



## **Attitude of the Rural Elite Farmers towards Extension Activities Performed by Personnel of Department of Agricultural Extension**

M. Arifullah<sup>1</sup>, A. Zahan<sup>2\*</sup>, M. M. Rana<sup>3</sup>, M. Adil<sup>4</sup> and Shamsunnaher<sup>2</sup>

<sup>1</sup>Janata Bank Ltd.; <sup>2</sup>Adaptive Research Division; <sup>3</sup>Agronomy Division; <sup>4</sup>Plant Breeding Division,  
Bangladesh Rice Research Institute, Gazipur 1701, Bangladesh

\*Corresponding author and Email: zahanafruz@yahoo.com

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### **Abstract**

The main purpose of the study was to ascertain the attitude of rural elite farmers towards extension activities performed by Upazilla Agricultural Extension personnel of DAE and to explore the relationship between the selected characteristics of the respondents and their extent of attitude towards those extension activities under reference. The study was conducted in two unions, namely Ratanpur and Rasullabad covering 5 villages of Nabinagar Upazilla under Brahmanbaria District. Data were collected from the rural elite farmers using a pre- tested interview schedule during 15<sup>th</sup> May 2009 to 10<sup>th</sup> June 2009. It was found that the highest proportion (43.14%) of the respondents had moderate favourable attitude compared to 33.33 percent having high favourable attitude and 23.53 percent less favourable attitude. Pearson Product Moment Correlation ( $r$ ) test was used to ascertain the relationships between the concerned dependent and independent variables of the study. Findings revealed that education, farm size, time spent for farm work, organizational participation, extension contact and knowledge on agriculture of elite rural farmers showed positive significant relationship while age and annual family income did not show any such relationship with their attitude towards extension activities performed by Upazilla Agricultural Extension Personnel of DAE.

**Keywords:** Rural elite farmers, attitude, extension activities, Upazila Agricultural Extension personnel

### **1. Introduction**

Bangladesh is predominantly an agrarian country. Agricultural sector accounts for about 32 percent of the Gross Domestic Product (GDP). There is about nine million hectares of land available for cultivation. Nearly 79.5 percent of the population of the country lives in rural area and 63.2 percent of the country's total labour force are engaged in agriculture (BBS, 2001). The agricultural sector comprises of crops, livestock, fisheries and forestry. Agricultural output at current prices has been

found to contribute 25.33 percent to our GDP (BBS, 2001). Agriculture contributes more than 32% to the gross domestic product of the country whereas crops alone contributes 12.28%, animal farming 2.92%, forest and related services 2.92% and fishing contributes 4.86%. (BBS, 2006). GDP growth rate of Bangladesh mainly depends on the performance of the agricultural sector. Till now agriculture, the largest contributor to income and employment generation is a vital sector in the country to achieve self-sufficiency in food production, poverty alleviation and fostering sustainable economic development.

Despite being an agricultural country, Bangladesh cannot provide enough food to feed her own population. Not only that, the present population of about 121 millions will progressively increase up to 160 millions by 2010 and will require about 30 million tons of food grains per annum. Henceforth, the increase of agricultural production in a sustainable rate is vital to food security of the country in the next decades. There are many developmental programmes at the grassroots levels which are being earned out by various Government Organizations (GOs). The institutional *foci* of management of extension service are at levels of block, upazila, district, region and the headquarter.

The Department of Agricultural Extension (DAE) is the largest public sector extension agency in the country and is responsible for all aspects of agricultural extension services in the rural area. The main function of DAE is the transfer of technologies evolved in the research station along with education, training and motivation (MOA, 1996). The success of technology transfer largely depends upon how the DAE maintains public relations and how the public held attitudes towards the activities of DAE. To evolve better approach the DAE had been reorganized several times.

