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## PROBLEM CONFRONTATION IN SHEEP REARING AT GOURIPUR UPAZILA UNDER MYMENSINGH DISTRICT OF BANGLADESH

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### ABSTRACT

Haque MM, Chowdhury MHB, Choudhury MP, Mondal T, Islam MA (2016) Problem confrontation in sheep rearing at Gouripur Upazila under Mymensingh district of Bangladesh. *J. Innov. Dev. Strategy*. 10(2), 1-4.

The goal of this present study was to determine the level of problems confrontation of the farmers associated with the sheep rearing in the Gouripur Upazila of Mymensingh district. Primary data were collected through survey from randomly selected 100 sheep farmers. A semi structured questionnaire was used for data collection. Appropriate scales were developed to measure both independent and dependent variables. Descriptive statistics were used to describe the variables under consideration. Results of the study showed that the majority of the farmers possessed medium knowledge followed by the farmers having low knowledge for sheep rearing which represent 54% and 36% of the respondents respectively. From our survey we have identified ten (10) different problems faced by the sheep farmers. To compare among the problems, a rank order was made based on Problem Faced Index (PFI). PFI was the lowest in 'High mortality of lambs'. It was observed that natural calamities ranked as the top most problem followed by unpopularity on consumption of sheep meat. For better understanding of the problems faced by the sheep farmers and to compare the findings of this research further study is recommended considering larger sample size from sheep farming areas having the similar socio-economic and physical condition.

**Key words:** sheep rearing, problem faced index (PFI), natural calamities, high mortality of lambs

### INTRODUCTION

Livestock is an integral component of agricultural economy of Bangladesh. Livestock contributes around 2.51% to the agricultural GDP and providing 20% of total employment (BBS 2015). About 75% people rely on livestock to some extent for their livelihood, which clearly indicates that the poverty reduction potential of the livestock sub-sector is high (BIDS 2015). Among the different livestock small ruminants especially goats and sheep are very important livestock species in rural economy of Bangladesh. The contribution of sheep in Bangladesh can be summarized as a source of meat, skin and wool. At present Bangladesh possess 3.002 million sheep (BBS 2012). Sheep produces 0.12 lakh metric ton meat every year (DLS 2013). Though the sheep was localized in particular areas of the country, they are now found all over the country and it was observed that over the last few decades sheep farming increased 2.53 times with an annual growth rate of 5% (BBS 2008). Sheep rearing is increasing in Bangladesh day by day. Sheep rearing is getting popularity among the farmers in char areas in Bangladesh and the price of sheep is too high in the foreign market. It is also reported that sheep meat is ranked top among the meats that internationally traded (Boutonnet 1999). Researchers show a conclusively evidence that sheep bear a far more prospect in the economy of Bangladesh. For example in a study (Alam *et al.* 2005) stated that along with poultry, sheep rearing with crop and livestock system could be an emerging activity for ensuring farming diversity and food security in the charland area of Bangladesh. So, one of the strategic policies would be to follow intensive and mixed cultivation by adopting scientific knowledge such that total value of production would be increased. This could be possible only by adopting scientific knowledge. Numerous studies have been carried out to study the general characteristics of pastoral farmers and different relationship among these traits with knowledge and skills. For example, research findings revealed that the trained farmers had higher knowledge level and adoption behavior compared to untrained farmers and also showed positive significant relationship with their knowledge on food and nutrition (Manjunath 1980; Mannan 2001). In addition, exposure to extension services also found to have significant relationship with the skills and knowledge of farmers. However, research is very limited exploring the problems confrontation for adoption of modern technologies for the sheep rearing in Bangladesh. Considering the above facts, the present study was undertaken to investigate the major problems that hinders adoption of modern technologies for sheep rearing at the selected study area of Bangladesh. Hence, the present study was aiming to answer the following research questions :

- What are the salient features of some of the socio-economic characteristics of the farmers?
- To what extent the farmers have knowledge on sheep rearing?
- What are the problems confronted by the farmers in sheep rearing?
- What relationships exist between the farmers selected characteristics and their knowledge on sheep rearing?

**Keeping these research questions in mind the present research work was undertaken to achieve the following objectives:**

- To assess the level of modern technological knowledge of the farmers for sheep rearing
- To explore and rank the problems confrontation of farmers during sheep rearing

## METHODOLOGY

The study was conducted in the Gauripur upazila under Mymensingh district. This upazila is situated 16 km north from Mymensingh district Head quarters. Among the ten unions five unions randomly selected as the locations of the study area. The five unions namely as Ochintopur, Bokainagar, Shidhla, Ramgupalpur and Shohonati had selected randomly as study area. 100 sheep farmers were randomly selected from the selected unions. A well structured interview schedule was developed based on objectives of the study for collecting information. The semi-structured interview schedule was constructed containing open form and close form keeping view the dependent and independent variables. Appropriate scales were developed to measure both independent and dependent variables. The questionnaire was pre-tested with ten sheep farmers in actual situation before finalized it for data collection.

Age of the respondent was measured in terms of complete years on the basis of their response. Education was measured in terms of grades (class) passed by the respondent. If a respondent received education outside the school, their education was assessed in term of the school, i.e. one (1) score was given for one year of schooling. Extension media contact was computed on the basis of the extent of contact of a respondent in 11 selected information sources. Knowledge on sheep rearing of respondents were determined by summing up the weights for their responses in four (4) areas *viz.* (a) Recall type question. (b) Understanding type question. (c) Applied type question. (d) Higher order thinking type question. Three (3) marks were allotted for each question.

