

SOCIOECONOMIC CONDITION AND REPRODUCTIVE PERFORMANCES OF THE GOAT REARED BY RURAL WOMEN IN THE FENI SADAR UPZILA, FENI



**A Report
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Session: 2010 – 2011

A production report submitted in partial satisfaction of the requirements for the degree of

Doctor of Veterinary Medicine

Faculty of Veterinary Medicine

Chittagong Veterinary and Animal Sciences University

Khulshi, Chittagong, Bangladesh

SEPTEMBER 2018

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THE GOAT REARED BY RURAL WOMEN IN THE FENI SADAR UPZILA, FENI**



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***DEDICATED TO MY RESPECTED AND BELOVED PARENTS AND
TEACHERS***

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ABSTRACT

The study was conducted to observe the socio-economic conditions of rural goat rearing women and reproductive traits of goats. The study area selected was *Feni Sadar* Upazila, Feni, and survey was performed during 15th February 2018 to 14th March, 2018. A total of 30 goat farmers were selected randomly for the study. The data reported that about 36.67% of farmers were landless, 30%, 13.33% & 20.00% were small and marginal, medium sized and large farmers, respectively. The data showed that most of the goat farmers were poor, illiterate & had a high number of family members. From the study, it was observed that yearly goat rearing cost were Tk.2600, whereas yearly return of goat rearing was Tk.3250. On the other hand, cost benefit ratio of goat farming was 1.25 considering one lactation period. The result clearly indicated that goat farming was profitable. The average age at puberty, age at first kidding, kidding interval, litter size, post partum heat period, service per conception and gestation period of Black Bengal goat were 190 day, 345 day; 175 day, 1.15; 35.5day, 1.99, 142 day, respectively. The data also further showed that average age at puberty, age at first kidding, kidding interval, litter size, post partum heat period, service per conception and gestation period of Crossbred goat were 200,360; 250, 2.5, 115.75 ; 1.5, 146 days, respectively. From the survey work, it is assumed that the reproductive performances of Black Bengal goat (BBG) seems to be better than Crossbred goat (CBG). On the other hand, productive performances like higher birth weight, maximum body weight gain, high milk yield, longer lactation period were favorable for CBG. Additionally, the study indicated some important problems of goat rearing, some recommendations from these limitations were made for enhancing the growth and development of goat farming in Bangladesh.

Key words: Socio economic conditions, cost, return, productive & reproductive performances, Black Bengal goat, Cross-bred goat .

CHAPTER- I

INTRODUCTION

Bangladesh is a densely populated country having about 165 millions of people in its 147570 sq. km of area. About 49.4 percent population of the country is female (BBS, 2011). Women are most important segment of human resources, who need attention for their development. There is a close relationship between the status of women and the socio-economic development in any country.

The rate of literacy for women is very low in Bangladesh. It is only 25.5 percent for women compared to 38.9 percent for men. Bangladesh is one of the poorest countries in the world. To ensure a balance socio-economic development of the country, improvement status of women with a change in the status is a precondition. This may be achieved only when there is an increased participation of women in development activities. Women play the most dominant part in rearing goat. The role of women in goat keeping is very significant in the rural families and goat is the most important means through which rural women are able to contribute meaningfully to the cash needs for herself and their family members. Women who stay at home, goat rearing is the most useful way of their earning. However, livestock contribute about 2.79 percent to the GDP (Gross Domestic Product) of Bangladesh(DLS,2012) and there in total foreign exchange earning accounts for about 6.2 percent (Alam, 1995) in which share of goat is enormous.

In Asia and Africa goat is numerically, economically important and promising animal resources (Hussain, 1999). Goats rank first position in terms of total livestock population in Bangladesh (FAO,1999). In Bangladesh Goat ranks second in terms of meat, milk and skin production representing about 28.0, 23.0 and 28.0 percent among the total contribution of livestock (FAO,1997).

