Table of Contents

List of Tables

Abstract

This study was conducted to evaluate the impact of structured training, regarding goat farming, on the socio-economic status of the farmers at Brahmanpara Upazilla, Comilla. A total of 31 goat farmers were randomly selected from Brahmanara Upazilla. A structured questionnaire was prepared for the taking data after the farmers had received training on goat farming that was conducted by Upazilla Livestock Office. 76.67% of the selected respondents goat farmers learnt more skill on deworming of goats, followed by keeping improved bucks 66.67%, use of vitamin and mineral mixture 60%, use of disinfectant for sanitation 46.67%, proper housing management for keeping goats 46.67%, keeping fodder trees or grasses 43.33%, use of vaccine, like PPR 40%, keeping of appropriate proportion between mate & female 30%, dipping or bathing or pour on of goats to control ectoparasite 13.33%. Goat rearing has been seen to have effect on increasing total family income, ready cash riding dependence on rich cost private credit increased the awareness about commercial goat farming and its advantages, increase in employment generation through goats, increase goat and increase access to goat milk for family consumption through goat rearing reported by the 73.33%, 70%, 66.67%, 66.67%, 46.67% and 20% of selected respondents goat farmers as a socioeconomic indicator. Similarly, mobile phone, television, construction of goat shed, motor cycle, construction of farmer's house, jewelry reported by the 90.32%, 64.51%, 45.16%, 20%, 20%, 25.8% selected respondent's goat farmers as status of family's assets, respectively.

Key words: Socio-economic; Impact of structured training, Skill development, Questionnaire.

Chapter I: Introduction

Goat has been considered as the most popular multipurpose domestic animal in the tropics through the ages due to its unique contribution to the agrarian economy through the production of meat, milk, skin, fiber and manure. Because of goats tremendous potential for extracting nutrients from areas which are unfit to support larger livestock as well as its extra ordinary capacity to produce valuable animal product commodities from diverse ecological sources goat has taken unique position among ruminants in the tropics.

Coat rearing is an integral part of many farming systems in Bangladesh. The goat is probably the only animal which in Bangladesh is managed for multiple end uses: meat, hides, milk and manure. It provides one of the main sources of income for the main sources of income for the farmers of Bangladesh. It is a major contributor of protein and fat and often the goat enterprise can help farmers to overcome an unforeseen crisis, which demands immediate finance. The goat is a prolific animal; twins or triplets are common in kidding. The cheese is worldwide recognized according to its quality. The skin of the Black Bengal goat in particular is unique throughout the world (Banerjee 1980). Cash income from the goat is utilized in different sub-sectors of the farm. Goats in general are hardy animals and in wild or semi-domesticated state they rarely suffer from serious disease.

At present in the South-West region of Bangladesh goats are found abundantly, but there is little reliable information regarding their potential and true role in rural development. In order to undertake any development work in the rural area, the goat production problems and prospects should be identified. (DC Paul, et. al., 1991).

Goat is more efficient producer of meat and milk than the cows, even under condition of good grazing (Raun, 1982, Devendra, 1980). Wilson 1996 reported that for each kilogram live weight of breeding females goats produce 1.5 and 1.8 times the weight of meat produced by sheep and cattle respectively under the same management and environmental condition.

There are about 410 million goats in the world. 79% of this found in this tropics and subtropics. Goats make up a large proportion of the domestic ruminants of Asia both interims of number and their contribution to production. Asia accounts for 46.2% of the world goat milk production and 62.7% of the world goat skin production (Devendra and Coop 1982). The majority of goats in Asia are found in Indian subcontinent. Of the world wide total goat meat reduction of 1.9 million tons per year, approximately 74% comes from tropical countries (Devendre and Owen, 1983). In Asia most of the land holdings are small and the purchasing power of the farmer is sub marginal. In this region of the world goats are animal of choice for meat and milk production especially for small, marginal farmer communities, because, the goat maintain itself on tree leaves or shrubs, thrives in a wide range of ambient temperature, is les susceptible to infectious diseases like tuberculosis, and produce highly palatable lean meat (Raghavan, 1988).

Bangladesh lies in the humid tropic zone in which the goat population is well distributed. There are about 10.2 million goats in Bangladesh, representing 29.9% of the total national livestock population and produce about 19.1% of the total livestock meat supply of the country (Huq, 1988). Bangladeshi goats also produce skins of high quality, earning Tk. 656 million per annum in foreign exchange (BBS, 1990).

The availability of land for grazing of animals, cultivation of animal feed and fodder decreasing gradually. On account of this, farmer prefers small ruminants (goats and sheep) and poultry then large ruminants in their subsistence agriculture. The primary objective of rearing goats in Bangladesh is to produce meat of superior quality (Huq, 1988). Higher reproductive efficacy (Williamson and payne, 1978), capacity to subsist on harsh nutritional regime (Devendra and Burnn, 1970), resistance to number to disease and parasitic infestation (French 1970), low investment and low risk of death makes viable proportion for increasing the productivity of goat in this country (Amin & Alam, 1990).