Among the identified problems through interview ten problems were selected to measure problems confrontation index of sheep rearing. A four point rating scale was used for each problem. Four alternative responses were not at all, low, medium and high problem. The weights were assigned to the response as 0, 1, 2 and 3 respectively. Problem faced score of a respondent was measured by summing of all the responses to all the problems. Thus problem faced score could range from 0 to 30 while zero (0) indicating no problem at all and 30 indicating high degree of problem faced. For clear understanding of the problem of sheep farmer in selected items frequency distribution and rank order was done by developing problem faced index (PFI) (Azad *et al.* 2014). Score for particular problem was measured by Problem Faced Index (PFI). PFI at each of the problem items were computed by using the following formula:

$$\text{Problem Facing Index (PFI)} = P_s \times 3 + P_m \times 2 + P_l \times 1 + P_n \times 0$$

Where,

$P_s$  = Percent of respondent faced "high problem"

$P_m$  = Percent of respondent faced "medium problem"

$P_l$  = Percent of respondent faced "low problem"

$P_n$  = Percent of respondent faced "no problem"

## RESULTS AND DISCUSSION

### Salient features of the socio-economic characteristics of the farmers

Salient features of the selected characteristics of the farmers are presented in table 1. From the table it was observed that most of the farmers are middle aged (49%) having secondary level (33%) and primary level (24%) education. Among the farmers about half of them had a medium level training involvement (49%) followed by low level of involvement in training activities (46%). It was also noticed from the table that majority of the farmers (57%) had low level of extension media contact followed by medium level of media contact (37%). Most of the farmers (46%) possess medium level of knowledge for sheep rearing followed by low level of knowledge for sheep rearing (36%). Only 18% of the farmers in the study area reported to have high level of knowledge for sheep rearing. The findings of the study is also supported by those of the research findings by Parveen *et al.* 2012; Khan 2005; Sarker 2002; Rahman 2004.

Table 1. Salient features of socio-economic characteristics of the farmers

Characteristics (with measuring unit)	Categories	Farmers		Mean	SD
		No.	%		
Age (years)	Young aged (up to 35)	37	37	38.02	12.23
	Middle aged (36-50)	49	49		
	Old aged (>50)	14	14		
Education (schooling years)	Illiterate (0)	37	37	4.58	3.90
	Primary (1-5)	24	24		
	Secondary (6-10)	33	33		
	Above secondary (>10)	6	6		
Training duration (number of days)	Low training (1-4)	46	46	3.70	2.90
	Medium training (5-8)	49	49		
	High training (>8)	5	5		
Extension media contact (score)	Low contact (up to 10)	57	57	10.29	4.96
	Medium contact (10-20)	37	37		
	High contact (>20)	6	6		
Knowledge on sheep rearing (score)	Low knowledge (up to 25)	36	36	33.01	11.24
	Medium knowledge (25-45)	46	46		
	High knowledge (>45)	18	18		

**Overall problem confrontation of sheep farmer**

Scores obtained on problem faced varied from 6 to 25 with a mean and standard deviation of 16.13 and 4.51 (Table 2). Data in the Table 2 revealed that highest (64%) farmers had medium level problem, while (34%) had high level problem and (10%) had low level problem.

Table 2. Distribution of the farmers according to their problem

Categories	Number of respondents	Percent	Mean	Standard deviation
Low level problem (below 10)	10	10	16.13	4.51
Medium level problem (10-18)	51	51		
High level problem (above 18)	39	39		
Total	100	100		

The highest 51 percent farmers had the medium level problem, while 10 percent farmers had low level problem and 39 percent had high level problem.

**Problem confrontation in sheep farming on 10 items**

To compare among the problems, a rank order was made based on Problem Faced Index (PFI). The observed problem faced index in sheep rearing ranged from 112 to 236 against the possible range of 0 to 300. Only two problem items namely, ‘Natural calamities’(236) and ‘Unpopularity on consumption on sheep rearing’(218) had PFI over 200, four items over 150 and rest of them are over 100. PFI was the lowest in ‘High mortality of lambs’(112). It was observed that natural calamities ranked first followed by Unpopularity on consumption on sheep meat, lack of training on sheep rearing, lack of market facilities, attack of predators(eg.dogs, foxes etc.), non availability of feed and fodder, non availability of credit in time, high price of feed and fodders, high sensitivity to disease of sheep, high mortality of lambs (Table 3).

Table 3. Rank order of 10 selected constraints faced by the farmers in sheep rearing

Problems	Extent of Problem faced				PFI	Rank Order
	High constraints	Medium constraints	Low constraints	No constraints		
Natural calamities	51	38	7	4	236	1
Unpopularity on consumption on sheep rearing	34	52	12	2	218	2
Lack of training on sheep rearing	37	35	17	11	198	3
Lack of market facilities	24	41	25	10	179	4
Attack of predators (eg. dogs, foxes etc.)	26	35	28	11	176	5
Non availability of feeds and fodder	4	50	40	6	152	6
Non availability of credit in time	17	29	40	14	149	7
High price of food and fodder	12	35	41	12	141	8
High sensibility to disease of sheep	8	36	42	14	138	9
High mortality of lambs	5	25	47	23	112	10

PFI = Problem Faced Index, N = 100

## CONCLUSION

Results indicated that natural calamities ranked first followed by unpopularity of consumption of sheep meat. Among the other problems lack of training on sheep rearing, lack of market facilities, non availability of feed and fodder, high mortality of lambs were also faced by the farmers. Only few of the socio-economic characters of the farmers were studied. Other factors might have influence on knowledge towards sheep rearing of the farmers, which needs to be identified by the further study. In addition, the study was only confined to the five unions and one municipality of Gouripur Upazila of Mymensingh district. So, for better understanding of the problems faced by the shhep farmers and to compare the findings of this research a comprehensive study is recommendend considering larger sample size from sheep farming areas having the similar socio-economic and physical condition.

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