Goat production varies in different parts of the world. Since production cost of goat is much less than cattle and buffalo, goat farming requires small initial investment and as such low risk of loss due to individual death. On the other hand, this species can easily be managed by women and children. Black Bengal goat is developed in this country through natural selection without any intervention by man. Goat rearing requires a minimum investment and they are managed by household wastage. Also they graze on road sided grass. So no extra management cost is required for them. That's why there is a traditional talk "Goat is poor men's cow". In Bangladesh, total livestock population is estimated about 24.68, 0.64, 25.21, 3.12, 206.89 and 39.08 million cattle, buffalo, goat, sheep, chicken and duck, respectively (DLS,2012).

Among total goat population more than 90 % are Black Bangle goat (BBG). There are other some breeds like Jamunapari and Beetal numbering only around 27,552 (BBS, 1999). The Black bangle goat is originally black in color with white patches. However,Black bangle goat with white, brown, gray are also found. On the other hand Jamunapari is different in color and give 1 kid per birth.(Azad, 2001). Black bangle goat are dwarf and famous for its adaptability, fertility, prolificacy, disease resistance and nutritional, delicious meat production. They are poor milk producers and unable to feed their kids. The skin of BBG is unique, because of the superiority of its finishes products (samad et. al 1998).

Bangladesh government has taken special attention to goat rearing with the rural women. A very limited work and scientific research had been done on this topic.The present study is, therefore, under taken to assess the socioeconomic status of goat rearing rural women in Bangladesh.

REVIEW OF LITERATURE

2.1 PRODUCTIVE PERFORMANCES

2.1. (1) Birth Weight:

The average birth weight for male and female Black bangle goat was reported to be 1.2 and 1.1 kg (Gupta *et al.* 1989). The birth weight of Black bangle goat and Cross breed goat were 1.5 and 2.0 kg respectively under traditional farming condition of sub-continent (Banerjee, 2004). The average birth weight of Black bangle goat and Cross breed goat were 1.6 ± 0.5 kg and 1.9 ± 0.75 kg respectively (Hassan *et al.* 2007).

2.1(2) Mature Body Weight:

The mature body weight of Black bangle goat and Cross breed goat were 20.25 ± 2.5 and 29.50 ± 3.5 kg. (Hassan *et al.* 2007).

2.1 (3) Milk Production:

Black bangle goat produces little amount of milk that only nourished its kids (Hussain *et al.* 1995; Banerjee, 2004). The average milk production in Cross breed goat was 1.05 ± 0.5 liter /day, whereas, Black bangle goat only can nourish its kids. (Hassan *et al.* 2007).

2.1(4) Lactation Periods:

Lactation period of Cross breed goat and Black bangle goat were 99.25 ± 10 day and 65.50 ± 7.5 days respectively (Hassan *et al.* 2007).

2.2 REPRODUCTIVE PERFORMANCES

2.2(1) Age at puberty:

Sexual maturity of Black bangle goat were 222.3 days for male and 269.4 days for female (Panigrahi *et al.*, 1997). Black bangle goat was reported early (200 days) maturing goats than Cross breed goat (225 days) (Banerjee, 2004). The average puberty of Cross breed goat and were 222.5 ± 5.5 and 196.5 ± 7.5 days, respectively (Hassan *et al.*, 2007).

2.2(2) Age at first kidding: The average age at first kidding was 360.5 ± 10 days in case of Black bangle goat, where as 411.5 ± 15.5 day in Cross breed goat (Epstein and Hertz ,1964 ; Hassan *et al.*, 2007).

2.2 (3) Post partum heat period: The average post partum heat period of Black bangle goat and Cross breed goat were 38.75 ± 10.5 and 121.75 ± 15 days, respectively (Hassan *et al.*, 2007).

2.2 (5) Kidding interval: The average Kidding interval in Black bangle goat and Cross breed goat were 179 ± 20 and 270 ± 22 days respectively (Hassan *et al.*, 2007). The kidding interval of goats ranged from minimum 166 days to maximum 1100 days (Shill *et al.*, 2003).

