

**ATTITUDE OF ELITE RURAL PEOPLE TOWARDS
EXTENSION ACTIVITIES OF DAE PERFORMED BY
UPAZILLA AGRICULTURAL EXTENSION PERSONNEL**

74 (01) Ag. Ext.
৩২/০১/১০

A Thesis

By

Md. Arifullah

Exam. Roll no. 01109

Registration no. 03-01109

Session: 2006-07

Semester: January-June/ 2008

**Submitted in Partial Fulfillment of
the Requirements for the Degree of**

Master of Science in Agricultural Extension


**Department of Agricultural Extension and Information System
Sher-e-Bangla Agricultural University
Dhaka-1207**

June 2008

**ATTITUDE OF ELITE RURAL PEOPLE TOWARDS
EXTENSION ACTIVITIES OF DAE PERFORMED BY
UPAZILLA AGRICULTURAL EXTENSION PERSONNEL**

**A Thesis
By
Md. Arifullah
Exam. Roll no. 01109
Registration no. 03-01109
Session: 2006-07
Semester: January-June/ 2008**

Approved as to the Style and Content by



**Prof. Mohammad Hossain Bhuiyan
Supervisor**



**Prof. M. Zahidul Haque
Co-Supervisor**



**Prof. M. Zahidul Haque
Chairman of the Examination Committee**

**Department of Agricultural Extension and Information System
Sher-e-Bangla Agricultural University
Dhaka-1207**

June 2008


CERTIFICATE

This is to certify that thesis entitled “**ATTITUDE OF ELITE RURAL PEOPLE TOWARDS EXTENSION ACTIVITIES OF DAE PERFORMED BY UPAZILLA AGRICULTURAL EXTENSION PERSONNEL**”, submitted to the faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka, in partial fulfillment of the requirements for the degree of **Master of Science in Agricultural Extension And Information System**, embodies the result of a piece of *bona fide* research work carried out by **Md. Arifullah**, Registration No. 03-01109, under my supervision and guidance. No part of the thesis has been submitted for any other degree or diploma.

I further certify that such help on source of information, as has been availed of during the course of this investigation has duly been acknowledged.

Dated.....

Dhaka, Bangladesh


.....
(Prof. Mohammad Hossain Bhuiyan)
Supervisor



*Dedicated
to
My Beloved
Parents and Sisters*

ACKNOWLEDGEMENT

All praises are due to Almighty Allah, the Great, Gracious and Merciful, Whose blessings enabled the author to complete this research work successfully.

The author is grateful to them all who made a contribution to this research work, although it is not possible to mention all by names.

In particular, the author takes the opportunity to express his deepest sense of gratitude to his honorable Supervisor Mohammad Hossain Bhuiyan, Professor, Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka for his inspiration, valuable suggestions, constant guidance and intensive supervision throughout the period of the study and preparation of this thesis.

The author takes an opportunity to express his profound gratitude and sincere appreciation to M. Zahidul Haque, professor and Chairman, Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka, as Co-supervisor, his creative suggestions, guidance and constant inspiration from beginning to the end of the work have greatly contributed to the completion of the study.

The author is thankful to Md. Mahbubul Alam, Lecturer, Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka for his active help and moral support in pursuing the study.

The author wishes to express his sincere appreciation and heartfelt indebtedness to all other teachers of the Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka for their valuable advice and suggestions in conducting the research.

The author is also grateful to the elite rural people managed themselves to give their valuable time during interviews for the collection of data.

Special and thankful appreciation is also due to the friends of researcher namely, Afnan, Alo, Arif, Diba, Dilu, Emon, Khorshed, Maria, Morshed, Nadim, Nazma, Nipu, Nowshin, Obid, Parves, Pial, Ranzu, Rubel, Rupa, Sadia, Tania, Tanima, and Zarnaz for their fellow feeling and encouragement during the study period.

Lastly the author cannot but expresses his immense indebtedness, deepest sense of gratitude and profound respect to his parents, and sisters who had been a constant source of blessing, inspiration and encouragement for his higher study.

The Author

CONTENTS

ITEMS	PAGE
ACKNOWLEDGEMENT	i
CONTENTS	ii
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF APPENDICES	ix
ABBREVIATIONS AND ACRONYMS	x
ABSTRACT	xi

CHAPTER	TITLE	PAGE
1	INTRODUCTION	1
1.1	General Background	1
1.2	Statement of Problem	5
1.3	Specific Objectives of the Study	6
1.4	Justification of the Study	7
1.5	Scope of the Study	7
1.6	Assumptions of the Study	8
1.7	Limitations of the Study	9
1.8	Definition of Terms	9
2	REVIEW OF LITERATURE	13
2.1	Concepts of attitude	13
2.2	Review of previous research findings related to attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	19
2.3	Review of previous research findings related to relationship of selected characteristics of elite rural people with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.	21
	2.3.1. Age and attitude	21
	2.3.2 Education and attitude	22

CONTENTS (Contd.)

CHAPTER	TITLE	PAGE
	2.3.3 Farm Size and attitude	23
	2.3.4 Time spent for farm work and attitude	24
	2.3.5 Annual family income and attitude	24
	2.3.6 Organizational participation and attitude	25
	2.3.7 Cosmopolitaness and attitude	26
	2.3.8 Extension contact and attitude	27
	2.3.9 Knowledge on agriculture and attitude	28
	2.4 The Conceptual Framework of the Study	29
3	METHODOLOGY	31
	3.1 The Locale of the Study	31
	3.2 Population and Sample of the Study	31
	3.3 Preparation of Data Gathering Instrument	35
	3.4 Data Collection Procedure	35
	3.5 Processing of Data	36
	3.6 Selection of Dependent and Independent Variables	36
	3.7 Independent Variables	36
	3.8 Dependent Variables	37
	3.9 Measurement of Variables	37
	3.9.1 Measurement of independent variables	37
	3.9.1.1 Age	37
	3.9.1.2 Education	38
	3.9.1.3 Farm size	38
	3.9.1.4 Time spent for farm work	38
	3.9.1.5 Annual family income	38
	3.9.1.6 Organizational participation	39
	3.9.1.7 Cosmopolitaness	40
	3.9.1.8 Extension contact	41
	3.9.1.9 Knowledge on agriculture	42
	3.9.2 Measurement of dependent variables	43
	3.9.2.1 Attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	43

CONTENTS (Contd.)

CHAPTER	TITLE	PAGE
3.10	Data Processing and Analysis	43
3.10.1	Compilation of data	43
3.10.2	Categorization of data	44
3.10.3	Statistical techniques of data analysis	44
3.11	Hypotheses of the Study	45
3.11.1	Research hypotheses	45
3.11.2	Null hypotheses	45
4	RESULTS AND DISCUSSION	47
4.1	Attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	47
4.2	Selected Characteristics of the Respondents	48
4.2.1	Age	50
4.2.2	Education	51
4.2.3	Farm size	51
4.2.4	Time spent for farm work	53
4.2.5	Annual family income	53
4.2.6	Organizational participation	54
4.2.7	Cosmopolitaness	55
4.2.8	Extension contact	56
4.2.9	Knowledge on agriculture	56
4.3	Relationships between the selected characteristics of elite rural people and their extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	57
4.3.1	Relationship between age and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	59
4.3.2	Relationship between education and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	60

CONTENTS (Contd.)		
CHAPTER	TITLE	PAGE
4.3.3	Relationship between farm size and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	61
4.3.4	Relationship between time spent for farm work and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	62
4.3.5	Relationship between annual family income and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	63
4.3.6	Relationship between organizational participation and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	64
4.3.7	Relationship between cosmopolitaness and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	65
4.3.8	Relationship between extension contact and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	66
4.3.9	Relationship between knowledge on agriculture and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	67
5	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	68
5.1	Summary	68
5.1.1	Introduction	68

CONTENTS (Contd.)

CHAPTER	TITLE	PAGE
5.1.2	Specific Objectives	68
5.1.3	Major Findings	69
5.1.3.1	Elite rural people's attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	69
5.1.3.2	Characteristics of the elite rural people	69
5.1.3.3	Relationship of the selected characteristics of the elite rural people with their attitude towards extension activities of DAE performed by Upazilla Agricultural extension Personnel	71
5.2	Conclusions	74
5.3	Recommendations	78
5.3.1	Recommendations for policy implications	78
5.3.2	Recommendations for further study	81
	BIBLIOGRAPHY	82
	APPENDICES	89

LIST OF TABLES

TABLE	TITLE	PAGE
3.1	Distribution of the population, sample and respondents included in the reserve list	32
4.1	Attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	48
4.2	Descriptive statistics and salient features of elite rural people characteristics	49
4.3	Distribution of elite rural people according to their age	50
4.4	Distribution of elite rural people according to their education	51
4.5	Distribution of elite rural people according to their farm size	52
4.6	Distribution of elite rural people according to their time spent for farm work	53
4.7	Distribution of elite rural people according to their annual family income	54
4.8	Distribution of elite rural people according to their organizational participation	54
4.9	Distribution of elite rural people according to their cosmopolitaness	55
4.10	Distribution of elite rural people according to their extension contact	56
4.11	Distribution of elite rural people according to their knowledge on agriculture	57
4.12	Results of relationships between the selected characteristics of the elite rural people and their extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel	58

LIST OF FIGURES

FIGURE	TITLE	PAGE
2.1	The conceptual framework of the study	30
3.1	Map of Brahmanbaria district showing the locale of the study	33
3.2	Map of Nabinagar upazila of B. Baria district	34

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
I	English Version of the Interview Schedule	89
II	Correlation Matrix	95

ABBREVIATIONS AND ACRONYMS

AAEO	=	Assistant Agricultural Extension Officer
AEO	=	Agricultural Extension Officer
BBS	=	Bangladesh Bureau of Statistics
DAE	=	Department of Agricultural Extension
df	=	Degrees of Freedom
FFS	=	Farmer Field School
GDP	=	Gross Domestic Product
GO	=	Government Organization
NAEP	=	New Agricultural Extension Policy
NGO	=	Non-Government Organization
REA	=	Revised Extension Approach
SAAO	=	Sub Assistant Agricultural Officer
SPSS	=	Statistical Package for Social Sciences
T&V	=	Training and Visit
UAO	=	Upazilla Agricultural Officer

ABSTRACT

The main purpose of the study was to determine and describe the attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel and to explore the relationship between the selected characteristics of elite rural people and their extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. The study was conducted in Ratanpur and Rasullabad Union covering 5 villages of Nabinagar Upazilla under Brahmanbaria District. Data were collected from the elite rural people using a pre-tested interview schedule during the period from 15th May 2008 to 10th June 2008. From the study it was found that the highest proportion (43.14 percent) of the respondents had moderate favorable attitude compared to 33.33 percent having high favorable attitude and 23.53 percent had less favorable 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, cosmopolitness, extension contact and knowledge on agriculture of elite rural people showed positive significant relationship while age, annual family income of elite rural people did not show any significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.





