



PROBLEMS OF REARING LIVESTOCK IN CHIRIRBANDAR UPAZILA UNDER DINAJPUR DISTRICT

M.S. Rahman^{1*}, M.R. Karim², H. Jamil³ and M.R.F. Noman⁴

^{1&2}Assistant Professor and ⁴MS Student, Dept. of Agricultural Extension, ³Lecturer, Department of Social Science and Language, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh

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ABSTRACT

The main objective of the investigation was to identify extent of the problems in rearing livestock. The relationship between problems in rearing livestock and some of the selected characteristics of the farmers was also explored. Sixty farmers out of 400 were selected randomly from Chirirbandar upazila under Dinajpur district. A pre-tested interview schedule was used to collect data from the respected farmers. Almost three-fourths (73.4 percent) of the farmers faced medium to high problems while rest of the farmers (26.6 percent) faced low problems regarding livestock rearing. Out of 10 problems lack of treatment was the number one problem followed by lack of modern technology and lack of knowledge. Out of five selected characteristics of the farmers, four such as age, education, extension media contact and livestock rearing knowledge were significantly correlated with the problems faced by the farmers in rearing livestock.

INTRODUCTION

Livestock plays a vital role for the economic development of agro-based Bangladesh. The contribution of livestock to National Gross Domestic Product (GDP) is 2.79 percent and which is 17.15 percent in Agricultural share. About 44 percent of the animal protein comes from livestock sources. Moreover, 4.31 percent of the total export is from the export of leather and leather goods (Anonymous, 2011). Though Bangladesh has one of the highest

livestock populations in the world, but characterized by very low productivity, particularly in cattle because of low productivity, inferior genetic material, indiscriminate breeding leading to severe genetic erosion, neglect of animal healthcare and non-existence of an efficient value chain, shortage of feeds and fodder resources, lack of awareness and lack of extension services. The present livestock and poultry population in Bangladesh is given in Table 1.

Table1. Livestock and poultry population in Bangladesh

Livestock	Number (in lac)						
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Cattle	228.0	228.7	229.0	229.76	230.51	231.21	231.68
Buffalo	11.6	12.1	12.6	13.04	13.49	13.94	14.24
Goat	199.4	207.5	215.6	224.01	232.75	241.49	247.54
Sheep	25.7	26.8	27.8	28.77	29.77	30.02	30.19
Total	464.7	475.1	485.0	495.58	506.52	516.66	523.65

Source: Bangladesh Economic Survey, 2012

The Department of Livestock Services (DLS) is one of the larger Government organizations in Bangladesh and provides challenging livestock services to farmers throughout the country. The DLS encourages and supports planning and implementation of all livestock related extension activities at the grass-root level and works in

partnership with Government Organizations (GOs), Non-government Organizations (NGOs), and private sectors (Islam, 2011). To provide high quality extension services, the DLS employs about 500 livestock officers at the field level (Anonymous, 2011). DLS is severely short of staff to deliver its mandated services, with existing infrastructure and

*Corresponding author: M. S. Rahman, Assistant Professor, Dept. of Agricultural Extension, ³Lecturer, Department of Social Science and Language, Hajee Mohammad Danesh Science and Technology University, Dinajpur.

staff, the DLS is capable of vaccinating only 10% and provide treatment to 6.5% of the ruminant livestock population in the country. The ratio of animals to a qualified veterinarian is 1: 150,000. Treatment of poultry is considered superficial and is now mostly carried out by NGOs. Especially, the DLS has serious shortage of front line staffs (Veterinary Field Assistants and Technicians) who are the principal contact persons with producers in rural areas. In 2003, there were about 4600 staff in this category (grade 3 staff responsible for supporting primary treatment, vaccination, artificial insemination, fodder extension, clinical assistance as compounders) (Rahman, 2003). In DAE organogram there is a Sub-Assistant Agricultural Officer (SAAO) in block level for agricultural extension services but there is no livestock staff employed at the union or village level. The support staff is employed at the upazila veterinary clinics, so these staffs has to cover about 15 villages or about 2-3 unions. Consequently, they can do very little beyond assisting the upazila Veterinary Officers at the upazila clinics. In the absence of adequate access to proper vet care at reasonable cost, poor farmers often resort to traditional medicine with poor outcomes (Jabbar, 2009). Some important extension services are required for increased productivity and sustainable development of livestock sub-sector in Bangladesh. These services are: formulation of policy, acts and regulations and implementation, capacity building, animal health care (preventive and curative) etc. and so on.

Keeping in view the importance of livestock and its contribution to the economic development of the country the present study was undertaken with the following specific objectives: i) To identify extent of the problems in rearing livestock and ii) To explore the relationship between problems in rearing livestock and some of the selected characteristics of the farmers.

MATERIALS AND METHODS

Locale of the study and data collection

The study was carried out in four union of Chirirbandar upazila under Dinajpur district. There are 13 upazila in Dinajpur district. Among them Chirirbar upazila was selected purposively to carry out the study, because Chirirbandar upazila is

enriched with dairy farm and farmers. There are 12 unions in Chirirbandar upazila of which 4 unions were randomly selected to conduct the study. An updated list of 400 livestock farmers were collected from these four unions. To decide upon the sample, 15 percent of the farmers were selected from this list. Thus, 60 farmers were randomly selected which constituted the sample of this study. Data were collected during March-April 2011 using a pre-tested interview schedule.

Variables and their measurement

Problems of rearing livestock were the dependent variable of this study. The five selected characteristics of the respondents namely age, education, family size, extension media contact and livestock rearing knowledge were the independent variables of this research work. Problems of rearing livestock in each of the ten (10) selected items were measured by Likert type scale with responses namely no, low, medium and high, assigned score for each of these responses were 0, 1, 2, 3 respectively. Thus, the possible score of problem index for each of the 10 items could range from 0 to 180, where '0' indicating no problem and '180' indicating high problem. For clear understanding, problem of rearing livestock in selected items, Problem Index (PI) was developed to arrange the item in rank order by using the following formula:

$$\text{Problem Index (PI)} = (N_{no} \times 0) + (N_1 \times 1) + (N_m \times 2) + (N_h \times 3)$$

Where

N_{no} = Number of farmers facing no problem

N_1 = Number of farmers facing low problem

N_m = Number of farmers facing medium problem

N_h = Number of farmers facing high problem

RESULTS AND DISCUSSION

Overall problem faced by the farmers regarding livestock rearing

The overall problem faced scores of the farmers ranged from 8 to 26 with the mean value of 17.27 and standard deviation of 5.04. The farmers are categorized into three categories on the basis of their overall problem faced scores and are presented in the following Table 2.

Table 2. Distribution of the farmers according to their level of problem faced regarding livestock rearing (N=60)

Categories	Farmers		Mean	SD
	Number	Percent		
Low problem (8-15)	16	26.6	17.27	5.04
Medium problem (16-20)	25	41.7		
High problem (21-26)	19	31.7		
Total	100	100.0		

Almost three-fourths (73.4 percent) of the farmers faced medium to high problems while rest of the farmers (26.6 percent) faced low problems regarding livestock rearing.

Problems faced by the farmers in rearing livestock in 10 (ten) selected items

Based on researchers' experience in the locale of the

research, ten items were selected for measuring the problems faced by the farmers regarding livestock rearing. Problem Index (PI) of ten items was presented in Table 3. The computed PI of the 10 problems ranged from 50 to 155 (against a possible range from 0 to 180) which are arranged in rank order according to their PI as shown in Table 3.

Table 3. Problems faced by the farmers in 10 (ten) selected items (N= 60)

Sl. No.	Problems	Farmers				Problem Index	Rank Order
		No	Low	Medium	High		
1.	Lack of treatment	0	5	15	40	155	1 st
2.	Lack of modern technology	10	10	5	35	125	2 nd
3.	Lack of knowledge	10	10	7	33	123	3 rd
4.	Capital insufficiency	11	12	8	29	115	4 th
5.	Costly food and equipments	12	11	12	25	110	5 th
6.	Insufficient extension worker	16	10	8	26	104	6 th
7.	Marketing problem	18	12	10	20	94	7 th
8.	Infectious disease	19	15	11	15	82	8 th
9.	Lack of medicine	30	5	5	20	75	9 th
10.	Lack of awareness	39	4	5	12	50	10 th