2.2 (6) Litter size: Average litter size of Black bangle goat was reported to be 1.10 whereas, in Cross breed goat was 1.5 respectively (Wilson, 1996).

2.2 (7) Gestation period: Goat carrying twins had a shorter gestation length than those carrying single (Ruvnaet *al.* 1988). The gestation length for single birth 142.6, 143.1 and 142.4 days for Black bangle goat, BBG×Beetal and Beetal respectively and for twin birth 140.9, 141.0 and 139.3 days respectively (Singh and Singh , 1983).

2.2 (8) Number of service per conception: In Black bangle goat average service per conception is 1.45 (Chowdhury *et al.*, 2002).

CHAPTER-III

MATERIALS AND METHODS

This chapter describes the methodology used for study. First half includes the design and conduct of survey to collect data and second half includes analytical technique for calculating the data.

3.1 Survey design and conduct

Survey methods are one of the several methods of data collection. The survey was designed to obtain necessary data of goat rearing. The survey method for the present study involved the following steps:

3.2 Selection of the study area:

The study areas were selected randomly on the basis of available goat in a particular region and as an integral part of internship placement. Data were collected from a sample of 30 goat raising women heads selected randomly during 15th Feb 2018 to 14th March 2018 through a pre-tested interview schedule (attached in Appendix). The main purpose of this study was to assess participation of rural women in goat rearing. Kazirbag, Dhormopur and Shoshordi union under Feni Sadar Upazila of Feni district was the location of the study. The entire rural goat rearing farm family women heads of those mentioned union constituted the population of the study.

3.3 Selection of sample:

In this study, the farmers having at least one goat was preferred to continue our study work. Farmers were purposively selected to conduct this survey work. Finally, 30 farms were considered for collecting necessary data through a pre-formed questionnaire.

3.4 Preparation of questionnaire: The preliminary questionnaires were prepared before conducting the final field survey. The following points were taken into consideration for making the questionnaire:

- a. Socioeconomic condition of goat farmers.
- b. Biological information about goat such as body weight, birth weight, age at puberty, service per conception, kidding interval, gestation length, litter size etc.
- c. Cost and return of goat rearing.

3.5 Period of the study:

The survey of this study was conducted for the period during 15 Feb 2018 to 14 March 2018.

3.6 Collection of data:

Accurate data with necessary information were collected by the myself, which was a bit troublesome. The farmers are reluctant or sometimes hesitate to give necessary information deliberately without any benefit. The goat farmers don not have a written documents or record. But I tried my best so far possible to achieve the accurate data from the farmers by approaching the farmers vis-a-vis. Question was asked systematically and explanation was given wherever necessary.

3.7 Processing of data and analysis:

The collected data were analyzed with tabular and graphical method. The data were also analyzed using the concerned software Microsoft excels.

3.8 BCR (cost benefit ratio)

The BCR is obtained when the present worth of the benefit streams is divided by the present worth of costs streams. When BCR is greater than 1, then the project is accepted and when BCR is lesser than 1, then the project is rejected.

3.9 Estimation of costs and returns:

Costs and benefits were calculated by prevailing market price of items.

3.9.1 Investment cost:

a. Cost of goats:

Goat purchasing is capital cost. The price varies with age and body weight of goat.

b. Cost of housing:

Most of the rural women kept goats in their own home. So no extra housing cost was required. But some straw, bamboo and rope were often used. It did not cost very large amount of money. The price of them was Tk.350.

c. Cost of tools and equipment:

The goat farmers used several tools and equipments such as feeding pot, milking pot, watering pot etc. The cost of this locally made tools and equipments were estimated at Tk.125 per goat.