Chapter 1
Introduction

CHAPTER 1

INTRDUCTION

1.1 General Background

Bangladesh is mainly an agricultural country. Agriculture contributes more than 22% to the gross domestic product of the country where as crops contributes 12.28%, animal farming contributes 2.92%, forest and related services contributes 2.92% and fishing contributes 4.86%. (BBS, 2006). GDP growth rate of Bangladesh mainly depends on the performance of the agricultural sector.

There are many agencies which provide extension support to the rural people of Bangladesh. These include government agencies, for example, the Department of Agricultural Extension, Bangladesh Rural Development Board, Bangladesh Water Development Board, Bangladesh Agricultural Development Corporation, Forestry Department, Directorate of Livestock Services and Directorate of Fisheries.

The Department of Agricultural Extension (DAE) is the largest public sector extension agency in the country and is responsible for all the aspects of crop production. The main function of DAE is the transfer of technologies evolved in the research station along with education, training and motivation. 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 organized and reorganized several times.

With the inception of Training and Visit (T&V) system DAE achieved its present form and structure in 1982. There were many appreciable elements in T& V system which allowed DAE personnel to come in contact with farmers and vice-versa. The mentionable elements were (i) contact farmers, (ii) 14-days work

schedule, (iii) intensive visit and (iv) intensive training. Intensive training and visit & 14-days work schedule channelized extension service to the door step of farmers. However in the beginning of the decade of ninety New Agricultural Extension Policy (NAEP) was introduced with Revised Extension Approach (REA). It had 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”.

To achieve the DAE’s mission, it works in the context of the NAEP. The broad objective of the agricultural policy is to facilitate and accelerated technological transformation with a view to becoming self sufficient in food production and improve the nutritional status of the population. The specific short and mid term policy objectives as stated in the perspective plan (July 1995 to June 2010) are as follows:

- To attain self sufficiency in food grains and increase production of other nutritional crops
- To ensure sustainable agricultural growth through more efficient and balanced use of land water and other resources
- To increase foreign exchange earnings through agricultural exports
- To increase per hectare rice output in order to release more land for other crops, especially legumes and fodder crops
- To introduce high value cash crops
- To improve the quality and availability of seeds
- To reduce environmental degradation
- To increase fish, livestock and forestry production
- To conserve and develop forest resources

The goal of new agricultural extension policy 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”.

To achieve this goal the policy includes the following key components:

- Extension support to all categories of farmers
- Efficient extension services
- Decentralization
- Demand led extension
- Working with groups of all kinds
- Strengthened extension-research linkage
- Training of extension personnel
- Appropriate extension methodology
- Integrated extension support to farmers
- Co-ordinate extension activities
- Integrated environmental support.

All the components show the way reach all level of farmers to serve them by assessing their needs and demands. To meet up learning demand appropriate extension methodology supports the principle of use of a wide range of different extension methods. The extension methods are as follows:

- Farm and home visit
- Farm walks
- Farmers rallies
- Result demonstration
- Method demonstration
- Group meetings
- Field days
- Motivational tours
- Districts and thana fairs

- Folk media
- Training days
- Farmer field school
- Radio
- Newspaper
- Print media and audio visual aids



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 grassroots 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 for upazilla agricultural extension personnel to perform their duties and responsibilities properly.

The duties and responsibilities of upazilla agricultural extension personnel are as follows:

- Assisting farmers to identify their problems and possible solution to them
- Implementing extension events within the block based on local needs
- Providing ideas for suitable extension activities for farmers during the thana planning workshop
- Assisting farmers to obtain information and other assistance from other extension partners
- Monitoring the implementation of extension events in the block using the seasonal extension monitoring
- Ensuring effective FINA within the thana
- Preparing high quality extension plans
- Preparing training materials for farmers

- Liaising with farmer associations and other related agencies at thana level, including those responsible for farm inputs and marketing

Viewing the role of extension service performed by DAE, it is apprehensive that its upazilla personnel have good interaction with the rural elites in creating and sharing information about agriculture. The elite people influence other individual's attitude or overt behavior informally in a desired way with relative frequency. They act as model of a social system. They serve the villagers as a source of information. The elite people collect the information from the different media like print media, extension worker etc. Then the information has flown from the elite people to their followers.

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.

In reality the Department of Agricultural Extension can play a vital role in accelerating technological, social and economical development of the country.

However it is necessary to know the "Attitude of Elite Rural People towards Extension Activities of DAE Performed by Upazilla Agricultural Extension Personnel".

1.2 Statement of Problem

Although Bangladesh is an agricultural country she cannot yet produce sufficient food to feed her population. A large number of government and non-government organizations (NGOs) are working for the development of agriculture. Among them, DAE is an important one that involved in transferring of improved agricultural technologies to the farmers. No doubt, these technologies are important components of crop production. But in some cases, despite the efforts of DAE, satisfactory technological changes among farming communities are not seen. It is due to various reasons such as, Sub

Assistant Agricultural Officers' negligence towards their duties, illiteracy and poverty of farmers, lack of communication between DAE personnel and farmers etc. Until and unless elite rural people possess favorable attitude towards the extension organization and its activities, it is not possible to change the behavior of the rural people through different activities of DAE. Therefore, it is necessary to have an understanding about attitude of elite rural people towards extension activities of DAE before planning and implementing an extension program. In view of the need for having an understanding of the attitude of the elite rural people towards extension activities of DAE for planning and execution of agricultural development programs, the researcher undertook this research entitled "Attitude of Elite Rural People towards Extension Activities of DAE Performed by Upazilla Agricultural Extension Personnel" to seek answer to the following questions:

- What is the attitude of elite rural people towards on-going extension activities of DAE?
- What are the characteristics of the elite rural people?
- Is there any relationship between the selected characteristics of the elite rural people and their attitude towards extension activities of DAE performed by upazilla agricultural extension personnel?

An understanding to these queries is likely to be helpful for the extension personnel or policy makers to take strategies for the better performance of agricultural extension personnel in the field level.

1.3 Specific Objectives of the Study

In order to answer to the above questions the following specific objectives were formulated that supposed to give proper direction to the study.

1. To determine and describe the attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

2. To determine and describe some selected characteristics of elite rural people.
The selected characteristics were as follows:

- I. Age
- II. Education
- III. Farm size
- IV. Time spent for farm work
- V. Annual family income
- VI. Organizational participation
- VII. Cosmopolitaness
- VIII. Extension contact
- IX. Knowledge on agriculture

3. To explore the relationship between the selected characteristics of elite rural people and their extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

1.4 Justification of the Study

The present study was initiated in order to have an understanding of attitude of elite rural people towards extension activities of the DAE performed by upazilla agricultural extension personnel. Findings of this study, may therefore, play a great role in gaining knowledge for the planers and experts of agricultural extension services and are expected to be helpful for the extension workers of DAE in order to improve extension activities of DAE for working effectively with the farmers. For these reasons, the researcher undertook the present study on “Attitude of Elite Rural People towards Extension Activities of DAE Performed by Upazilla Agricultural Extension Personnel”.

1.5 Scope of the Study

The main focus of the study was to ascertain the attitude of elite rural people towards extension activities of DAE. The findings of the study are applicable to

some selected villages of Nabinagar upazila under Brahmanbaria district. However, the findings may also be applied for other areas of the country having similarity to the study area. Findings of this research will help the policy makers and planners in formulating and re-designing the extension activities of DAE for the development of agriculture. Therefore, the findings are thought to be useful for the students, academicians, researchers, extension personnel and specially for planners to formulate and to design the strategies for maintaining proper co-ordination, between DAE and elite rural people. As a result, most of the elite rural people may be benefited and at the same time, economic condition of this agricultural country may be developed through the betterment of agriculture.

1.6 Assumptions of the Study

An assumption is the supposition that an apparent fact or principle is true in the light of the available evidence (Goode and Hatt, 1952). The researcher had the following assumptions in mind while undertaking this study:

1. The elite rural people included in the sample for this study were competent to furnish proper response to the questions included in the interview schedule.
2. Views and opinions furnished by the elite rural people included in the sample were representative of the whole population of the study area.
3. The responses furnished by the respondents included in the sample were valid and reliable and expressed the truth about their conviction and opinions.
4. The respondents selected for the study were competent enough to reply questions made by the researcher.
5. The researcher who acted as interviewer was well adjusted to the social environment of the study area. Hence, the data collected by him from the respondents were free from bias.

6. The researcher was capable of rating the responses of the respondents with adequate precision.
7. The findings of the study were expected to be useful for planning and execution of various extension programs, strategies and approaches.

1.7 Limitations of the Study

The present study was undertaken for ascertaining the attitude of the elite rural people towards extension activities of the DAE performed by upazilla agricultural extension personnel and to explore the relationships between their attitude and their selected characteristics. In order to keep the study under manageable limit, meaningful, and considering the time, money and other necessary resources available to the researcher, the following limitations were recognized.

1. The study was confined to Nabinagar Upazila of Brahmanbaria district.
2. The characteristics of the farmers are many and varied. But only 9 characteristics were selected for this study.
3. Population for the study was kept confined to the elite rural people during data collection.
4. For information about the study, the researcher was dependent on the data furnished by the randomly selected elite rural people.

1.8 Definition of Terms

Certain key terms used throughout the study are defined in this section for clarity of understanding.

Attitude: Attitude is a mental state of readiness, which has dynamic influence upon the individual's response to any social objects or situation. It is an enduring psychological system considering of three interacting components centering on a single object. These three components may be classified as

cognitive components, feeling components and action tendency components. In this study attitude means the favorable or unfavorable opinion of the elite rural people of Brahmanbaria district towards the activities of DAE performed by upazilla agricultural extension personnel.

Extension activities of DAE: It referred to the works conducted by upazilla agricultural extension personnel for the agricultural development of the farmers. Extension activities of DAE means some techniques performance performed by the upazilla agricultural extension personnel, which includes some methods such as farm and home visit, result demonstration, method demonstration, agricultural fairs, farmers rallies, motivational tours, farmer training and some other activities related to agricultural development.

DAE: The Department of Agricultural Extension (DAE) is the largest public diffusion agency of Bangladesh. It shoulders the responsibilities for all aspects of agricultural extension services including transfer of technology in crop sub-sector of the country. Its technical and administrative services spread at five levels throughout the country such as (i) national level, (ii) regional level, (iii) zonal level, (iv) unit level and (v) block level.

Attitude of elite rural people towards DAE: As attitude is the mental predisposition of an individual to act in a particular way, attitude of elite rural people towards extension activities of DAE referred to their beliefs, feelings and action tendencies towards different activities and programs of DAE.

Upazilla Agricultural Extension Personnel: The people who perform their job in upazilla level under DAE are known as Upazilla Agricultural Extension Personnel such as Assistant Agricultural Extension Officer (AAEO), Upazilla Agricultural Officer (UAO), Sub Assistant Agricultural Officer (SAAO) and Agricultural Extension Officer (AEO).

Rural people: The people who live in rural areas and engaged directly or indirectly in agricultural activities are known as rural people.

Elite rural people: The rural people who are more conscious about their surroundings and hold social power are known as elite rural people. They may be teachers of schools and colleges, leaders of the social system, rich farmers, elected members and chairman, service holders etc.

Age: Age of the elite rural people has been defined as the period of time from his/her birth day to the time of interview.

Education: Academic qualification of a respondent referred to the formal education received up to a certain level from an educational institute (e.g. school, college, madrasa and university) at the time of interview.

Farm size: It referred to the cultivated area either owned by the farmer or obtained from others on barga or lease system, the area being estimated in terms of full benefit to the respondent's family.

Time spent for farm work: Time spent for farm work means how much time elite rural people were engaged in farming activities (daily).

Annual family income: Annual family income referred to the net income of the respondents by subtracting the livelihood expenses or expenditure for subsistence from family's annual earning from different sources including agricultural during last year.

Organizational participation: Organizational participation of the elite rural people is referred to his/her taking part in different social organizations either as a ordinary member, executive member or president/secretary.

Cosmopolitaness: It referred to the degree or the frequency of movement of an elite rural people to outside places from his own working place, his exposure to the nearest village, own upazilla sadar, other upazilla, other district sadar and capital or big cities.

Extension contact: Extension contact referred to an individual's exposure to contact with different communication media and source and personalities being used for dissemination of new technologies among the elite rural people.

Agricultural knowledge: It was the extent of basic understanding of the elite rural people in different aspects, of agricultural subject matters, i.e. crops, livestock, fisheries etc.



Chapter 2

Review of literature

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this chapter is to review the past researches related to the present investigation. The reviews are conveniently presented based on the major objectives of the study.

The present research was concerned with the attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. The researcher observed no directly related literature representing the study readily available in Bangladesh as well as in abroad. However the researcher came across with some expert opinion about the concept of attitude and tried his best to collect required information through searching relevant studies, journals and bulletins. Reviews are arranged in this chapter with the following three sections:

Section 2.1: Concepts of attitude.

Section 2.2: Review of previous research findings related to attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Section 2.3: Review of previous research findings related to relationship of selected characteristics of elite rural people with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Section 2.1: Concepts of attitude

Different persons and sources have defined attitude in many different ways. Some of these are as follows:

Attitude is personal view of something, an opinion or general feeling about something. Attitude can be interfered from human behavior. Attitude is relative enduring belief or opinion that predisposes people to respond in a positive, negative or ambivalent way to a person, object or idea (Microsoft Encarta, 2006).

Attitude is predisposition to classify objects and events and to react to them with some degree of evaluative consistency. Attitudes logically are hypothetical constructs i.e., they are manifested in coconscious experience, verbal reports, gross behavior and physiological symptoms (Encyclopedia Britannica, 2005).

Doob (1966) stated that attitude affects behavior since an implicit, drive producing response considered socially significant in the individual society. If this definition is broken down typographically into phrases and clauses, an attitude implies the following:

- It is an implicit response.
- It is both anticipatory and mediating reference to patterns of overt responses.
- It is evoked by a variety of stimulus patterns and as a result of previous learning or of gradients of generalization and discrimination.
- It is itself a cue and drive producing.
- It is considered socially significant in the individual's society.

Drever (1968) has defined an attitude as a more or less stable set or disposition of opinion, interest, or purpose, involving expectancy of certain kind of experience and readiness with appropriate kind of response.

Kendler (1963) regarded the term attitude as applied to an individual's predisposition to respond in a characteristic way to some stimuli in his social environment. Basically, an attitude, according to him, is a tendency to behave

either positively or negatively towards any social care whatever - an institution, a person, a situation, an idea or a concept.

Campbell (1950) defined attitude of an individual as an enduring syndrome of response consistency with regard to a set of social objects.

Goode (1945) in his dictionary of education defined the term as state of mental and emotional readiness to react to situation, person or things, in harmony with a habitual pattern of response previously conditioned to or associated with these stimuli. Attitude is the byproduct of an individual's experience and has their bases in inner urges; acquire habits and environment influences by which he is surrounded.

Allport (1935) defined an attitude as a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related.

Warren (1934) has referred to attitude as a specific mental disposition towards an incoming or arising experience, whereby that experience is modified; or in other words, it is a condition of readiness for a certain type of activity.

Components of Attitude

Krech *et al.* (1962) have defined attitudes as systems of three interrelated components in the following explanations:

"In defining attitudes as systems, we are emphasizing the interrelatedness of the three attitude components. When incorporated in a system, these components become mutually interdependent about an object are influenced by his feelings and action tendencies toward that object. And a change in his cognition about the object will tend to produce changes in his feelings and action tendencies toward it."

Another definition of attitude made by Triandis (1971), "an attitude is an idea charged with emotion which predisposes a class of actions to a particular class of social situations." This definition suggests that attitude has three components. These components are cognition, affective and behavioral.

- a) The cognitive component of an attitude consists of the belief of the individual about the object. This may also be said as understanding, knowledge and conception.
- b) The feeling or affective component of an attitude refers to the emotions connected with the object. The object is felt to be pleasing or displeasing: it is liked or it is disliked.
- c) The action or behavioral component of an attitude includes all the behavioral readiness associated with the attitude.

Attitude as a system bearing these three components is expected to be consistent but there may have some degree of inconsistency.

An attitude of a respondent may be defined as his tendency or predisposition to behave towards an object in a certain manner. In other words, it is a mental state of readiness which has dynamic influence upon the individual's response to any social object or situation. It is an enduring psychological system consisting of three interacting components centering on a single object. These three components may be classified as (i) cognitive component - the beliefs about the object (ii) the feeling components - the affect connected with the object, and (iii) the action tendency component - the disposition to take action with respect to the object.

Formation of Attitude

It is important to know the process of attitude formation within the individual in order to ensure more accurate prediction about their behavior and to have greater control over action. Many factors are responsible to attitude formation.

Because the overt behavior of an individual is the result of interaction of several factors (Kendler, 1963).

From the results of different experiments and observations, Krech et al. (1962) enlisted individual's wants, information, group affiliations, and personality as factors for attitudes formation. They said that, the individual develops attitudes while coping with various problems in trying to satisfy his wants and unfavorable attitudes towards-objects and persons that block the achievement of his goal.

Individual's physical condition, heredity, environment, knowledge, habits religious beliefs, and psychological motives have also been incorporated as the factors for the erection and development of attitudes (Canfield, 1960). By including these factors actually many of the personality traits were made responsible for attitude construct.

According to Asch (1952) an attitude is formed through organization of experiences and on the basis of data with reference to an object. Whereas, Goode (1945) in his Dictionary of Psychology explained that attitudes are the by-product of an individual's experience, and have their bases in inner urges, acquired habits and the environmental influence by which he is surrounded.

Doob's (1948) analysis of attitude formation takes into account the following factor:

- **Goal response** - the response pattern or patterns which are anticipated.
- **Afferent** - habit strength - the strength of the bond between the existing attitudes and the evoking stimulus patterns, including the gradients of generalization discrimination.
- **Efferent** - habit strength - the strength of the bond between the existing attitudes and evoked responses including over time.

- **Perception** - the drive orienting the individual to pay attention to the stimulus pattern evoking the attitude.
- **Drive** - the strength of the stimuli.
- **Interaction** - the strength of the other attitudes.
- **Social significance** - the evaluation in the society of the attitude along with its direction (e.g. positive, negative, neutral, etc.)

Changes of attitude

Islam et al. (2000) stated that the attitude of an individual is not a static phenomenon. There are several factors which will help to change attitude, while there are factors which might resist such change. The major factors in this regard are

- the characteristics of the pre-existing;
- the personality of the individual
- the individual's group affiliation;
- the individual's level of intelligence;
- persuasibility of the individual; and
- the cognitive needs and style of the person

The question of modifiability of attitude as its dependence on the psychological characteristics of the individual and his/her group affiliation has been documented by Krech, Crutchfield and Ballachey (1962), when they made the following comment:

Attitude modifiability depends on the level of intelligence of the individual. Moreover, some individuals seem to be characterized by a general trait of persuasibility, tending to be susceptible to all kinds of persuasive communications; other individuals may be characteristically resistant to persuasive communications. The cognitive need and style of the person influence his readiness to accept change. Attitude which have strong social

support through the group affiliation of the individual are different to change. If a person values his membership in a group, he will tend to cling to the attitudes endorsed by the group in order to maintain his status.

Wahab (1975) stated that one of the effects of group influences upon attitude development is to produce uniformity of attitudes among the members of various social groups. But perfect uniformity is never formed due to the existence of personality differences among individuals. People tend to accept as their own only those attitudes which seem to them congruent with their own personality assessment.

Section 2.2: Review of previous research findings related to attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

Rana (2007) conducted a study on attitude of women beneficiaries towards the activities of ASA. His study revealed that 20% respondents had low favorable attitude, 65% respondents had medium favorable attitude and 35% had high favorable attitude towards ASA's activities.

Haque (2006) observed that two thirds of the farmers in organic farming group had highly favorable attitude towards organic farming, on the other hand, more than half (56%) of the conventional farmers had shown moderately favorable attitude towards organic farming.

Haque (2003) revealed that 17% respondents had strongly unfavorable attitude, 38% had moderately unfavorable attitude, 5% had neutral attitude, and 49% had moderately favorable attitude and 8% strongly favorable attitude towards extension activities of Department of Agricultural Extension (DAE).

Sarker (2002)_a conducted a research on attitude of rice growers towards the use DAP on rice cultivation and found that majority (62%) of the rice growers had moderately unfavorable attitude and (27%) had favorable attitude towards the use of DAP on rice field. Only (11%) farmers possessed highly favorable attitude towards the use DAP on rice field.

Sarker (2002)_b found in his study that the highest proportion (40%) of the farmers had highly favorable, 25% unfavorable, 15% neutral and only 20% had moderately favorable towards the activity of Bangladesh Agricultural University Extension Center (BAUEC).

Ahmed's (2002) study revealed that majority (74%) of the farmer had slightly favorable attitude towards BRRI Dhan-29 variety of rice while only 10% respondents had unfavorable and 16% highly favorable attitude towards BRRI Dhan-29.

Mannan (2001) conducted a study on attitude of Proshika farmers towards the ecological agricultural program (EAP) and found that majority of the Proshika farmers (57.3%) had favorable attitude towards the EAP while 12.7% and 30% had slightly and highly favorable attitude towards respectively.

Akanda (2001) found in his study that 66% of farmers had moderately favorable attitude towards Rice-Fish program of CARE. On the other hand, 22% of farmers had slightly favorable attitude and 12% of them had highly favorable attitude towards Rice-Fish program of CARE.

Bari (2000) found that farmers' attitude towards hybrid rice AALOK 6201 and found that the highest proportion (45%) of rice growers had moderately unfavorable, 27% unfavorable and 28% had favorable attitude towards hybrid rice AALOK 6201.

Nurzaman (2000) conducted a study on attitude and practices of FFS and non-FFS farmers in respect of IPM. His study revealed that around half (48%) of FFS farmers had highly favorable attitude compared to 40% had moderately favorable and only 12% had slightly favorable attitude, while 57% of non-FFS farmers had slightly favorable attitude, 37% had medium favorable and only 6% of non-FFS had highly favorable attitude.

Ali's study (1995) revealed that the highest proportion (65%) of the women of Bangladesh Agricultural University Extension Center (BAUEC) had slightly favorable attitude while 19% had unfavorable and 16% had favorable attitude towards working in groups.

Section 2.3: Review of previous research findings related to relationship of selected characteristics of elite rural people with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

2.3.1 Age and attitude:

Rana (2007) in his study found that there was no significant relationship between age of the women beneficiaries and attitude towards activities of ASA.

Ahmed (2006) observed that age of the shrimp farmers in Khulna District had no significant relationship with the attitude towards shrimp farming.

Haque (2006) observed that there is negative relationship between age of the conventional farmers and their attitude towards organic farming.

Haque (2003) found that age of the farmers had no significant relationship with their attitude towards extension activities of Department of Agricultural Extension (DAE).

Sarker (2002)_b reported that age of the farmers had no significant relationship with their attitudes towards the activity of Bangladesh Agricultural University Extension Center (BAUEC).

Sarker (2001) found that age of the world vision farmers had no significant relationship with their attitude towards organic homestead gardening practices.

Paul (2000) found that there was negative significant relationship between age and attitude towards the use of Urea Super Granule (USG).

Parveen (1993) found that age of the modern village women had influenced their attitude towards homestead agriculture production. But in case of the traditional village age was not associated with their attitude towards homestead agricultural production.

2.3.2 Education and attitude:

Rana (2007) in his study found that there was no significant relationship between education of the women beneficiaries and attitude towards activities of ASA.

Ahmed (2006) observed that educational level the farmers had significant and positive relationship with the attitude of the farmers towards shrimp cultivation.

Haque (2003) found that education of the farmers had significant and positive relationship with their attitude towards extension activities of Department of Agricultural Extension (DAE).

Ali (2002) found that educational qualification of BSs had negative relationship with their attitude towards NGOs activities.

Sarker (2002)_b reported that education of the farmers had significant and positive relationship with their attitudes towards the activity of Bangladesh Agricultural University Extension Center (BAUEC).

Nurzaman (2000) observed in his study that education of the FFS and non-FFS farmers, were positive correlated with their attitude towards IPM.

Habib (2000) found that education of the BSs had significant relationship with their attitude towards the use of agrochemicals.

Verma and kumar (1991) reported that there was a positive and significant relationship between education and attitude of farmers towards buffalo management in no-adopted village but the relationship was not significant in adopted village.

2.3.3 Farm Size and attitude:

Rana (2007) in his study found that there was significant relationship between farm size of the women beneficiaries and attitude towards activities of ASA.

Ahmed (2006) reported that farm size had significant and negative relationship with their attitude towards shrimp cultivation.

Haque (2003) found that farm size of the farmers had no significant relationship with their attitude towards extension activities of Department of Agricultural Extension (DAE).

Sarker (2002)_b reported that farm size of the farmers had no significant relationship with their attitudes towards the activity of Bangladesh Agricultural University Extension Center (BAUEC).

Mannan (2001) found that there was significant and positive relationship between farm size of respondents and attitude towards Ecological Program of Proshika.

Paul (2000) found in his study that there was significant and positive relationship between farm size and attitude of farmers towards the use of Urea Super Granule (USG).

Nurzaman (2000) observed in his study that farm size of the FFS and non-FFS farmers had no significant relationship with their attitude towards IPM.

Bari (2000) observed in his study that farm size of farmers had no relationship with their attitude towards hybrid rice AALOK 6201.

Habib (2000) found that farm size of the BSs had no significant relationship with their attitude towards the use of agrochemicals.

2.3.4 Time spent for farm work and attitude:

No review was found on this topic.



2.3.5 Annual family income and attitude:

Rana (2007) in his study found that there was significant relationship between annual family income of the women beneficiaries and attitude towards activities of ASA.

Ahmed (2006) reported that annual family income of farmers had no relationship with their attitude towards shrimp cultivation.

Sarker (2002)_b reported that annual family income of the farmers had no significant relationship with their attitudes towards the activity of Bangladesh Agricultural University Extension Center (BAUEC).

Paul (2000) found in his study that there was significant and positive relationship between annual family income and attitude of farmers towards the use of Urea Super Granule (USG).

Nurzaman (2000) observed in his study that annual family income of the FFS and non-FFS farmers had positive significant relationship with their attitude towards IPM.

Habib (2000) found that annual family income of the BSs had significant relationship with their attitude towards the use of agro-chemicals.

Bari (2000) observed in his study that annual family income of farmers had no relationship with their attitude towards hybrid rice AALOK 6201.

Kashem (1987) found that income of the small farmers had no significant relationship with their attitude towards community of the farmers.

Puttaswamy (1977) conducted a study and found that the small farmers in general had favorable attitude towards, mixed farming.

2.3.6 Organizational participation and attitude:

Rana (2007) in his study found that there was no significant relationship between organizational participation of the women beneficiaries and attitude towards activities of ASA.

Haque (2003) found that organizational participation of the farmers had no significant relationship with their attitude towards extension activities of Department of Agricultural Extension (DAE).

Nurzaman (2000) observed in his study that organizational participation of the FFS farmers had positive correlation with their attitude towards IPM.

74 (8) 12/01/10

37571

Habib (2000) found that organizational participation of the BSs had a positive significant relationship with their attitude towards the use of agro-chemicals.

Islam and Kashem (1997) observed that organizational participation of the farmers had a negative relationship with their attitude towards agro-chemicals.

Noor (1995) found that organizational participation of the farmers had positive significant relationship with their attitude towards the cultivation of high yielding varieties of potato.

Hoque (1993) in his study observed a positive relationship between organizational participation of the cane growers and their use of recommended dose of fertilizer.

Kumar and Verma (1991) found that there was positive relationship between attitude and social participation of the farmers.

2.3.7 Cosmopolitaness and attitude:

Rana (2007) in his study found that there was significant relationship between cosmopolitaness of the women beneficiaries and attitude towards activities of ASA.

Ahmed (2006) reported that cosmopolitaness of farmers had no relationship with their attitude towards shrimp cultivation.

Haque (2003) found that cosmopolitaness of the farmers had significant and positive relationship with their attitude towards extension activities of Department of Agricultural Extension (DAE).

Afrad (2002) cosmopolitaness of the farmers had positive significant relationship with their attitude towards vegetable cultivation.

Siddique (2002) observed that cosmopolitanism of the farmers had a positive relationship with their attitude towards improved winter vegetable production.

Nurzaman (2000) observed in his study that cosmopolitanism of the FFS and non-FFS had no significant relationship with their attitude towards IPM.

Habib (2000) found that cosmopolitanism of the BSs had no significant relationship with their attitude towards the use of agro-chemicals.

Islam and Kashem (1997) found that cosmopolitanism of the farmers had positive significant relationship with their attitude towards agrochemicals.

Noor (1995) found that cosmopolitanism of the farmers had positive significant relationship with their attitude towards the cultivation of high yielding varieties of potato.

2.3.8 Extension contact and attitude:

Ahmed (2006) reported that extension media contact of farmers had significant and positive relationship with their attitude towards shrimp cultivation.

Haque (2003) found that extension media contact of the farmers had significant and positive relationship with their attitude towards extension activities of Department of Agricultural Extension (DAE).

Sarker (2002)_b reported that extension contact of the farmers had no significant relationship with their attitudes towards the activity of Bangladesh Agricultural University Extension Center (BAUEC).

Siddique (2002) observed that extension media contact of the farmers had a positive relationship with their attitude towards improved winter vegetable production.

Mannan (2001) conducted a study on attitude of Proshika farmers towards the ecological program (EAP) and found that there was a significant relationship between mass media exposure of farmers and their attitude towards the ecological agricultural program (EAP) of Proshika.

Habib (2000) observed in his study that the media exposure of the BSs had no relationship with their attitude towards the use of agro-chemicals.

Nurzaman (2000) revealed that extension contact of the FFS farmers was positively significant with their attitude on IPM but in case of non-FFS farmers, there was no significant relationship with their attitude on IPM.

Vidvashankar (1997) reported that the media participation had positive relationship with the attitude towards seed production program of seed growers.

2.3.9 Knowledge on agriculture and attitude:

Ahmed (2006) reported that knowledge about shrimp culture of farmers had significant and positive relationship with their attitude towards shrimp cultivation.

Haque (2003) found that agricultural knowledge of the farmers had no significant relationship with their attitude towards extension activities of Department of Agricultural Extension (DAE).

Sarker (2002)_b reported that knowledge about vegetable cultivation of the farmers had significant relationship with their attitudes towards the activity of Bangladesh Agricultural University Extension Center (BAUEC).

Sarker (2001) found that the knowledge of the World Vision farmers had a significant positive relationship with their attitude towards organic homestead gardening practices.

Bari (2000) observed in his study that agricultural knowledge of farmers had no relationship with their attitude towards hybrid rice AALOK 6201.

Nurzaman (2000) revealed that agricultural knowledge of the FFS farmers and non-FFS farmers had significant relationship with their attitude on IPM.

2.4 The conceptual framework of the study

The conceptual framework of Rosenberg and Hovland (1960) was kept in mind while framing the structural arrangement for the dependent and independent variables. This study was concerned with the dependent variable is attitude of elite rural elite towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel farmers and, the selected characteristics of elite rural people of as independent variables.