Data in Table 3 indicated that “lack of treatment” was number one problem. In the study area, out of 60 farmers 40 farmers faced this constraint at high extent, 15 farmers faced at medium extent and 5 respondents faced at low extent i. e all the farmers faced any level of problems. Most of the respondents complained about “lack of modern technology” as their problem of rearing livestock obtaining the second position in the rank order with PI of 125. The PI of “lack of knowledge” is 123 and ranked third in

the Table because due to lack of knowledge farmers faced various kinds of problems. “Infectious disease”, “lack of medicine” and “lack of awareness” are the last three problems i.e. 8th, 9th and 10th in the Table 3. Their PI becomes 82, 75 and 50 respectively. Majority of the farmers of the study area had primary to secondary education. For this reason, the knowledge levels of the respondents are low As a result; they are facing different kinds of problems in rearing livestock.

Table 4. Some selected characteristics of farmers along with basic statistical values (N= 60)

Sl. No.	Characteristics	Scoring Method	Categories	Farmers		Mean	SD
				Number	Percent		
1.	Age	No. of year	Young (25-34)	20	33.3	38.1	9.0
			Middle (35-43)	28	46.7		
			Old (>43)	12	20.0		
2.	Education	Actual years of schooling	Illiterate (0)	0	0	6.5	2.9
			Primary (1-5)	33	55.0		
			Secondary (6-10)	25	41.7		
3.	Family size	Number	Above secondary (>10)	2	3.3	5.3	1.0
			Small (up to 5)	15	25.0		
			Medium (6-7)	38	63.3		
4.	Extension media contact	Score	Large (>7)	7	11.7	1.0	0.7
			Not at all(0)	12	20.0		
			Medium (1-5)	48	80.0		
5.	Livestock rearing knowledge	Score	High (>5)	0.0	0.0	7.9	1.9
			Low (up to 6)	5	8.3		
			Medium (7-10)	51	85.0		
			High (>10)	4	6.7		

Selected characteristics of the farmers

Data in Table 4 revealed that near about fifty percent (46.7 percent) of the farmers are middle aged while more than one-fourths (33.3 percent) of the farmers and 20 percents of the farmers were young and old aged respectively. Overwhelming majority (96.7 percent) of the farmers had primary to secondary education.

Findings revealed that about three-fifths (63.3 percent) of the farmers had medium family size. Majority (80 percent) of the farmers had medium extension media contact. In terms of livestock

rearing knowledge, findings indicated that overwhelming majority (93.3 percent) of the farmers had low to medium livestock rearing knowledge.

Relationship between the independent variables and dependent variable

The personal characteristics of the farmers might have some sort of influences over the problems faced by the farmers in rearing livestock. The relationship between problems of rearing livestock and some selected characteristics of the farmers are given in Table 5.

Table 5. Relationship between dependent and independent variables

Dependent Variable	Independent Variables	Value of 'r'
Problems of rearing livestock	Age	0.273*
	Education	-0.491**
	Family Size	0.107
	Extension media contact	-0.276*
	Livestock rearing knowledge	-0.570**

* Correlation is significant at the 0.05 level (2-tailed), ** Correlation is significant at the 0.01 level (2-tailed)

The selected characteristics of the farmers such as age, education, extension media contact and livestock rearing knowledge were significantly correlated with the problems faced by the farmers in rearing livestock. This means that the extent of problem encountered by the women in rearing livestock are in any way related to the above mentioned selected characteristics of the farmers. Poor livestock rearing knowledge, understanding, perception and low level of education may be the vital causes of problem facing regarding livestock rearing of the farmers.

CONCLUSION

The findings and discussion presented above indicated that majority of the farmers faced medium to high problems regarding livestock rearing. Due to lack of proper knowledge, lack of treatment and lack of modern technologies farmers have been facing greater extent of problems regarding livestock rearing. Medicines be provided at subsidized rates by government for proper treatment of the livestock. More training facilities should be arranged and increased by the relevant GOs and NGOs for increasing the need based knowledge of the farmers regarding livestock rearing. Extension workers should be equipped with the latest and modern knowledge regarding livestock rearing and model dairy farms should be organized among the farming community.

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