3.9.2 Production cost:

a. Feed cost:

Grazing is the only mean of feeds for goats and they grazed in the fellow land, road sides and around the bushes and fields. They were also managed with kitchen waste. A negligible

amount of purchased feed for example, wheat bran, black gram bran, rice, rice gruel and salt have also been used as feed in there goat farm. The feed cost was estimated at Tk. 440 per month

b. Veterinary expenses:

Due to financial inability, the farmers are not able to buy medicine for their sick goat. Rather the farmers went to local pharmacy for purchasing some common medicine. The cost of veterinary expenses was estimated at Tk.180 per month.

3.9.3 Return of goat rearing:

a. Income by selling of goats:

This includes the income received by selling goats within one year. The goats were sold at a given price.

b. Value of milk:

The quantity of milk was determined by per lactation period of a goat. Then it was multiplied by prevailing market price to determine the value of milk.

CHAPTER- IV

RESULTS AND DISCUSSION

4.1 SOCIOECONOMIC STATUS OF THE RURAL WOMEN IN GOAT FARMING:

Socio economic characteristics analyze is important to get a complete picture of goat farming. It includes the family size and composition, literacy level, occupational status, land ownership pattern, yearly cost and return of the farm owners. These are described here.

4.1.1 Information of the members of goat farmers:

The whole family members were classified in to 4 age groups. These were 0-10 years, 11-30 years, 31-50 years and 50 and above. Table-1 indicated that **6.667%** were 0-10 years, **36.667%** were 11-30 years, **46.67%** were 31-50 years and **10%** were more than 50 years age groups.

Table-1: Information of the family members of the farm owners. (N=30)

Age group	Total no (n)	Percentage (%)
0-10 years	2	6.67
11-30 years	11	36.67
31-50 years	14	46.67
50 and above	3	10

4.1.2 Literacy level:

To examine the literacy level of the respondents, literacy levels were classified into 5 categories. These were Illiterate, Primary, Secondary, Higher secondary and Honors and above. Table-2 revealed that about **20%** of the members were illiterate, **36.67%** have passed primary, **26.67%** have passed secondary and **16.67%** have completed higher secondary.

Table-2: Literacy level of family members. (N=30)

Literacy level	Total no (n)	Percentage (%)
Illiterate	6	20
Primary	11	36.67
Secondary	8	26.67
Higher secondary	5	16.67
Honors and above	0	0

4.1.3 Occupational status:

Occupation of goat farmers was classified into 4 categories. Table-3 showed that goat farming with service was about **26.67 %**, goat farming with business was about **6.67 %**, goat farming with cow farming was about **56.67%** and goat farming with other was **10 %**.

Table-3: Occupational status of farm owners. (N=30)

Occupational status	Number of farm owners (n)	Percentage (%)
Goat farming with service	8	26.67
Goat farming with business	2	6.67
Goat farming with cow farming	17	56.67
Goat farming with other	3	10

4.1.4 Land ownership pattern:

The farm owners were classified into 4 groups, namely landless, small and marginal, medium and large farmers whose land holdings assumed to be ranged from 0-0.50 acres, 0.51-1.50 acres, 1.51-2.50 acres and above 2.50 acres respectively. Table-4 showed that about **36.67%** of farmers were landless, **30%**, **13.3%** and **20%** were small and marginal, medium sized and large farmers, respectively.

Table-4: Land ownership pattern. (N=30)

Land holding sizes	Number of farm owners (n)	Percentage (%)
Landless farmers (0-0.5 acres)	11	36.67
Small and marginal (0.51-1.50 acres)	9	30
Medium sized (1.51-2.5 acres)	4	13.3
Large farmers (above 2.5 acres)	6	20

4.1.5 Livestock population of farmers:

Table-5 showed that about **6.09 %** of bull, **3.37 %** of cows, **1.6 %** of calf, **18.45 %** goat, **61.38 %** of poultry and **8.98 %** of duck in studied area.

Table-5: Livestock population of farmers. (N=336)

Livestock species	Number of animals (n)	Percentage (%)
Goat:		
BBG (Black bangle goat)	38	11.31
CBG(Cross bred goat)	44	13.09

4.1.6 Yearly income level of farmers:

Table-6 showed that about **13.33%** of farmer's income lies less than Tk. 50000, **26.67%** of the farm owners income level lies between Tk. 50001-100000, **16.67%** of farm owners income lies between Tk. 100001-150000 and **43.33%** of farm owners income were above Tk. 150000.

Table-6: Yearly income level of farmers. (N=30)

Income level	Number of farm owners (n)	Percentage (%)
> Tk. 50,000	4	13.33
Tk.50,001-1,00,000	8	26.67
Tk. 1,00,001- 1,50,000	5	16.67
Tk. Above 1,50,000	13	43.33

4.2. YEARLY COST AND RETURN OF GOAT FARMING:

The yearly cost and return of goat farming were estimated from collected data discussed in 3 tables.

Table-7: Per Year per Goat cost of goat rearing.

Particulars	Cost (Tk.)
Investment cost	
Purchasing cost of goat	1450.00
Housing cost	350.00
Tools and equipment	120.00
Sub-total	1920.00
Production cost	
Feed cost	500.00
Veterinary expenses	180.00
Sub-total	680.00
Total gross cost	2600.00

Table-7 showed that total gross cost of yearly goat rearing was **Tk. 2600.00**.

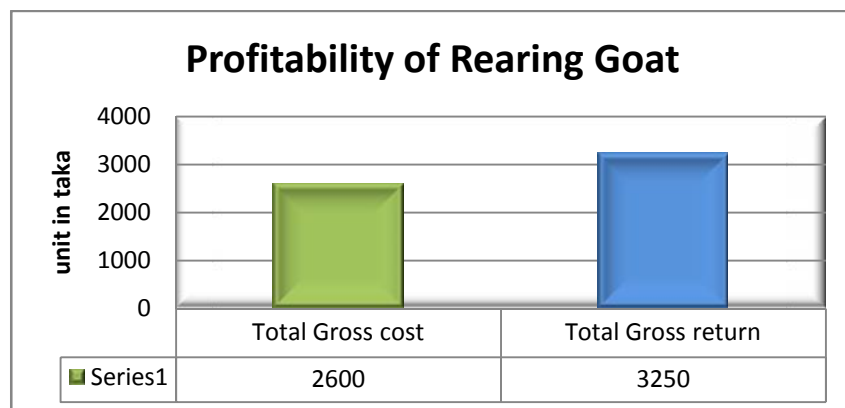
Table-8: Per Year per Goat Return of goat farming.

Item of returns	Return (Tk.)
Goats sale	3000.00
Value of milk	250.00
Gross return	3250.00

Table-8 showed that gross return of goat rearing yearly was **Tk. 3250.00**.

Table-9: Profitability of rearing goat:

Particulars	Amount in BDT
Total Gross cost	2600.00
Total Gross return	3250.00
Return over cost	650.00
BCR(cost benefit ratio)	1.25



Graph-6: Graphical representation of cost and return of Goat farming.

4.3.1 PRODUCTIVE PERFORMANCES:

Table-10: Productive performances of Black bangle goat and Cross breed goat.

Productive traits	BBG(Black bangle goat)	CBG(Cross breed goat)
Birth weight (kg)	1.40	1.70
Mature body weight (kg)	17.75	27.25
Milk production (lit/day)	Nourished only it's kids	1.00
Lactation period (day)	95.00	60.50

4.3.1 (1) Birth weight:

In this study the average birth weight of Black bangle goat and **Cross breed goat** were 1.4 and 1.7 kg, respectively, which was supported by Hassan *et al.* (2007). These two results of study were also agreed with Banerjee (2004). The results might vary due to birth weight depends on feeding, care and management of pregnant doe (Lamont,1964; Skinner and Hofmeyrs 1969). Also birth weight was negatively correlated with litter size (Epstein and Herifz,1964; Amoah and Bryant, 1983).

4.3.1 (2) Mature body weight:

In study av. mature body weight of Black bangle goat and **Cross breed goat** were 17 kg and 27.25 kg which was supported by Banerjee (2004) and Hassan *et al.* (2007). The body weight depends on birth weight and balance feeding of goat (Lamont, 1962; Skinner and Hofmeyrs, 1964)

4.3.1 (3) Milk production:

From the Table 10, it was found that the Black Bengal Goat produced a little amount of milk, which only nourished it's kids, whereas in **Cross breed goat** it was 1.0 kg, which was agreed with Hussain *et al.* (1995), Banerjee (2004) and Hassan *et al.* (2007) . BBG produced very little amount of milk due to genetic factor (Payne, 2000).

4.3.1 (4) Lactation period:

The table 10 showed lactation period of Black bangle goat and **Cross breed goat** were 95 ± 5.5 day and 60.5 ± 10.5 day, respectively. These result agreed with Shill *et al.* (2003) and Hassan *et al.* (2007).

4.3.2 REPRODUCTIVE PERFORMANCES:

The reproductive performances data, for exaxple, age at puberty, fist kidding age, kidding interval, service per conception, post partum heat period, litter size and gestation period of Black Bengal Goat and cross-bred goat were shown in the Table 11.

Table-11: Reproductive performances of Black Bengal goat and Cross breed goat.

Reproductive traits	Black Bengal Goat(BBG)	Cross-bred goat (CBG)
Age at puberty (day)	190	200
Age at first kidding (day)	345	360
Kidding interval(day)	175	250
Service per conception (no)	1.15	2.50
Post partum heat period (day)	35.5	115.75
Litter size (no)	1.99	1.50
Gestation period (day)	142	146

4.3.2 (1) Age at puberty: From the Table 11, it is obvious that the average age at puberty of BBG and CBG were 190 and 200 d, respectively. The Table 11 also showed that the duration was greater in **Cross breed goat** than Black Bengal goat. It was due to genetic cause. The result agreed with Banerjee (2004) and Hassan et al. (2007). Environmental factors such as temperature, which has a great influence on puberty (Rajkonwar and Borgohain, 1978). There were other several factors like presence of buck in the herd (Devendra and Burns, 1983) and plan of nutrition, availability of forage.

4.3.2 (2) Age at first kidding:

The data stated in the Table 11 showed that average age at first kidding of Black Bengal goat and **Cross breed goat** were 345 day and 360 day, respectively. The result agreed with Hassan *et al.* (2007). Age at first kidding depends on puberty, environmental factors eg. Photoperiod, kidding season, nutritional status etc. (Epstein and Hertz, 1964).

4.3.2 (3) Kidding interval:

From the Table 11, it revealed that average kidding interval of BBG and BG were 175 day and 250 day, respectively. It showed that av. kidding interval of BBG was lower than that of **Cross breed goat**. So reproductive performances of Black bangle goat were better than that of **Cross breed goat**. The result agreed with the previous investigators (Shill *et al.*, 2003, Hassan *et al.*, 2007).

4.3.2 (4) Post partum Heat Period:

The average post partum heat period of BBG and CBG were 35.5 d and 115.75 day, respectively. Lower the post partum heat period higher the reproductive performances. So reproductive performance of Black bangle goat was better than that of **Cross breed goat**. The result agreed with the report of Shill *et al.* (2003) and Hassan *et al.* (2007).

4.3.2 (5) Litter size:

The Table 11 showed that the average litter size of BBG and **CBG** were 1.15 and 2.5, respectively. The result agreed with Wilson (1996). Litter size of goat depends on various factors such as plane of nutrition and good body weight were found to improve litter size in mature goat.

4.3.2 (6) Service per conception:

In this study the average number of service per conception of BBG and **CBG** were 1.99 and 1.5, respectively. Thus the Table 11 also reported that BBG had a better reproductive performances than **CBG**.