The Upazilla level is the basic unit for planning, implementing, monitoring, and evaluating local extension programs. Upazilla agricultural extension personnel such as Upazilla Agricultural Officer (UAO), Agricultural Extension Officer (AEO), Assistant Agricultural Extension Officer (AAEO) and Sub Assistant Agricultural Officer (SAAO) are the grassroot level workers of DAE. They are directly communicating with the rural people. The success of extension service of DAE largely depends on Upazilla Agricultural Extension personnel. So it is very important to see how the Upazilla agricultural extension personnel to perform their duties and responsibilities effectively and efficiently. The Upazilla personnel have good interaction with the rural elites in creating and sharing information about agriculture. But some people have the opinion that DAE

personnel do not perform their assigned job properly. They claim that the agricultural development so far achieved is due to the own efforts of the farmers.

Training and Visit (T&V) system was established during late seventies which was the backbone of the DAE. DAE develops its own approach to increase the effectiveness of T&V. DAE has a specific mission which is “to provide efficient and effective needs based extension services to all categories of farmers, to enable them to optimize their use of resources, in order to promote sustainable agricultural and socioeconomic development”. The goal of new agricultural extension policy (NAEP) is to “encourage the various partners and agencies within the national agricultural system to provide efficient and effective services which complement and reinforce each other, in an effort to increase the efficiency and the productivity of agriculture in Bangladesh”.

Department of agricultural Extension (DAE) can play a vital role in accelerating technological, social and economic development of the country. Therefore, this study was undertaken to determine the attitude and some selected characteristics of rural elite farmers and to explore the relationship between the selected characteristics of those people and their extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

## **2. Methodology**

The present study was conducted at Ratanpur and Rasullabad union in Nabinagar Upazilla under Brahmanbaria District purposively. There were 19 villages in two unions. Five villages were selected as the locale of the study randomly. Considering time, money and resources of the researcher, the study was kept confined to five villages in two unions of Nabinagar Upazilla. The researcher himself with the help of local leaders like chairman, member and SAAO prepared an updated list of all rural elite farmers of five selected villages.

In this study, rural elite farmer means rich farmer, school teachers, college teachers and service holders. The total number of rural elite farmer was 340, which constituted the population of the study. From this population, 102 rural elite farmers (30% of the population) were randomly selected as the sample. A reserve list of 17 rural elite farmers (5% of the population) was also prepared. The rural elite farmers in the reserve list were used only when a respondent in the original list was not available for interview.

Appropriate scales and measurement techniques were developed to ensure correct responses of the variable concerned. Data were collected from the sampled rural elite farmer through personal contact by the researcher himself. Collection of data took 27 days from 15<sup>th</sup> May 2009 to 10<sup>th</sup> June 2009.

### 3. Results and Discussion

#### 3.1. Attitude of rural elite farmers towards extension activities performed by Upazilla Agricultural Extension Personnel of DAE

Attitude of rural elite farmers towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was the dependent variable of this study. There were twenty statements where ten were positive and

ten were negative statements on attitude. Scores of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel ranged from 15 to 60 against the possible range of 0 to 80. The average score was 36.23, the standard deviation was 13.27. On the basis of observed scores, rural elite farmers were classified into three categories such as less favourable attitude, moderate favourable attitude and high favourable attitude. Distribution of respondents according to their attitude score is presented in Table 1.

The data in the Table 1 revealed that, highest proportion (43.14 percent) of the respondents had moderate favourable attitude compared to 33.33 percent having high favourable attitude and 23.53 percent had less favourable attitude. Data also revealed that about three fourth (76.47 percent) of the rural elite farmers had moderate to high favourable attitude. This is may be due to agricultural extension personnel make regular contact with the rural elite farmers. Agricultural extension personnel also try to solve any problem faced by rural elite farmers in agricultural activities. Haque (2003) revealed that 17% respondents had strongly unfavourable attitude, 38% had moderately unfavourable attitude, 5% had neutral attitude, and 49% had moderately favourable attitude and 8% strongly favourable attitude towards extension activities of Department of Agricultural Extension (DAE).