Among the Asiatic countries Bangladesh has got the second highest population of goats which accounted for 34.47 million heads (FAO 1977). The goat ranks second interns of

meat, milk and skin production representing about 28.0, 23.0 and 28.0 percent among the total contribution of livestock, respectively, in Bangladesh (FAO, 1997). It is estimated that more than 9 percent of goat population in Bangladesh comprised the Black Bangle goats having variation in color and size, the remainder being Jamunapari and their crosses. The black Bengal are dwarf goats and become famous for its adaptability, fertility, prolificacy and disease resistant etc. They contribute very nutritious and delicious meat for human consumption.

The Black Bengal goat is unique of the superiority of its finished products (Samad et. al, 1988), which focused the goat enterprise extremely prominent to the vulnerable vulnerable group of people in existing socio economic condition of the country. Goats in Bangladesh have an important role in generation employment, income capital storage and improving household nutrition. Being small in size they do not require any large management essential and can easily be handled by women and children. Rural people are rearing 90 percent of goats. More than 70 percent of rural people are directly and indirectly engaged in agricultural operation. It is reported that 65% people of Bangladesh are poverty stricken and about 55% are landless, farmers having no or very little land for their homestead only (FAO, 1990). It is difficult to keep high priced cattle or buffalo by this group of farmers. Therefore, they can afford to keep goats as it involves very small financial investment and the risk involvement is also much less as compared to large ruminants.

1. To overview the skill improvement of selected goat farmers through goat farming training.
2. To determine the socio-economic indicators of selected goat farmers.
3. To observed the impact of goat farming in socio-economic status in rural area.

Chapter II: Materials and Method

This study was carried out to see the impact of structure training regarding goat farming on the socio-economic status of the farmers at Brahmanpara Upazilla, Comilla. Study area was 16 randomly selective village in Brahmanpara Upazilla. Study period was the time of my internship placement at Upazilla Veterinary Hospital, Brahmanpara at 01 February to 29 March, 2018. A total 31 goat farmers were selected at randomly in Brahmanpara Upazilla, Comilla. The study was conducted under the transfer of technology program by Upazilla Livestock office on different improved goat production system in above adopted villages through a previously structured questionnaire on different parameters such as socio-economic status of the farmers and goat production system. Eight improved goat production practice and six socioeconomic indicators and 06 status of family's were identified with the help of experts and goat farmers for this study. Collected data were sorted out and imported into the MS. EXcel-2016 for description statistics frequency and percentage were used for logical conclusion.

Chapter III: Results and Discussion

The findings on the socio-economic impact of the transferred improved goat production practices in adopted villages are presented and discussed in terms of skill of management, socio-economic indicators and status of family's assets. Practice wise skill improvement in recommended/ demonstrated improved goat production practices: 8 practices in goat rearing as recommended/ demonstrated by Upazilla livestock officer, Brahmanpara, Comilla. In 31 adopted villages were considered for assessing the skill improvement. The data generated on this aspect were analyzed and presented in Table 1.

Table 1: Distribution of selected goat farmers according to skill improvement in improved goat production practices, N= (31)

SL. no.	Leant more skill on Management	F	%
1	Deworming of goats.	23	76.67
2	Keeping improved bucks.	20	66.67
3	Use of mineral mixture	18	60
4	Use of disinfectant	14	46.67
5	Proper housing management for keeping goats.	14	46.67
6	Plantation/ keeping of fodder trees/ grasses.	13	43.33
7	Use of vaccine like, PPR	13	43.33
8	Dipping/ use of vermic of goats to control ectoparasite.	04	13.33

It could be seen from Table 1 that 8 practices recommended/ demonstrated by Uppozilla livestock officer, Brahmanpara, Comilla in goat rearing in adopted villages. The majority

(76.67%) of the selected respondents goat farmers learnt more skill on deworming of goats, followed by keeping improved bucks (66.67%), use of vitamin and mineral mixture (60%), Use of disinfectant for sanitation (46.67%), Proper housing management for keeping goats (46.67%), plantation/ keeping fodder trees/ grasses (43.33%), use of vaccine like PPR (40%), keeping of appropriate proportion between mate & Female (30%), Dipping/ bathing/ pour on of goats to control ectoparasite (13.33%). This study was reported that the skills are required by the extension agents to diagnose farmers problems and the willingness to do so effectively, listen to and learn from farmers, communicate effectively with farmers and farmers groups, present options based on principles of science and good agricultural practices which widen the real choices available to farm families and work under complex and circumstances with little supervision.