The present study tried to focus two concepts; first attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel; and the second, the selected characteristics of elite rural people. Attitude of an individual may be influenced and affected through interacting forces of many characteristics in his surroundings. It is impossible to deal with all characteristics in a single study. It was therefore, necessary to limit the characteristics only related to one's. Hence the characteristics include age, education, farm size, time spent for farm work, annual family income, organizational participation, cosmopolitaness, extension contact, and knowledge on agriculture. The conceptual framework of the study has been presented below:

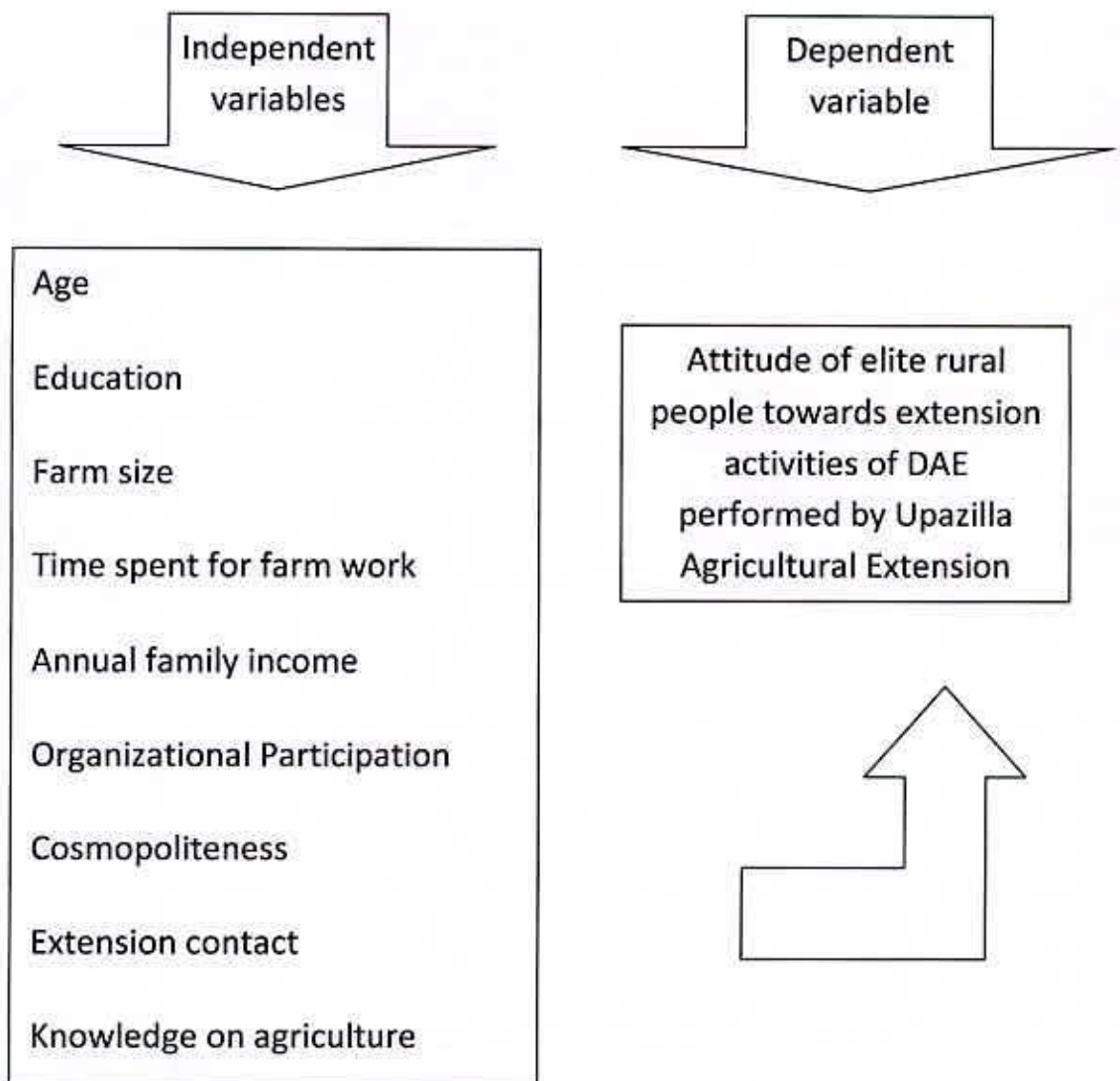
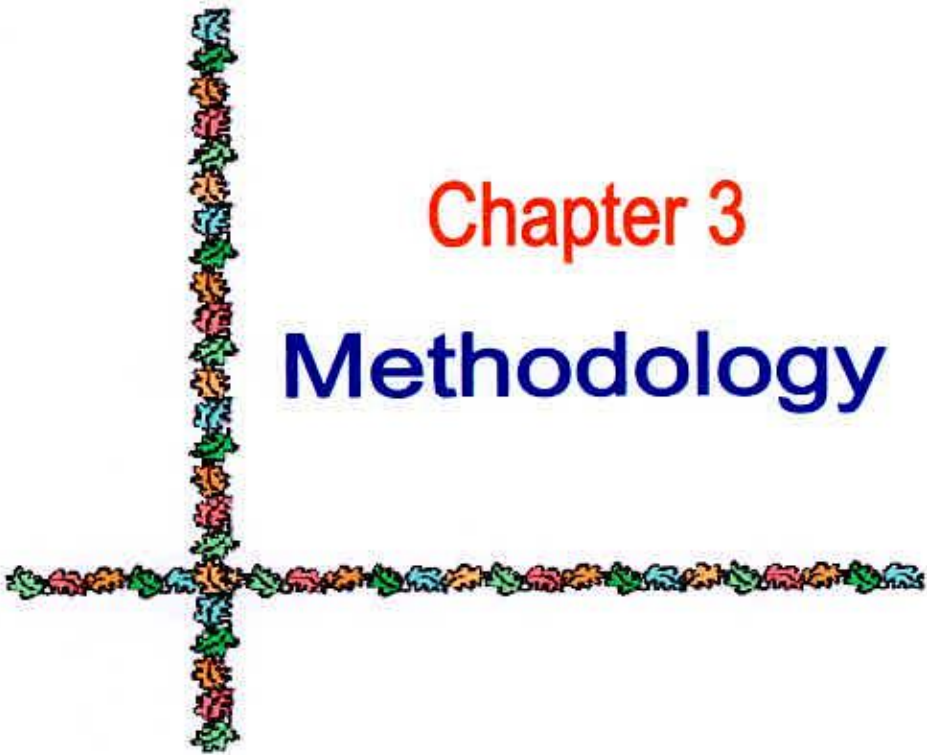


Fig. 2.1 The conceptual framework of the study

Chapter 3

Methodology



CHAPTER 3

METHODOLOGY

Methodology leads the researcher to achieve his research objectives in a proper way. Methodology in social science consists of section of locale of the study, population and sampling procedure, preparation of interview schedule, data collection procedure, measurement of variables and method of analysis. Every aspect of methodology acts as the vigor of the research. More the accurate methodology more the valid and reliable data and more appropriate research findings. So researcher was very much careful in selecting components of methodology. Below the components of methodology have been discussed step by step.

3.1 The Locale of the Study

The present study was conducted at Ratanpur and Rasullabad union in Nabinagar upazilla under Brahmanbaria District of Chittagong division purposively. There were 19 villages in two unions. The researcher selected five villages as the locale of the study randomly. With considering time, money and resources of the researcher, the study was kept confined five villages of Nabinagar upazilla. The map of Brahmanbaria District showing the locale of the study and the map of Nabinagar upazilla has been presented in Figure 3.1 and 3.2 respectively.

3.2 Population and Sample of the Study

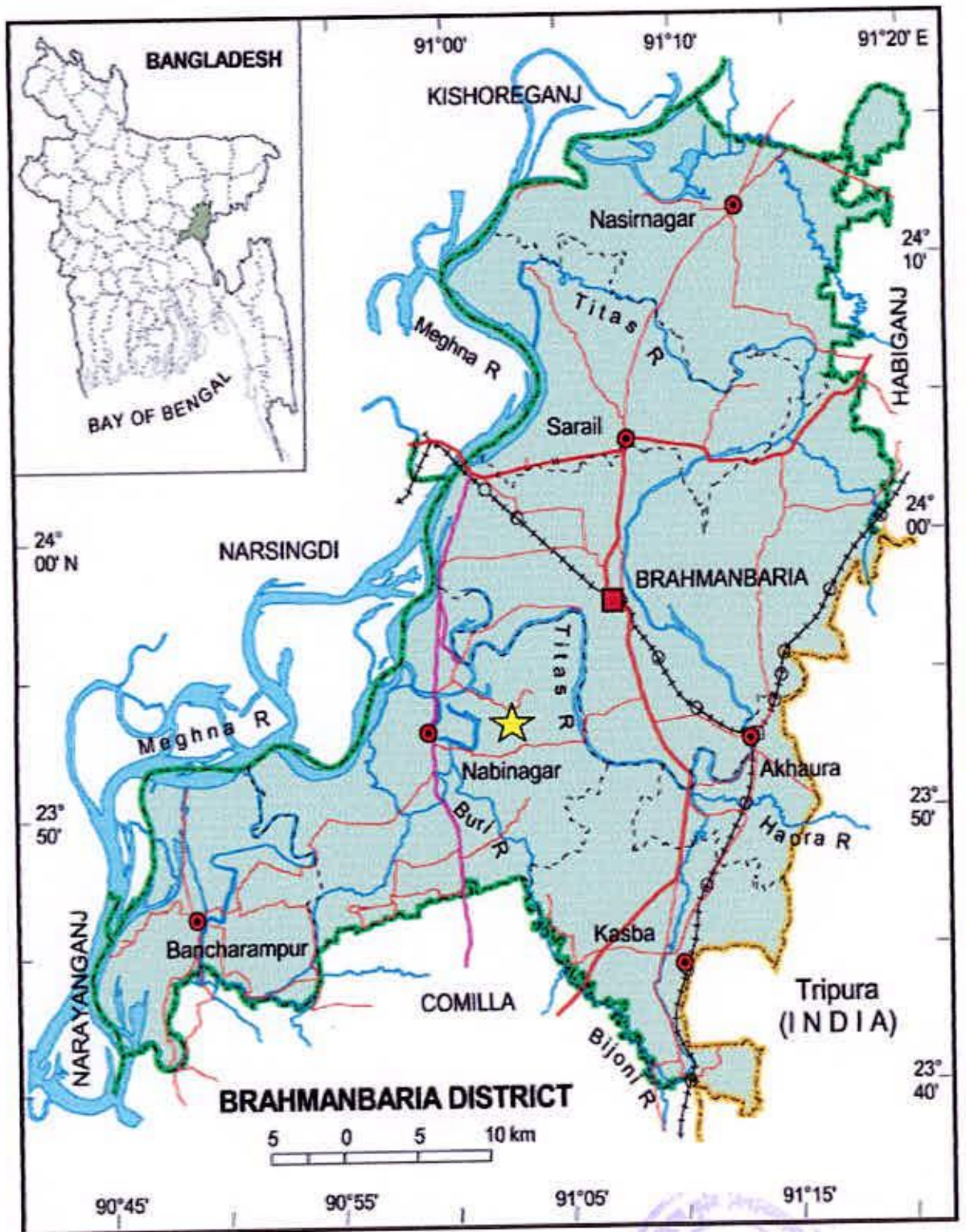
The researcher himself with the help of local leaders like chairman, member and SAAO prepared an updated list of all elite rural people of five selected villages. In this study elite rural people means rich farmer, school teachers, college teachers and service holders. The total number of elite rural people were 340, which constituted the population of the study. From this population

102 elite rural people (30% of the population) were randomly selected as the sample. A reserve list of 17 elite rural people (5% of the population) was also prepared. The elite rural people in the reserve list were used only when a respondent in the original list was not available for interview.