4.3.2 (7) Gestation period:

The Table 11 showed that average gestation period of BBG and **CBG** were 142 day and 146 day, respectively. It was seen that goat carrying twins had a shorter gestation period than those carrying single (Ruvnaet *al.*, 1988).

CHAPTER-V

CONCLUTION

Goat rearing is a profitable business. If the problems related to it were solved and sufficient livestock loan and other modern technology were provided to rural people especially women, it would be able to earn money as a result it can play an important role in women empowerment and poverty alleviation. In present study, overall participation of rural women in goat rearing was low to medium. In fact, women in our country belongs to conservative society who face different sorts of social obstacle to rear goat which rightly been reflected in this study. So, there is a need for strengthening extension by GOs and NGOs to ensure a continuous flow of information and technical know-how to the rural women for enhancing their skills and knowledge in the respective areas. In present study, overall participation of rural women in goat rearing was low to medium. In fact, women in our country belongs to conservative society who face different sorts of social obstacle to rear goat which rightly been reflected in this study. So, there is a need for strengthening extension by GOs and NGOs to ensure a continuous flow of information and technical know-how to the rural women for enhancing their skills and knowledge in the respective areas.

CHAPTER-VI

PROBLEMS RELATED TO GOAT REARING AND SUGGESTION

Risk and uncertainty are quite common facts in livestock business. This section identified the major problems and constraints faced by the farmers in goat rearing and discussed about the possible solutions of these problems. The problems of goat rearing as reported by the farmers are presented in Table-12.

Table-12: Problems faced by goat farmers. (N=30)

Nature of problems	Number of farmer (n)	Percentage (%)
Lack of grazing land	7	23.33
Problem of rainy season	1	3.35
Lack of improved breed	2	6.67
Inadequate veterinary services	7	23.33
Lack of feed and grass	2	6.67
Lack of credit facilities	4	13.33
Lack of extension services	5	16.67
Lack of money	2	6.67

- **Lack of grazing land:**

Grazing facilities are very limited especially during cropping season, rainy season and during dry season. The grazing land has been decreasing day by day due to establishment of more industries and housing infrastructures for advanced population of this country. About 23.33 % of the selected farmers reported against this problem.

- **Problem of rainy season:**

It is another problem of goat rearing. About 3.33 % of farmer complained about this problem.

- **Lack of improved breed:**

Lack of improved breed increases the inbreeding problem due to use of some buck for more generation. This problem was reported by 6.66 % of goat farmers.

- **Inadequate veterinary services:**

It is an important problem. Most of the farmers reported that veterinary services were not adequate in the study area. About 23.33 % of farmers mentioned this problem.

- **Lack of feed and grass:**

Due to high price of feed and unavailability of grass, the farmers provide less amount feed to goat. About 6.66 % of farmers complained about this problem.

- **Lack of credit facilities:**

It is one of the main obstacles for goat farming. About 13.33 % of goat farmers mentioned this problem.

- **Lack of extension services:**

This is also an important problem of goat farming. About 16.66 % of farmers faced this problem.

- **Lack of money:**

Most of the farmers in the study area are poor. They have not enough money to manage their family. But most of them have one or two goats for rearing. It is not possible to rearing them with their little money. About 6.66 % of farmers mentioned this problem.

- To overcome the above problems the following recommendations are made for successful operation of goat farming:
- The govt. and non- govt. organizations should play an important role in overcoming the shortage of feed and grass problems by introducing the fodder cultivation techniques to the farmers.
- The adequate veterinary services and other training facilities should be offered to the rural people especially to women so that goat rearing would be profitable. The DLS should play a vital role in this regard.
- The govt. should provide improved breeds to the farmers from different govt. goat farms.
- The govt. should extend credit facilities to the farmers at low interest rate.
- The several extension works on animal health, disease control should be made available to goat farmers. The DLS and NGOs should expand their different training and extension programs to farmers which help in profitable goat rearing.

