

Farmers' Attitude towards the Rearing of Red Chittagong Cattle

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Abstract

The main objective of this study was to determine attitude of the farmer's towards rearing of Red Chittagong Cattle (RCC). The study also explored the relationships between selected characteristics of the farmers with their attitude. The study was conducted in Char Jelkhana and Char Ishwardi villages of Mymensingh sadar under Mymensingh District. The data were collected by using an interview schedule from a sample of 70 farmers during the period from 15 March to 5 April, 2010. Attitude of farmers towards rearing of RCC was the dependent variable and nine selected characteristics of the respondents constituted the independent variables. The selected characteristics were age, level of education, family education, family size, annual family income, farm size, farming experience, communication exposure and training exposure of the farmers. Majority of the farmers (60 percent) had moderately favorable attitude while 25.7 percent had slightly favorable and 14.3 had highly favorable attitude towards Red Chittagong Cattle rearing. Two characteristics of the farmers, namely level of education and training exposure had significant positive relationships with their attitude towards rearing of RCC. Age, family education, family size, annual income, farm size, farming experience and communication exposure had no significant relationships with their attitude towards rearing of RCC.

Keywords: Farmers, attitude, rearing, Red Chittagong Cattle.

Introduction

Bangladesh is an agro-based developing country where agriculture is considered as the jewel crown of the country. Livestock is an integral part of agriculture that plays an important role in the national economy by earning foreign exchange and creating employment opportunity. However, the production of livestock in Bangladesh is insufficient to meet the current domestic demand and balanced nutritional needs of the people. Livestock sub sector contribute about 2.95 percent to the GDP, which was estimated about 17.32 percent of GDP to agriculture (DLS, 2010). In Bangladesh there are 22.9 million cattle, most of them are indigenous (80%) and remaining 20% are exotic and graded cattle (DLS, 2008). These indigenous cattle are the mainstay of the

agricultural and livestock industries in Bangladesh and possess beneficial characteristics e.g. ability to survive and reproduce in stressful conditions (heat tolerance, rainfall, humidity) with low feed input resistant to many biological maladies and other parasitic infestation. But these valuable genetic resources do not express its full potential under threat of extinction. Traditional way of rearing is one of the reasons for this problem. The farmers who rear cattle have no scientific background, for this reason performance of cattle decreases day by day (Bhuiyan and Sultana, 1994). Some people do not know the benefit of rearing of RCC. Now it is essential to know why farmers do not rear RCC in large scale. In order to measure attitude they

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possessed towards Red Chittagong Cattle rearing researcher undertook the present study on "Farmers' attitude towards rearing of Red Chittagong Cattle". With these view, the study was conducted with the following objectives: (a) to determine the attitude of farmers towards rearing of Red Chittagong Cattle. (b) to determine and describe some of the selected characteristics of the farmers.

These are: age, level of education, family education, family size, annual income, farm size, farming experience, communication exposure and training exposure and (c) to explore the relationships between selected characteristics of the farmers and their attitude towards rearing of Red Chittagong Cattle.

Methodology

The study was conducted in two villages - char Jelkhana and char Ishwardi under sadar upazila of Mymensingh district. These two villages were selected purposively. The people of these two villages were the beneficiaries of "Community Driven Red Chittagong Cattle Project" (jointly conducted by Dept. of Animal Breeding and Genetics, BAU and World Vision). The beneficiaries under Community Driven Red Chittagong Cattle Project of Char Jelkhana and Char Ishwardi were the population of the study. The total beneficiaries of these two villages were 70. As the population size was very small for this reason the whole population was selected as a sample of the study. An interview schedule was prepared for collection of data from the respondents keeping the objectives of the study in mind. The characteristics of the farmers such as - age, level of education, family education, family size, annual income, farm size, farming experience, communication exposure and training exposure were considered as independent variables of the study. The

dependent variable of the study was "Farmers attitude towards rearing of RCC". Five point Likert scale was used to determine the attitude towards the rearing of Red Chittagong Cattle (Likert, 1932). The variables were measured by constructing an attitude scale of eight statements (five positive and three negative). A statement was considered as positive when it possessed a favorable idea towards RCC rearing. On the other hand, a statement was considered as negative if it was unfavorable towards RCC rearing. The respondents were asked to express their opinions in the form of "strongly agree" "agree" "no opinion" "disagree" strongly disagree". A score of 5 was given to "strongly agree" 4 to "agree", 3 to "no opinion" 2 to "disagree" and 1 to "strongly disagree" if the statement was positive. A reverse scoring method was followed in case of negative statements. Attitude towards RCC rearing score of a farmer could range from 0 to 40, by summing up the weights for his/her responses in all the 8 statements.

Findings and Discussion

Selected characteristics of the farmers

Data presented in Table 1 shows that age of the respondents ranged from 18 to 65 years with an average of 38.40 years and standard deviation 11.53 years. Data reveals that the

highest proportion (47.1percent) of the farmers was middle aged and 38.6 percent of them belonged to the young age category. Only 14.3 percent of the respondents belonged to the old age category. Data in

Table 1 revealed that majority (44.3 percent) of the farmers had the ability to sign, whereas 21.4 percent of them were illiterate, 18.6 percent of them having primary level of education and 15.7 percent of the farmers had education between 6 to 10 years of schooling. Above findings indicate that majority of the farmers (65.7 percent) belonged to illiterate to can sign only categories. This may be due to the reason that the study area is a char area and education facility of the area is poor. Majority (34.3 percent) of the respondents had small sized family and the same proportion having large sized family while 31.4 percent of them had medium sized family. The average family size was 5.59 which is almost similar to the national average of 5.60 (BBS 2005). This may be due to the reason that the family planning activities in the country continuing since long time and its performance seems somewhat satisfactory. Majority (64.3 percent) of the farmers had very low family education, compared to 32.9 percent having low and 2.8 percent had no family education. The family education of majority of the farmers (97.2 percent) ranged from very low to low. The income of the family members in the study area was found very low as a reason they engaged their children in income generating activities at the very early stage of livelihood. The family head always think on how he feed his family members and this thinking keep him far away from sending his child to the school for education. Majority (55.7 percent) of the farmers had low income compared to 44.3 percent having medium income. Findings indicate that all the farmers had low to medium income because their main profession was boatman and their earning was very low per day.

Among the farmers, the smallest farm size was found to be 0.02 hectare and the largest 1.70 hectare. Average farm size was 0.205 hectare with a standard deviation of 0.270. Largest proportion (65.7percent) of the farmers belonged to the marginal farm size category compared to 30 percent having small farm size. Only 1.4 percent of them had medium farm and 2.9 percent of the farmers were landless. It indicates that majority of the families' possessed small amount of land. Small and marginal farmers are usually reluctant to adopt new agricultural technologies though striving hard to increase their income. About three-fourth (77.1 percent) of the farmers had low farming experience, 21.5 percent having medium farming experience and 1.4 percent had high farming experience. This may be due to the reason that the farmers of char area have not enough farming opportunity to cultivate crops and performing related activities throughout the year. The farmers remain involved in off-farm activities during rainy season. The large majority (84.3 percent) of the farmers had low communication exposure compared to 15.7 percent having medium exposure. Since the study area is close to Mymensingh town so the farmers have more opportunity to maintain contact with various communication sources for getting farming and non farming information. This opportunity is helpful for rearing of RCC by the farmers. The information revealed that 55.7 percent of the farmers had medium training exposure, 21.4 percent having low exposure and 8.6 percent of them had no training exposure. while 14.3 percent of the farmers had high training exposure. This may be due to the reason that the farmers are the members of world vision and they received training from World Vision at different aspects of farming. This endeavor is helpful for rearing of RCC by the farmers.

Table 1 Characteristics profile of the farmers

Characteristics	Scoring system	Range		Categories	Respondent		Mean	SD
		Possible	Observed		Number (N = 70)	Percent (%)		
Age	Actual years	-	18-65	Young (up to 30)	27	38.6	38.40	11.539
				Middle aged (31-50)	33	47.1		
				Old (> 50)	10	14.3		
Level of education	Years of schooling	-	0-10	Illiterate (0)	15	21.4	2.23	2.916
				Sign only (0.5)	31	44.3		
				Primary (1-5)	13	18.6		
				Secondary (6-10)	11	15.7		
Family size	No. of members	-	2-10	Small (2-4)	24	34.3	5.59	1.98
				Medium (5-6)	22	31.4		
				Large (≥ 6)	24	34.3		
Family education	Years of schooling	-	0-6.12	Illiterate(0)	2	2.8	2.476	1.493
				Very low(0.1-3)	45	64.3		
				Low(>3)	23	32.9		
Annual income	'000 Tk.	-	00-90	Low (up to 45)	39	55.7	42.62	23.161
				Medium (46- 90)	31	44.3		
				High (>90)	0	0		
Farm size	Hectares	-	0.02-1.70	Landless(>.02)	2	2.9	0.205	0.270
				Marginal(0.02-0.2)	46	65.7		
				Small (0.21-1)	21	30.0		
				Medium (1.01-3)	1	1.4		
Farming experience	Years of farming	-	0-40	Low (up to 13)	54	77.1	7.285	8.102
				Medium (14-27)	15	21.5		
				High (>28)	1	1.4		
Communication exposure	Scale score	0-42	10-20	Low (up to 14)	59	84.3	13.11	1.69
				Medium (15-28)	11	15.7		
				High (29-42)	0	0		
Training exposure	Days	-	0-12	No training (0)	6	8.6	6.11	2.934
				Low (1-4)	15	21.4		
				Medium (5-9)	39	55.7		
				High (≥ 10)	10	14.3		

Attitude towards RCC rearing

The attitude score of the respondents towards rearing of RCC ranged from 25 to 36 with an average of 30.29 and standard deviation 2.335. On the basis of the attitude scores of the respondents, they were classified into the following categories and shown in Table 2

Data presented in Table 2 reveals that the highest proportion (60 percent) of the respondents had moderately favorable attitude towards the rearing of RCC while 14.3 percent possessed highly favorable attitude and 25.7 percent possessed slightly

Table 2 Distribution of the farmers according to their attitude

Category	Farmer		Mean	Standard deviation
	Number	Percent		
Slightly favorable (25 to 28)	18	25.7	30.29	2.335
Moderately favorable (29 to 32)	42	60.0		
Highly favorable (33 to 36)	10	14.3		
Total	70	100		

favorable attitude. This means about three-fourths (74.3 percent) of the farmers possessed moderately favorable to highly favorable attitude. This may be due to their active involvement in project activities which influence them in rearing RCC breed than local breeds. So if the efforts are continued the attitude of the farmers would remain favorable towards rearing of RCC. The attitude of the farmers towards RCC rearing is presented in Table 3.

Table 3 Analysis of opinion of the farmers for individual attitude statement

SL. No.	Statements	Opinion					Total score	Mean
		SA	A	U	D	SD		
1(+)	I like RCC because diseases and parasitic infestation is less than the cross breeds and other local breeds.	19	46	5	0	0	294	4.2
2(-)	I have less preference for RCC because it does not grow faster.	0	0	25	39	6	261	3.72
3(+)	I like RCC because its rearing is economically profitable for small and resource poor farmers.	12	57	1	0	0	291	4.15
4(-)	As calf mortality in case of RCC is high I do not prefer it for commercial use.	1	11	33	23	2	224	3.2
5(+)	Reproduction problem is considerably less in RCC.	8	29	27	6	0	249	3.5
6(-)	It is a problem for me that success rate of insemination is not so high in RCC.	1	10	32	27	0	225	3.2
7(+)	RCC rearing is easy by locally available feed stuff.	23	47	0	0	0	303	4.3
8(+)	I like RCC for its higher milk production.	13	48	6	3	0	281	4.0

SA= Strongly Agree, A= Agree, U= Undecided, D= Disagree, SD= Strongly Disagree

The information in Table 3 revealed that the respondents have highly favorable attitude towards rearing of RCC regarding disease infestation, feeding facilities, milk production and economic profitability. It was found that farmers possessed moderately favorable attitude in respect to slow grow and reproduction problem of RCC.

Relationship between selected characteristics of the farmers and their attitude towards rearing of RCC

This section deals with the relationship between dependent and independent variables. The results of correlation analyses are shown in the Table 4.

Table 4 Correlation co-efficient between selected characteristics of the farmers and their Attitude

Characteristics of the farmers	Computed value of 'r'
Age	-0.202
Level of education	0.344**
Family education	0.152
Family size	0.070
Annual income	0.184
Farm size	0.229
Farming experience	0.065
Communication exposure	0.069
Training exposure	0.558**

**=Significant at 1 percent (0.01) level of probability
Dependent variable: Attitude towards RCC rearing

Correlation analysis indicated that level of education, training exposure had significant positive relationships with their attitude towards rearing of RCC. Age, family education, family size, annual income, farm size, farming experience, communication

exposure had no significant relationships with their attitude towards rearing of RCC.

The correlation coefficient between level of education of the farmers and their attitude in RCC rearing was 0.344. The level of education of the farmers had significant relationship and their attitude in rearing of RCC. The findings indicate that a person having more education was found to have more favorable attitude on cattle rearing because education helps individual to gain knowledge and skill in different cognitive and affective levels of learning and develop positive attitude. The correlation coefficient between training exposure of the farmers and their attitude in RCC rearing was 0.558. The findings indicate that the training exposure of the farmers had significant relationship with their attitude in RCC. This may be due to the reason that the farmers were the beneficiaries of World Vision- an NGO having regular schedule for training programme on development activities.

Conclusions

The findings of the study showed that majority (60 percent) of the respondents had moderately favorable attitude towards the rearing of RCC, while 14.3 percent had highly favorable attitude and 25.7 percent had slightly favorable attitude towards RCC rearing. The existing attitude of the farmers is not enough for rearing of RCC by a large number of farmers although the RCC is a potential breed for meeting increased demand for meat and milk. The level of education and training exposure of the farmers were found

to have significant positive relationships with their attitude towards rearing of RCC. Based on the findings it may be concluded that if education and training facilities are available to the farmers, the level of knowledge will be increased which in turn help in the formation of positive attitude towards rearing of RCC. However, education and training are important factors for formation of favorable attitude of the farmers towards the rearing of RCC.

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