The distribution of the population, sample and respondents of a reserve list are shown in Table 3.1.

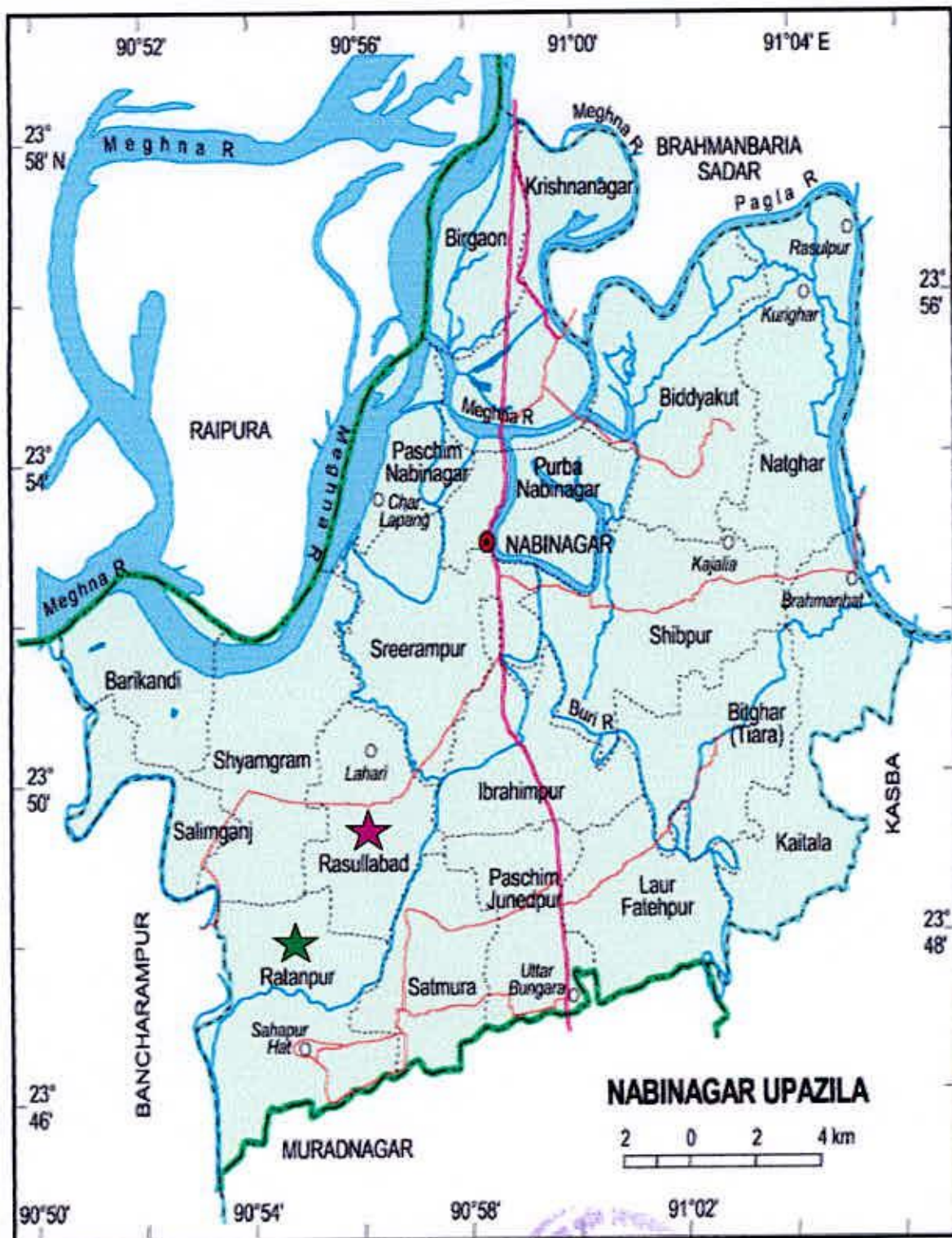
Table 3.1 Distribution of the population, sample and respondents included in the reserve list

Elite rural people	Population size	Sample size	Reserve list size
Rich farmer	102	31	5
School teacher	90	26	4
College teacher	48	14	3
Service holder	100	31	5
Total	340	102	17



★ = Nabinagar Upazilla

Figure 3.1 Map of Brahmanbaria district showing the locale of the study



- ★ = Rasullabad Union
- ★ = Ratanpur Union

Figure 3.2 Map of Nabinagar upazila of Brahmanbaria district

3.3 Preparation of Data Gathering Instrument

In order to collect relevant information, an interview schedule was prepared carefully keeping the objective of the researcher in view. The questions and statements contained in the schedule were simple, direct and easily understandable to the elite rural people. The schedule contained both open and closed form questions. Appropriate scales and measurement techniques were developed to ensure correct responses of the variable concerned.

After devoting considerable time and efforts to prepare the interview schedule, the researcher felt further improvement of the schedule. The interview schedule was pre-tested with 20 elite rural people under actual situation. Corrections, alterations and adjustments were done in the schedule on the basis of the pre-test result. Then it was finalized and ready for data collection.

An English version of the interview schedule has been presented in Appendix-I.

3.4 Data Collection Procedure

Data were collected from the sample elite rural people through personal contact by the researcher himself. Prior to data collection, the researcher met with the local leaders like Chairman, Member and SAAO. Researcher requested them to provide necessary help and co-operation for data collection. The researcher made all possible efforts to establish rapport with the respondents so that they could feel easy to respond to the questions contained in the schedule. All possible efforts were made to explain the purpose of the study to the respondents and their answers were recorded sincerely. Whenever, any respondent felt difficulty in understanding any question, care was taken to help him getting understand of the same. The researcher in collecting data faced no serious problem. Excellent co-operation and co-ordination were extended by the respondents and other concerned persons at the time of data collection.

Though the researcher made every endeavor to arrive the respondents' entire house, it was not possible to collect data from seven elite rural people of the sample, as they were not available during interviewing. Therefore, the researcher compelled to replace the unavailable respondents by seven individuals from the reserve list. Collection of data took 27 days from 15th May 2008 to 10th June 2008.

3.5 Processing of Data

Data collected from the respondents were coded, compiled, tabulated and analyzed in accordance with the objective of the study. Qualitative data were converted into quantitative form by means of suitable scoring whenever needed.

3.6 Selection of Dependent and Independent Variables

The researcher employed adequate care in selecting the variables of the study. Considering personal, economic, social and psychological factors of the rural community, time and resources availability to researcher, reviewing relevant literature and discussing with relevant expert, the researcher selected the variables for the study.

Two types of variables were used in this study e.g., independent and dependent variables. Townsend (1953) defined an independent variable as that factor manipulated by the experimenter in his attempt to ascertain its relationship to an observed phenomenon. He also defined a dependent variable as that factor which appears, disappears, or varies as the experimenter introduces, removes or varies the independent variables.

3.7 Independent Variables

The following selected characteristics of elite rural people were considered as independent variables of this study:

- a) Age
- b) Education
- c) Farm size
- d) Time spent for farm work
- e) Annual family income
- f) Organizational participation
- g) Cosmopolitaness
- h) Extension contact
- i) Knowledge on agriculture

3.8 Dependent Variables

Attitude of Elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was the dependent variable of this study.

3.9 Measurement of Variables

Measurements of variables constitute an important task of social research. This section contains procedures for measurement of independent variables and dependent variables of the study.

3.9.1 Measurement of independent variables

3.9.1.1 Age

Age of a respondent was measured by counting the years from his birth to the time of interview. Age was measured in terms of years on the basis of his response. A score of one (1) was assigned for each year of age. It was measured in complete years as reported by a respondent. For example, a respondent of 23 years of age scored 23.

3.9.1.2 Education

Education of a respondent was measured in terms of classes passed by his in formal education system (i.e. school, college and university). A score of one (1) was assigned for each completed year of schooling. If a respondent passed the final examination of class V in the school, a score of five was taken for calculating his education score. A respondent who could sign only was given an education score of 0.5 and a respondent who did not know reading and writing was given an education score of zero (0).

3.9.1.3 Farm size

Farm size of a respondent was measured based on total land possessed by the respondent. Farm size is expressed in terms of hectares by using the following formula;

$$\text{Farm size} = A + B + C + \frac{1}{2}(D + E) + F$$

Where,

A = Own homestead land

B = Own land under own cultivation

C = Own pond and garden

D = Own land given on barga to others

E = Land taken on barga from others

F = Land taken on lease from others

3.9.1.4 Time spent for farm work

Time spent for farm work of the respondents was measured in hour. A score of one (1) was assigned for each hour.

3.9.1.5 Annual family income

Annual family income of a respondent was measured in taka on the basis of total yearly earnings of the respondents from different sources like agriculture,

livestock, poultry, fishery, business and services according to his response. A score of one (1) was assigned for each of '000' taka of the annual family income of a respondent.

3.9.1.6 Organizational participation

The organizational participation score was computed for each respondent on the basis of his membership with different type of organization.

The following scale was used for computing the organizational participation score.

Categories of participation	Score
Participation as president/secretary for one year	3
Participation as executive member for one year	2
Participation as ordinary member for one year	1
No participation	0

Organizational participation of a respondent was obtained by multiplying the score of his participation status with his corresponding duration (in year) in all the organizations and then added together.

Therefore, the total score of organizational participation was computed in the following way:

$$\text{Organizational participation score} = \sum P_0 \times 1 + \sum P_e \times 2 + \sum P_{ps} \times 3$$

Where,

P_0 = Total duration (year) of participation as ordinary member

P_e = Total duration (year) of participation as executive member

P_{ps} = Total duration (year) of participation as president/secretary

3.9.1.7 Cosmopolitaness

Cosmopolitaness is defined as the degree to which an individual visit outside of his locality from his particular social system. A Cosmopolitaness score was computed for each respondent to determine the degree of his exposure on the basis of his number of visits to different types of places. Each respondent was asked to indicate the number of places to eight different types of places by checking any one of five responses; regularly, often, occasionally, rarely and not at all. Weights assigned to his responses were 4,3,2,1 and 0 respectively according to the nature of visits as presented below:

Place of visit	Weighting system
1.Other villages	0 = 0 time/week 1 = 1 time/week 2 = 2 times/week 3 = 3 times/week 4 = more than 3 times/week
2.Local market	0 = 0 time/month 1= 1-2 times/month 2= 3-4 times/month 3= 5-6 times/month 4= more than 6 times/month
3.Visit to other union	0 = 0 time/month 1 = 1 time/ month 2 = 2 times/month 3 = 3 times/month 4 = more than 3 times/month
4.Upazilla DAE office	0 = 0 time/year 1 =1-2 times/year 2 = 3-4 times/year 3 = 5-6 times/year 4 = more than 6 times/year

5. Other upazilla sadar	0 = 0 time/year 1 = 1-2 times/year 2 = 3-4 times/year 3 = 5-6 times/year 4 = more than 6 times/year
6. District DAE office	0 = 0 time/year 1 = 1 time/year 2 = 2 times/year 3 = 3 times/year 4 = more than 3 times/year
7. Other district sadar	0 = 0 time/year 1 = 1 time/year 2 = 2 times/year 3 = 3 times/year 4 = more than 3 times/year
8. Visit to big cities	0 = 0 time/year 1 = 1 time/year 2 = 2 times/year 3 = 3 times/year 4 = more than 3 times/year

Cosmopolitanism of a respondent was obtained by summing up the weights for his visit to the 8 types of places. The cosmopolitanism score could range from 0 to 32, while 0 indicating no cosmopolitanism and 32 indicating highest level of cosmopolitanism.