The skill level seemed to be poor in the areas of dipping of goats to control ectoparasite Plantation/ keeping of fodder trees/ grasses. Use of vaccine like, PPR. Trainability refers to a person's ability to acquire the skills, knowledge or behavior necessary to perform a job at a given level and to achieve these outcomes in a given time.

Socio-economic indicators:

The socio-economic indicators of selected respondents goat farmers were selected, tabulated and presented in Table 2.

Table **2**. Distribution of selected goat farmers with respect to socio-economic indicators (N=31)

SL. no.	Particulars	F	%
1	Increased share of income from goat to family's total income.	22	73.33
2	Goat has been a ready cash riding dependence on high cost private credit.	21	70
3	Increased awareness about commercial goat farming and its advantages.	20	66.67
4	Increase in employment generation through goats.	20	66.67
5	Increase profit/ goat	14	46.67
6	Increased access to goat milk for family consumption.	6	20

It is clear from Table 2 that majority of the selected respondents goat farmers (73.33%) reported that Goat has been increased share of income from goat to family's total income, (70%) Ready cash riding dependence on rich cost private credit, (66.67%) increased the awareness about commercial goat farming and its advantages, (66.67%) increase in employment generation through goats, (46.67) increase goat and (20%) increase access to goat milk for family consumption through goat rearing. By this study also observed that the goats have become steadily important in the rural economy of the country. Similarly, goat provided an opportunity for efficient utilization of family labour.

Status of family's assets:

The status of family's assets of selected respondents goat farmers presented in Table 3.

Table **3.** Distribution of goat farmers based on status of family's assets (N = 31)

SL. no.	Particulars	F	%
1	Mobile Phone	28	90.32
2	Television	20	64.51
3	Construction of goat shed	14	45.16
4	Motor Cycle	6	20
5	Construction of house	6	20
6	Jewelry	8	25.8

It may be seen from the Table that phone, Television, Construction of goat shed, Motor Cycle, Construction of farmers house, Jewelry reported by the 90.32%, 64.51%, 45.16%, 20%, 20%, 25.8% selected respondents goat farmers as status of family's assets, respectively. There were fewer respondents having Motor Cycle, Construction of house, jewelry. In this study also highlighted the crucial role of the goats in livelihood security of resource poor rural households.

Conclusion

The study indicated that recommended/ demonstrator practices in goat rearing, the majority of selected respondents goat farmers learnt more skill on deworming of goat, keepings improved bucks, use of disinfectant for sanitation, proper housing management for keeping goats, plantation/ keeping fodder trees/ grasses, vaccine like PPR, dipping/ bathing/ pour on of goat to control ectoparasite. In case of socioeconomic indicators, Majority of the selected responpdents goat farmers had reported that the goat has been increased share of income from goat to family's total income, goat has been ready cash riding dependence on high cost private credit, increase awareness about commercial goat farming and its advantage increase access to goat milk for family consumption and increase employment generation through goats.

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Brief Biography

I am Md. Lokman Hossain, son of Mr. Jahidul Hossain and Mrs. Samsunnaher Begum. I am from Cumilla. I have completed my secondary (2007) and higher secondary (2009) education from Cumilla successfully. Then I got admitted in Doctor of veterinary Medicine course under Chittagong Veterinary and Animal Sciences University. I would like to work as a veterinary practitioner. I hope this case study will be helpful in progress of my carrier in future.

Questionnaire for the study on

Impact of 'goat farming training' on the socio-economic status of farmers of Brahmanpara upazilla, Comilla.

Name of the Respondent:

Village:

Union:

Upazila and district:

Contact Number (mobile, if any):

Please furnish the information as mentioned in the following items

1. Age

What is your age? ..... Years

3. Family size

What's the number of your family members? …….

4. Farm size …….

5. Training received……yes/no.

6. Skill Improvement:

Skills	**Yes**	**No**
Deworming of goats		
Keeping improved bucks		
Use of mineral mixture		
Use of disinfectant		
Proper housing management for keeping goats		
Plantation of fodder		
Use of vaccination		
Use of antiparasitic		

5. Socio-economic indicators:

SL. no.	Particulars	Yes	No
1	Increased share of income from goat to family's total income.		
2	Goat has been a ready cash riding dependence on high cost private credit.		
3	Increased awareness about commercial goat farming and its advantages.		
4	Increase in employment generation through goats.		
5	Increase profit/ goat		
6	Increased access to goat milk for family consumption.		

6. Status of family's assets:

SL. no.	Particulars	Present	Absent
1	Mobile Phone		
2	Television		
3	Construction of goat shed		
4	Motor Cycle		
5	Construction of house		
6	Jewelry		

Thank you for your kind cooperation.

_____

Signature of the Interviewer

Name of the interviewer:

Date: