etc.), house and household durable assets (i.e., dwelling, bed, alna, chair, table, almirah, radio, TV watch/clock, sewing machine, van, rickshaw etc.). The average value of assets according to farm size is presented in table 7.

It is apparent from the table that average value of house and household durable assets was the highest (Tk. 29967.67) constituting 67.85 % of all assets. Value of livestock and agricultural equipments were on and average Tk. 12990.97 and Tk. 1215.11 constituting 29.40 and 2.75 % of the total. The overall average value of asset was estimated at Tk. 44173.74. Average value of assets bears a positive relationship with the size of farms. That is, average value of assets increases as the size of farm increases.

Tabel 7
Average value of different assets

| Farm type | Average value of different assets (Tk.) | | | |
|-----------|---|------------------|----------------------------------|----------------|
| | Agricultural Equipment (%) | Livestock (%) | House and household durables (%) | Total (%) |
| Small | 1183.93 (3.09) | 9810.51 (25.62) | 27300.89 (71.29) | 3295.33 (100) |
| Medium | 1215.30 (2.70) | 14116.20 (31.36) | 29680.10 (65.94) | 45011.6 (100) |
| Large | 1246.10 (2.53) | 15046.20 (30.57) | 32922.00 (66.90) | 49214.3 (100) |
| All | 1215.11 (2.75) | 12990.97 (29.40) | 29967.67 (67.85) | 44173.74 (100) |

Table 8
Average annual household income of the respondents

| Farm type | Average annual income | | | | | | | |
|-----------|-----------------------|-------|-------------|-------|-----------------|-------|----------|-----|
| | Banana growing | | Farm income | | Non-farm income | | Total | |
| | Tk. | % | Tk. | % | Tk. | % | Tk. | % |
| Small | 15821.80 | 23.17 | 12538.30 | 25.50 | 20816.21 | 42.33 | 49176.31 | 100 |
| Medium | 17650.23 | 31.99 | 14835.30 | 26.89 | 22683.36 | 44.11 | 55168.89 | 100 |
| Large | 25238.59 | 40.77 | 13251.69 | 21.40 | 23408.62 | 37.81 | 61898.9 | 100 |
| All | 19570.20 | 35.32 | 13541.76 | 24.44 | 22302.73 | 40.25 | 55414.7 | 100 |

Table 9
Average annual expenditure

| Farm type | Average annual expenditure | | | | | | | |
|-----------|----------------------------|-------|--------------------------|-------|------------------------------|-------|----------|-----|
| | Farm expenses | | Expenditure on food item | | Expenditure on non-food item | | Total | |
| | Tk. | % | Tk. | % | Tk. | % | Tk. | % |
| Small | 13215.29 | 29.72 | 25930.00 | 58.31 | 5320.00 | 11.96 | 44465.29 | 100 |
| Medium | 15810.85 | 33.83 | 24346.00 | 52.09 | 6580.78 | 14.08 | 26737.63 | 100 |
| Large | 22011.53 | 39.70 | 26320.00 | 47.46 | 7120.00 | 12.84 | 55451.53 | 100 |
| All | 17012.55 | 34.80 | 25532.00 | 52.23 | 6340.00 | 12.97 | 48884.81 | 100 |

Table 10
Average annual savings

| Farm type | Average annual saving | | |
|-----------|-----------------------------|---------------------------|----------------------|
| | Average annual income (Tk.) | Average expenditure (Tk.) | Annual savings (Tk.) |
| Small | 49176.31 | 44465.29 | 4711.02 |
| Medium | 55168.89 | 46737.63 | 8431.26 |
| Large | 61898.90 | 55451.53 | 6447.37 |
| All | 55414.70 | 48884.81 | 6529.89 |

Average annual income of the respondent households

Income is the most important indicator of the socio-economic status of the people living in rural areas of Bangladesh. Average annual income of the respondent households has been estimated from the earnings of all active members of the

family from various income generating activities during the study period.

Table 8 shows the average annual income of different farm categories of the banana growers. It is evident from the table that the overall average annual income for all farms was Tk. 55,414.7. About 40 % of all income was earned from non-

farm sources. Banana farming contributes 35.32 % to the annual income and other farming operations contributed 24.44 %. Average annual income also displayed a positive relation with the farm size. Banana cultivation provides a very good insure base. Thus, it is a great source of the income of the selected borrowers in the area.

Average annual expenditure of the respondent

Total expenditure of RAKUB credit beneficiaries was estimated using three main categories, i.e., farm expenditure, expenditure on food item and expenditure on non-food item. Expenditure on farm indicates the expenses incurred on banana cultivation. Expenditure on food item indicates the expenditure for food item likes rice, wheat, vegetable, etc. and non-food item indicates expenditure on housing, clothing, medical services etc.

Table 9 indicates that farm expenses were Tk. 13215.29, 15810.85 and 22011.53 for small, medium and large farms respectively. It also indicates that the average overall expense of all farms was Tk. 48884.81. Farm and food expenditure accounted for 34.80 % and 52.23 % respectively while that of non-food items shared only 12.97 %. The table also provides support that small farm spends more on food. In this study, small farmers have been fund to have spent 58.31 % on food items.

Average annual savings

Saving of the respondents of different occupations was calculated by deducting the corresponding total expenditure from total income of the borrower members.

Average amount of annual savings of the respondents in general was Tk. 6529.89 during the study period. However, the same for farms small, medium and large was Tk. 4711.02, 8431.26 and 6447.37 respectively, reflecting that medium farms were in a higher position in terms of annual saving.

PROBLEMS OF THE BANANA GROWERS

Banana is a year round field crop. During the period, the banana growers faced several problems. The most burning problems of growing banana that the farmers have usually been facing

are summarized and briefly discussed in this chapter. The problem reported in this chapter is based on the opinions of the respondents. The most common and serious problems are summarized and presented below:

Problems faced by the farmers

Farmers were asked whether they faced any acute problem in producing banana. Most of the farmers faced the same kind of problems during banana production. It may be noted that problems confronted by the individual farmers were not identical for the enterprise. Some problems were in fact more severe than others. However, in this chapter an attempt has been made to identify some major problems of banana production as reported by the farmers growing banana in the study villages.

Problems of credit

Credit poses the most important constraint in banana production. The various kinds of problems in relation to credit faced by the respondents in the study area are as follows:

Non-availability of credit

Non-availability of credit is always a limiting factor to banana growers. About 27 % of the banana growers in the study area reported that they had problems in obtaining bank loans. Some of them expressed their failure to have loan even applied for the same to the bank during the study year.

Insufficiency

Some of the growers complained that amount of bank loan received was not sufficient to cover the production expenses. About 17 % of the respondents reported inadequacy of banana loan has been the problem for timely completion of production practices to obtain better yield and thereby higher income.

High interest rate and loan transaction cost

In the study area, about 60 % of the banana growers reported that high interest rate charged on loan specially by the village samity was also a problem to have loan for banana cultivation. For institutions like Rajshahi Krishi Unnayan Bank

(RAKUB), the occurrence of loan transaction cost other than formal interest rate stood as an additional burden for the borrowers which might have enhanced effective rate of interest even sometimes more than those of informal sources of credit.

Low prices of output

The farmers of Bangladesh are not well organized. They usually do not get competitive prices for their product. About 80 % of banana growers sold their products at low prices.

High prices of inputs

Some key inputs like fertilizer, manure, sucker, human labour and insecticides are important factors for banana cultivation. In the study area about 65 % of banana growers thought that the existing prices of these inputs for the selected enterprises were quite high for them.

Lack of human labour

Since banana is a labour intensive field crop, shortage of human labour is one of the major problems for growing banana, specially during the time of transplanting period. About 75 % of banana growers treated lack of human labour as a crucial problem.

Lack of sucker/seed

Lack of good quality HYV sucker/seed appeared to be a limiting factor in cultivating banana in the study area. Most of the farmers purchased this input from their neighboring farmers/relatives/traders but they opined that in many cases sucker/seeds were not of good quality and the rate of mortality was quite high. About 50 % of banana growers reported against this problem.

High prices of fertilizer and insecticides

Fertilizer being the vital input and insecticides for precautionary measure against pest attack is essential in the production of banana. It was reported that bananas were seriously affected by pest and diseases during the study year. About 87 % of the banana growers reported that although there was timely supply of fertilizer the price was high. They complained that they had to purchase

fertilizer and insecticides at higher prices in the area.

Lack of storage facilities

Storage problem for banana cultivation was another important problem in the study area. Because of banana being a perishable fruit crop, most of the output is sold after harvest at a lower prices due to lack of proper storage facilities. About 48 % of banana growers reported that they had no proper storage facilities.

Problem of theft

During the time of harvesting, stealing of banana was a common problem, which adversely affected the cultivation of banana. In the study area about 40 % of banana growers mentioned about the problems of theft of banana.

Inadequate extension service

Most of the banana growers complained that they did not get any extension services regarding the improved method of banana as well as banana cultivation from the Department of Agricultural Extension (DAE). About 60 % banana growers complained against the extension workers of the DAE.

CONCLUSION AND RECOMMENDATION

Based on the findings of the study, some policies and recommendations may be advanced which are likely to be useful for policy formulation:

Lack of credit supply was one of the chronic problems faced by the banana growers in the study area. Institutional credit facilities should, therefore, be made available on easy terms and conditions to the banana growing farmers.

The major constraint to high production of banana is the scarcity of HYV suckers in the study area. So, good quality HYV suckers should be made available to the door steps of the farmers at a reasonable price in time.

For increasing the production of banana, regular and adequate supply of fertilizers and insecticides should be ensured to the growers on time at fair prices.

Reasonable market prices of banana should be ensured by increasing available storage facilities and establishing various types of food processing industries.

Positive steps should be taken for improving transport and marketing facilities in the study area.

Farmers were adherence to traditional production practices in the study area and they had no training on banana cultivation. So, extension services should be extended to farmers to accelerate the production of banana.

However, the study was conducted in a limited area of an upazila taking a very limited number of respondents. Therefore, the findings of this study should be interpreted with considerable caution to generalize for the country as a whole. In spite of the above mentioned limitations, some of the findings of the study may cautiously be used in providing important clues and information for decision makers and other users.

REFERENCES

- Ahmed (2005). A study on Banana Marketing in Selected Areas of Bangladesh, M. S. Thesis, Department of Co-operation and Marketing, Bangladesh Agricultural University, Mymensingh.
- BBS (2004). Small Area Atlas, Mouzas and Mohallahs of Bogra District. Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka.
- Singh A (1990). Banana, In: Fruit Physiology and Production, Kalyani Publishers, New Delhi, PP. 285-300.
- Hossain MMS (2000). A Comparative Economic Analysis of Banana and Other Crop Production in Some Selected Areas of Mymensingh and Tangail District, M. S. Ag. Econ. Thesis, Bangladesh Agricultural University, Mymensingh.
- USAID (1969). Study of Perishable Food Marketing, East Pakistan' United States Agency for International Development, July 1969.
- Haque MA (1983). Some Technical Aspects for the Commercial Production of Banana, National Symposium on Agricultural Research, 22-23 December, BRAC, Dhaka.
- Shil NC and Mondal MF (1990). Intercropping in Banana with Some Short Duration Crops', Bangladesh Journal of Extension Education 5 (1&2): 75-80.