3.9.1.8 Extension contact

Extension contact of a respondent may be defined as one's extent of contact to different communication media. The extent of contact was determined against 5 point rating scales as regularly, often, occasionally, rarely and not at all and

score was assigned as 4,3,2,1 and 0 respectively. For all the 19 selected communication media, it has been described as follows:

Extent of contact	Assigned score
Not at all	0
Rarely	1
Occasionally	2
Often	3
Regularly	4

The extension contact of a respondent was therefore, determined by adding the total responses against 19 selected communication media. The extension contact score could range from 0 to 76, where 0 indicating no extension contact and 76 indicating very high contact.

3.9.1.9 Knowledge on agriculture

It referred to the knowledge gained by the farmers from different media and also through their experience of farming. For measuring the knowledge on agriculture of a respondent, a knowledge scale was developed. For this, each respondent was asked 10 questions covering the different aspects of agriculture. Each question had a predetermined assigned score of 1, making a total score of 10. For correct responses to all the 10 questions, a respondent could secure a total score of 10. For wrong responses to all the questions he could get a score of zero (0). For partial correct responses, scores were assigned accordingly. The sum of total scores for all the 10 questions yielded the knowledge score of a respondent. Thus, the score of the respondents about knowledge on agriculture could range from 0 to 10, when 0 indicates no knowledge and 10 indicate very high knowledge on agriculture.

3.9.2 Measurement of dependent variables

3.9.2.1 Attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

An attitude may be defined as predisposition to act towards an object in a certain manner. Attitude of a respondent towards extension activities of DAE was used to refer his feeling, belief and action tendency towards the various aspects of DAE's activities.

Lickert-type attitude scale was used to determine the attitude towards extension activities of DAE. Attitude of a respondent towards extension activities of DAE was measured by using a scale for 20 statements (10 positive and 10 negative). These statements include the predisposition of elite rural people towards extension activities of DAE and these were collected after thorough consultation with the relevant expert. The respondent was asked to indicate his agreement or disagreement by checking any one of the responses like strongly agree, agree, no opinion, disagree and strongly disagree. Weights were assigned to the responses as 4, 3, 2, 1 and 0 respectively for positive statement and the scoring system was reversed for the negative statements. The attitude score of a respondent was determined by adding up the weights for all the responses against 20 statements. Thus, attitude score of a respondent could range from 0 to 80, where 0 indicating unfavorable attitude and 80 indicating highly favorable attitude towards extension activities of DAE.

3.10 Data Processing and Analysis

3.10.1 Compilation of data

After completion of field survey data from all the interview schedules were coded, compiled, tabulated and analyzed in accordance with the objectives of the study. In this process, all the responses in the interview schedule were given numerical coded values. Local units were converted into standard units and qualitative data were converted into quantitative ones by means of suitable

scoring system whenever necessary. The responses to the questions in the interview schedules were transferred to a master sheet to facilitate tabulation.

3.10.2 Categorization of data

For describing the independent and dependent variables, the respondents were classified into several categories in respect of each variable. These categories were developed by considering the nature of distribution of data, general understanding prevailing in the social system and possible scores system. The procedure for categorization of data in respect of different variable is discussed elaborately while describing those variables in Chapter 4.

3.10.3 Statistical techniques of data analysis

The computer software SPSS (Statistical Package for Social Sciences) was used to analyze the data. The following statistical treatments were used to describe, represent and explanation of the relationships and contributions of the variables included in the study.

Descriptive statistical measures such as range, mean, number and percentage distribution, standard deviation were used to describe and interpret the data.

For exploring relationships between any two variables Pearson's Product Moment Correlation (r) was used. Correlation matrix was also computed to determine the inter-relationship among the variables. If the computed value of coefficient of correlation ' r ' was equal or greater than the table value of coefficient at designated level of significant for the relevant degree of freedom, the null hypothesis was rejected and it was concluded that there was significant relationship between the concerned variables. However, when the computed value of coefficient of correlation was found to be smaller than the tabulated value designated level of significant for the relevant degree of freedom, it was

concluded that the null hypothesis could not be rejected and hence there was no significant relationship between the concerned variables.

3.11 Hypotheses of the Study

According to Kerlinger (1973) a hypothesis is a conjectural statement of the relation between two or more variables. Hypothesis are always in declarative sentence form and they are related, either generally or specifically from variables to variables. In broad sense hypotheses are divided into two categories: (a) Research hypothesis and (b) Null hypothesis.

3.11.1 Research hypotheses

To find out relationship between variables a researcher first formulates research hypothesis which narrates anticipated relationships between the variables. Based on review of literature and development of conceptual framework, the following research hypotheses were formulated:

“Each of the 9 selected characteristics (age, education, farm size, time spent for farm work, annual family income, organizational participation, cosmopolitanism, extension contact and knowledge on agriculture) of the elite rural people has significant relationships with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

However, when a researcher tries to perform statistical tests, then it becomes necessary to formulate null hypotheses.

3.11.2 Null hypothesis

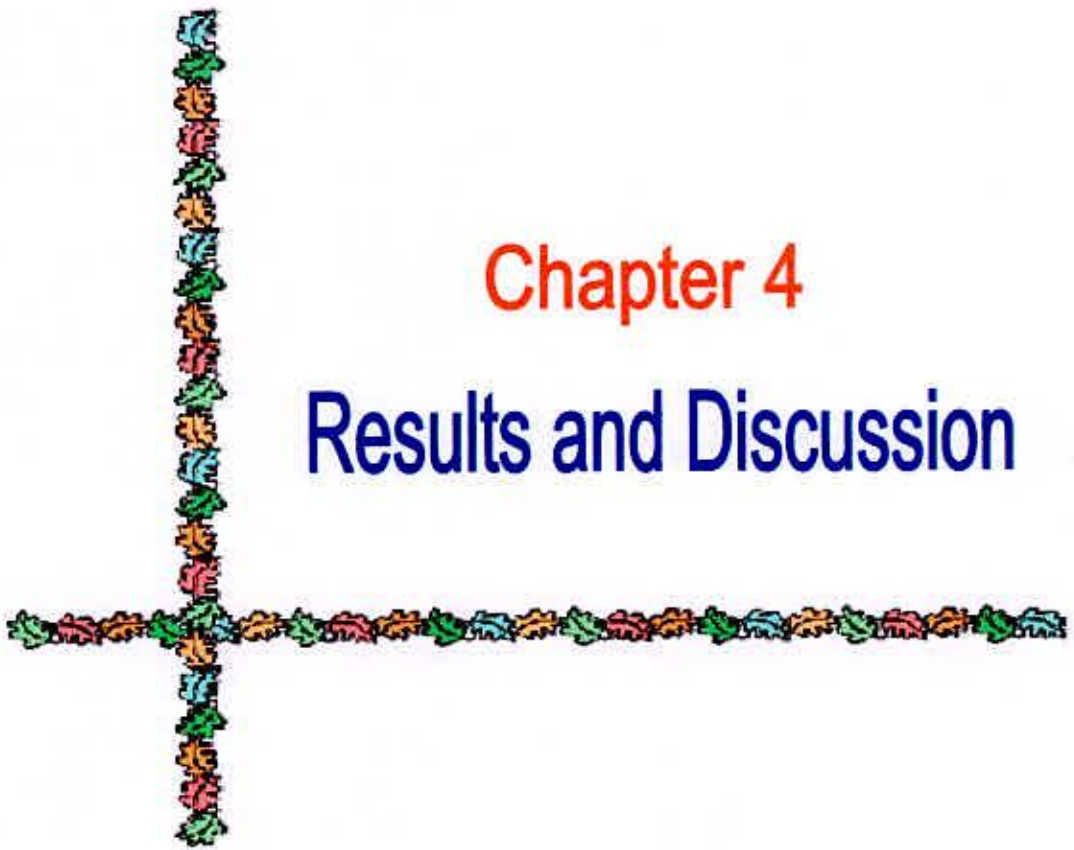
A null hypothesis states that there is no relationship between the concerned variables. The following null hypotheses were formulated to explore the relationships between the extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. Hence, in order to

conduct tests, the earlier research hypotheses were converted into null form as follows:

- I. There is no relationship between age of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.
- II. There is no relationship between education of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.
- III. There is no relationship between farm size of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.
- IV. There is no relationship between time spent for farm work of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.
- V. There is no relationship between annual family income of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.
- VI. There is no relationship between organizational participation of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.
- VII. There is no relationship between cosmopolitness of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.
- VIII. There is no relationship between extension contact of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.
- IX. There is no relationship between knowledge on agriculture of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Chapter 4

Results and Discussion



CHAPTER 4

RESULTS AND DISCUSSION

The findings of this study and their logical interpretation have been systematically presented in different sections of this chapter according to the objectives of the study. The chapter is divided into three sections. The first section deals with the attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. The second section deals with the selected characteristics of the elite rural people. Finally, in the third section, discussions have been made on the relationships between selected characteristics of the elite rural people and their extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.1 Attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

Attitude of elite rural people 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, elite rural people were classified into three categories such as less favorable attitude, moderate favorable attitude and high favorable attitude. Distribution of respondents according to their attitude score is presented in Table 4.1.

Table 4.1 Distribution of elite rural people according to their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

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

The data in the table 4.1 revealed that, highest proportion (43.14 percent) of the respondents had moderate favorable attitude compared to 33.33 percent having high favorable attitude and 23.53 percent had less favorable attitude. Data also revealed that about three fourth (76.47 percent) of the elite rural people had moderate to high favorable attitude. This is may be due to agricultural extension personnel make regular contact with the elite rural people. Agricultural extension personnel also try to solve any problem faced by elite rural people in agricultural activities.

4.2 Selected Characteristics of the Respondents

According to the objectives of the study, data were collected from a sample of 102 respondents. The n selected characteristics of elite rural people 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 4.2.