ACKNOWLEDGMENTS

The author wishes to acknowledge the immeasurable grace and profound kindness of **Almighty “GOD”** the supreme authority and supreme ruler of universe, who empowers the author to complete the work successfully.

It is deemed as a proud privilege and extraterrestrial pleasure to express author ever indebtedness, deepest sense of gratitude, sincere appreciations, profound regards to reverend and beloved teacher and supervisor **Professor Dr. M. A. Hossain**, Department Dairy and Poultry Science, Chittagong Veterinary and Animal Sciences University, for his ingenuous and scholastic guidance, judicious recommendations, constant inspiration, continuous encouragement and valuable suggestions to case study have guided the author from the beginning of inception of intern studies until to the completion of this case study.

The author would like to express his gratefulness to Veterinary Surgeon, Upazila and **Dr. Mishuk Shaha**, MS, Department of Genetics & Animal Breeding, CVASU for the tough job and helping in completing following case study.

Special thanks to other teachers and staffs of Department of Dairy and poultry science for their valuable advice and co-operation.

The author is ever indebted to his parents for their sacrifices, blessing and encouragement to get him in this position. It's also to be ungrateful, if not express deep sense of grateful to all of his friends, roommates, and well wishers for their help, encouragement and inspiration during the study period.

The Author

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APPENDIX

A FORMET OFQUESTIONNAIRE ON SOCIOECONOMIC STATUS OF GOAT REARING RURAL WOMEN IN SADAR UPZILA OF FENI DISTRICTOF BANGLADESH

1. Farmer's data:

- a. Name:
- b. Address:
- c. Educational status:

2. Days of goat rearing:

3. No. of goat reared:

4. Age and no. of different goat:

Types of goat	Total no.	BBG	CBG
a. Doe			
b. Buck			
c. Kid			

5. Family information:

Sl. no.	Name	Relation with farmer	Age				Educational status					Occupation
			0-10 y	11-30 y	31-50 y	Above 50	Illiterate	Primary	Secondary	Higher secondary	Honors above	

6. Family size: Boys: Girls:

7. Assets:

Types	Amount
Cultivable land	
House	
Pond	
Lease	
Garden	

8. Information about rearing animals:

Type: No. of animal:

- a. Bull
- b. Cow
- c. Goat
- d. Sheep
- e. Chicken
- f. Duck

9. Cost of goat rearing (Per goat per year):

Items	Cost
a. Goat purchase	
b. Feed cost	
c. Housing cost	
d. Veterinary expenses	
e.	

10. Return of Goat rearing (Per goat per year):

Items:	Return:
a. Goats sale	
b. Value of milk	

11. Reproductive and Productive information about goat:

	Black Bengal goat	Crossbred goat
Age at puberty:(Day)		
Age at first kidding: (Day)		
Kidding interval: (Day)		
Post partum heat period: (Day)		
Service per conception: (No.)		
Litter size: (No.)		
Gestation period: (Day)		
Birth weight: (Kg)		
Body weight: (kg)		
Milk production: (lit/day)		
Lactation period: (day)		

12. Problem of goat rearing:

Nature of problems	Black Bengal goat	Crossbred goat
Lack of grazing land		
Problem of rainy season		
Lack of improved breed		
Inadequate veterinary services		
Lack of feed and grass		
Lack of credit facilities		
Lack of extension services		
Lack of money		

Name of the interviewee.....

Date.....

Signature.....

Name of the interviewer.....

Date:

Signature

BIOGRAPHY

I am **Ripon Kumar Bhowmick**, son of Santosh Kumar Bhowmick and Mrs.ShurjaBalaDavi. I passed Secondary School Certificate examination in 2007 from Bangladesh Railway Government High School, followed by Higher Secondary Certificate examination in 2009 from Hazera Tazu Degree College. Now I am an intern veterinarian under the Faculty of Veterinary Medicine in Chittagong Veterinary and Animal Sciences University. In the future I would like to work as a veterinary practitioner and do research on clinical animal diseases in Bangladesh.