**Table 1.** Attitude of rural elite farmers towards extension activities performed by Upazilla Agricultural Extension Personnel of DAE

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Less favorable attitude (up to 25)	24	23.53		
Moderate favorable attitude (26 - 40)	44	43.14	36.23	13.27
High favorable attitude (above 40)	34	33.33		
Total	102	100		

### **3.2. Selected characteristics of the Respondents**

According to the objectives of the study, data were collected from a sample of 102 respondents. The selected characteristics of rural elite farmers included their age, education, farm size, time spent for farm work, annual family income, organizational participation, cosmopolitaness, extension contact, and knowledge on agriculture. The salient features of these characteristics are shown in Table 2. Followings are the findings on each of the selected characteristics of the respondents in separate table along with the interpretations.

#### **Age**

Middle aged rural elite farmers constituted the highest proportion (52.94 percent) followed by young aged category (25.49 percent) and old aged category (21.57 percent). Ahmed (2006) observed that age of the shrimp farmers in Khulna district had no significant relationship with the attitude towards shrimp farming.

#### **Education**

Secondary & higher secondary category constitute the highest proportion (37.26 percent) compared to 26.47 percent under below secondary and 36.27 percent under graduation & masters. Sarker (2002) reported that education of the farmers had significant and positive relationship with their attitudes towards the activity of Bangladesh Agricultural University Extension Center (BAUEC).

#### **Farm size**

Majority (63.73 percent) of the respondents belonged to medium farm size category, 17.64 percent of the respondents had small farm size and 18.63 percent of the respondents had large farm size. Rana (2007) in his study found that there was significant relationship between farm size of the women beneficiaries and attitude towards activities of ASA.

#### **Time spent for farm work**

Highest percentage (55.88 percent) of respondents fell into medium farming time,

whereas 21.57 percent respondents involved in low farming time and 22.55 percent respondents involved high farming time.

#### **Annual family income**

Elite rural farmers having medium income constituted the highest proportion (46.08 percent) followed by respondents having low annual family income (22.55 percent) and high annual family income (31.37 percent). Per capita income of the elite people is higher than national per capita income which is \$599 (Anon, 2008). This is may be due that the elite people are not only involve to their main profession, but they also involved with other economic activities

#### **Organizational participation**

Medium participation in organizations category constituted the highest proportion (74.50 percent) followed by low participation (12.75 percent) and high participation (12.75 percent) category.

#### **Cosmopolitaness**

Maximum (45.10 percent) respondents had medium cosmopolitaness followed by 22.55 percent had low cosmopolitaness and 32.35 percent had high cosmopolitaness.

#### **Extension Contact**

Highest proportion (40.20 percent) of the respondents of the study area had the medium extension contact, while 23.53 percent had low extension contact and 36.27 percent had high extension contact.

#### **Knowledge on agriculture**

Majority (55.88 percent) of the respondents fell into medium knowledge category followed by 14.71 percent in poor knowledge category and 29.41 percent in high knowledge category. Nurzaman (2000) revealed that agricultural knowledge of the FFS farmers and non-FFS farmers had significant relationship with their attitude on IPM.

**Table 2.** Descriptive statistics and salient features of rural elite farmers characteristics

Characteristics	Measuring unit	Categories	Range (observed)	Number	Per cent	Mean	Standard Deviation
Age	Year	Young (up to 35)	25-62	26	25.49	43.39	9.09
		Middle (36 to 50)		54	52.94		
		Old (> 50)		22	21.57		
Education	Assigned score	Below secondary(< 10)	0-15	27	26.47	10.44	4.94
		Secondary & Higher Secondary (10-12)		38	37.26		
		Graduation & Masters (14-17)		37	36.27		
Farm size	Hectare	Small (up to1)	0.7-2.9	18	17.64	1.52	0.53
		Medium (1.1 – 2)		65	63.73		
		Large (above 2)		19	18.63		
Time spent for farm work	Hour	Low farming time (up to 1)	1-9	22	21.57	3.22	2.61
		Medium farming time (2-3)		57	55.88		
		High farming time (above 3)		23	22.55		
Annual family income	Thousand (Tk)	Low (<125)	100-270	23	22.55	181.13	52.71
		Medium (125 to 225)		47	46.08		
		High (>225)		32	31.37		
Organizational participation	Assigned score	Low participation (Up to 10)	2-27	13	12.75	15.72	5.44
		Medium participation (11-20)		76	74.50		
		High participation (>20)		13	12.75		
Cosmopolitaness	Assigned score	Low (up to 11)	7-23	23	22.55	14.65	4.16
		Medium (12-16)		46	45.10		
		High (above16)		33	32.35		
Extension contact	Assigned score	Low ( 11-25)	11-59	24	23.53	34.94	12.75
		Medium (26-40)		41	40.20		
		High (above 40)		37	36.27		
Knowledge on agriculture	Assigned score	Poor knowledge (up to 3)	2-8	15	14.71	4.83	1.56
		Medium knowledge (4-5)		57	55.88		
		High knowledge (>5)		30	29.41		

**Table 3.** Results of relationships between the selected characteristics of the rural elite farmers and their extent of attitude towards extension activities performed by Upazilla Agricultural Extension Personnel of DAE

Dependent variable	Independent variable	Value of 'r'	Table value of 'r' with 100 df	
			0.05 level	0.01 level
Attitude towards extension activities performed by Upazilla Agricultural Extension Personnel of DAE	Age	0.186 <sup>NS</sup>		
	Education	0.619 <sup>**</sup>		
	Farm size	0.562 <sup>**</sup>		
	Time spent for farm work	0.455 <sup>**</sup>	0.195	0.254
	Annual family income	0.079 <sup>NS</sup>		
	Organizational participation	0.612 <sup>**</sup>		
	Cosmopolitaness	0.579 <sup>**</sup>		
	Extension Contact	0.594 <sup>**</sup>		
	Knowledge on agriculture	0.590 <sup>**</sup>		

\* Significant at 0.05 level of probability, \*\* Significant at 0.01 level of probability

**3.3. Relationships between the selected characteristics of rural elite farmers and their extent of attitude towards extension activities performed by Upazilla Agricultural Extension Personnel of DAE**

Coefficient of correlation was computed in order to explore the relationships between the selected characteristics of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. The relationship between the selected characteristics of the elite rural people and the attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel has been presented in Table 3.

Out of 9 selected characteristics of the rural elite farmers, education, farm size, time spent for farm work, organizational participation, cosmopolitaness, extension contact, knowledge on agriculture had positive and significant relationship while age and annual family income had no significant relationship. Haque (2003) found that age of the farmers had no significant

relationship while education, cosmopolitaness and extension media contact of the farmers had significant and positive relationship with their attitude towards extension activities of Department of Agricultural Extension (DAE).

**4. Conclusions**

The researcher observed the attitude of the rural elite farmers towards extension activities of DAE performed by Upazilla Agricultural extension Personnel with a great care and put forwarded the conclusions on the basis of the findings and its logical interpretations: Most of the rural elite farmers (43.14 percent) had moderate favourable attitude towards extension activities performed by Upazilla Agricultural extension Personnel of DAE. It is quite logical that most of the rural elite farmers had medium education, medium farm size, medium organization participation, medium cosmopolitaness, medium extension contact, medium agricultural knowledge, so they showed moderate favourable attitude. If Upazilla agricultural extension personnel would visit to certain families who are deprived farmers, would obtain important information from those families

and thus got some positive information about the activities of DAE. Therefore, moderately favourable attitude would convert favourable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel might grow in their mind. Out of 9 selected characteristics of the rural elite farmers, education, farm size, time spent for farm work, organizational participation, cosmopolitenes, extension contact, knowledge on agriculture had positive and significant relationship while age and annual family income had no significant relationship with their attitude towards extension activities performed by Upazilla Agricultural extension Personnel of DAE.

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