Table 4.2 Descriptive statistics and salient features of elite rural people characteristics

Characteristics	Measuring unit	Range (observed)	Categories	Number	Per cent	Mean	Standard Deviation
Age	Years	25-62	Young (up to 35)	26	25.49	43.39	9.09
			Middle (36 to 50)	54	52.94		
			Old (> 50)	22	21.57		
Education	Assigned score	0-15	Below secondary (< 10)	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	0.7-2.9	Small (up to 1)	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	1-9	Low farming time (up to 1)	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	100- 270	Low (<125)	23	22.55	181.13	52.71
			Medium (125 to 225)	47	46.08		
			High (>225)	32	31.37		
Organizational participation	Assigned score	2-27	Low participation (Up to 10)	13	12.75	15.72	5.44
			Medium participation (11-20)	76	74.50		
			High participation (>20)	13	12.75		
Cosmopolitan-ess	Assigned score	7-23	Low (up to 11)	23	22.55	14.65	4.16
			Medium (12-16)	46	45.10		
			High (above 16)	33	32.35		
Extension contact	Assigned score	11-59	Low (11-25)	24	23.53	34.94	12.75
			Medium (26-40)	41	40.20		
			High (above 40)	37	36.27		
Knowledge on agriculture	Assigned score	2-8	Poor knowledge (up to 3)	15	14.71	4.83	1.56
			Medium knowledge (4-5)	57	55.88		
			High knowledge (>5)	30	29.41		

Followings are the findings of each of the selected characteristics of the respondents in separate table along with the interpretations.

4.2.1 Age

The age of the elite rural people ranged from 25 to 62 with a mean and standard deviation of 43.39 and 9.09 respectively. The respondents were classified into three categories viz. 'young', 'middle' and 'old' on the basis of their observed age. The distribution of the elite rural people according to their age is presented in Table 4.3.

Table 4.3 Distribution of elite rural people according to their age

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Young (up to 35)	26	25.49	43.39	9.09
Middle (36 to 50)	54	52.94		
Old (> 50)	22	21.57		
Total	102	100.00		

Data in the table 4.3 indicates that the middle aged elite rural people constituted the highest proportion (52.94 percent) of the elite rural system followed by young aged category (25.49 percent) and old aged category (21.57 percent). Data also indicates that the middle aged elite rural people constituted more than half of the respondents. Young and middle aged people are generally more receptive to new ideas and practices. They may have favorable attitude towards activities of DAE. However the older aged elite people might have favorable attitude in regard to activities of DAE due to their longer experience. The upazilla agricultural extension personnel can make use of their views and opinions in designing their extension activities.

4.2.2 Education

The educational scores of the elite rural people ranged from 0.5 to 17 with a mean and standard deviation of 10.44 and 4.94 respectively. Based on their educational scores, the elite rural people were classified into three categories such as 'below secondary', 'secondary & higher secondary' and 'graduation & masters'. The distribution of the elite rural people according to their education has been presented in Table 4.4.

Table 4.4 Distribution of elite rural people according to their education

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Below secondary (< 10)	27	26.47	10.44	4.94
Secondary & Higher Secondary (10-12)	38	37.26		
Graduation & Masters (14-17)	37	36.27		
Total	102	100.00		

Data in the table 4.4 showed that elite rural people under secondary & higher secondary category constituted the highest proportion (37.26 percent) compared to 26.47 percent below secondary and 36.27 percent under graduation & masters category. It was found that an overwhelming majority (73.53 percent) of the elite rural people had education ranged from secondary to masters. Highly educated elite rural people may show favorable attitude towards activities of DAE as they are more conscious about their surroundings. Educated persons keep contact with other educated person. Be a farmer, school teacher, college teacher, service holder for their own interest they meet with DAE personnel.

4.2.3 Farm size

The farm size of the elite rural people ranged from 0.7 hectare to 2.9 hectare with a mean, and standard deviation of 1.52 and 0.53 respectively. Based on

their farm size, the respondents were classified into three categories. These categories were

Categories	Farm Size
Small farm holder	up to 1 ha
Medium farm holder	1.1 – 2ha
Large farm holder	above 2ha

The distribution of the elite rural people according to their farm size categories has been presented in Table 4.5.

Table 4.5 Distribution of elite rural people according to their Farm Size

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Small (up to 1)	18	17.64	1.52	0.53
Medium (1.1 – 2)	65	63.73		
Large (above 2)	19	18.63		
Total	102	100.00		

Data in the table 4.5 indicated that majority (63.73 percent) of the respondents belonged to medium farm size category compared to 17.64 percent of the respondents had small size farm size and 18.63 percent of the respondents had large farm size. Here the farm size of the respondents are larger than the national average which is 0.28 acre (BBS, 2001). This is may be due to that they are elite people of the rural area, they are involved in different activities. Larger the farm size stronger the rural power holdings. Generally rural elite people are the rich man and possess large farm size. Due to the possession of large farm size they possess rural power and supposed to be opinion leaders. So, their attitude towards DAE personnel is considered to be important in respect of technology transfer.

4.2.4 Time spent for farm work

Time spent for farm work score ranged from 1 to 9, the average being 3.22 with standard deviation 2.61. The distribution of elite rural people according to their time spent for farm work is given on table 4.6.

Table 4.6 Distribution of elite rural people according to their time spent for farm work

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Low farming time (up to 1)	22	21.57	3.22	2.61
Medium farming time (2-3)	57	55.88		
High farming time (above 3)	23	22.55		
Total	102	100.00		

Data in the table 4.6 showed that highest percentage (55.88) of respondents fell into medium farming time, whereas 21.57 percentage respondents involved in low farming time and 22.55 percentage respondents involved high farming time. More than three-fourth of the respondents (78.43 percent) spent time for farming ranged from medium to high. In fact, all the rural elite people spent time for their own farm work. Some respondents performed some farm works by themselves, some respondents gave instructions farm works what to do. So, acquire the scientific knowledge about farm works by coming in contact with DAE personnel.

4.2.5 Annual family income

Annual family income of the respondents ranged from 100 to 270 thousands taka with a mean and standard deviation of 181.13 and 52.71 respectively. On the basis of their Annual family income, the respondents were classified into three categories, such as low family income, medium family income and high family income. The distribution of the elite rural people according to farm size categories has been presented in Table 4.7.

Table 4.7 Distribution of elite rural people according to their annual Family Income

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Low (<125)	23	22.55	181.13	52.71
Medium (125 to 225)	47	46.08		
High (>225)	32	31.37		
Total	102	100.00		

Data in table 4.7 revealed that the elite rural people 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 more 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.

4.2.6. Organizational Participation

Organizational Participation score of the respondents ranged from 2 to 27 with a mean and standard deviation of 15.72 and 5.44 respectively. According to observed score of duration of involvement, the respondents were classified into three categories viz. 'low participation, 'medium participation' and 'high participation'. The distribution of the elite rural people according to duration of involvement in different organization has been presented in Table 4.8.

Table 4.8 Distribution of elite rural people according to their organizational participation

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Low participation (Up to 10)	13	12.75	15.72	5.44
Medium participation (11-20)	76	74.50		
High participation (>20)	13	12.75		
Total	102	100.00		

Data in the table 4.8 showed that the 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. Organizational participation enhances the elite rural people to share their knowledge and experience with other personnel. It also enables them to broaden their mental make up as well as to form favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.2.7. Cosmopolitaness

The observed cosmopolitaness scores of the respondents ranged from 7 to 23 with a mean 14.65 and standard deviation 4.16. On the basis of cosmopolitaness scores, the elite rural people were classified into three categories as shown in table 4.9.

Table 4.9 Distribution of elite rural people according to their cosmopolitaness

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Low (up to 11)	23	22.55	14.65	4.16
Medium (12-16)	46	45.10		
High (above16)	33	32.35		
Total	102	100.00		

Here data revealed that maximum (45.10 percent) respondent had medium cosmopolitaness followed by 22.55 percent had low cosmopolitaness and 32.35 had high cosmopolitaness. That means three-fourth of the respondents (77.45 percent) fell into medium to high cosmopolitaness. Through cosmopolitaness quality an individual becomes aware of the recent information. Here maximum respondents had medium cosmopolitaness so they may form favorable attitude

towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.2.8. Extension Contact

Extension Contact scores of the respondents ranged from 11 to 59 with a mean and standard deviation of 34.94 and 12.75. On the basis of extension contact scores, the elite rural people were classified into three categories as shown in the table 4.10.

Table 4.10 Distribution of elite rural people according to their extension contact

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Low (11-25)	24	23.53	34.94	12.75
Medium (26-40)	41	40.20		
High (above 40)	37	36.27		
Total	102	100		

Data presented in the table 4.10 indicated that 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. The findings of the study indicate that most of the respondents (76.47 percent) had medium to high extension contact. Extension contact had an important role in order to form favorable attitude. Here most of the elite rural people had medium extension contact, as they are elite people and like to contact with others like individual media, group media and mass media.

4.2.9 Knowledge on agriculture

Knowledge on agriculture score of elite rural people could range from 0 to 10 with the observed range of 2 to 8. The mean and standard deviation of agricultural knowledge of the respondents was 4.83 and 1.56 respectively. On

the basis of observed knowledge scores, the respondents were classified into three categories namely, 'poor knowledge', 'medium knowledge' and 'high knowledge'. The distribution of the respondents according to their knowledge is given in Table 4.11.

Table 4.11 Distribution of elite rural people according to their knowledge on agriculture

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Poor knowledge (up to 3)	15	14.71	4.83	1.56
Medium knowledge (4-5)	57	55.88		
High knowledge (>5)	30	29.41		
Total	102	100.00		

Data of Table 4.11 revealed that 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. Knowledge is to be considered as vision of an explanation in any aspect of the situation. It is the act or state of understanding; clear perception of fact or truth that helps an individual to foresee the consequence he may have to face in future. It makes individuals to become rational and conscious about related field. An overwhelming majority (85.29 percent) of the respondents had medium to high knowledge on agriculture which helps the elite rural people to form of favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.3 Relationships between the selected characteristics of elite rural people and their extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

Coefficient of correlation was computed in order to explore the relationships between the selected characteristics of the elite rural people and the 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 4.12. However, the inter-correlations among different independent and dependent variables have also have been computed by using Pearson's Product Moment Correlation Coefficient and the results have been presented in Appendix II.

Table 4.12 Results of relationships between the selected characteristics of the elite rural people and their extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

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

* Significant at 0.05 level of probability,

** Significant at 0.01 level of probability

4.3.1 Relationship between age and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

The relationship between age and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was examined by testing the following null hypothesis:

“There is no relationship between age and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

The correlation coefficient (r) between age and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was found (0.186) in table 4.12. This led to the following observation regarding the relationship between the variables under consideration:

- The relationship showed a positive trend.
- The computed value of ' r '=0.186 which was smaller than the table value (r =0.195) with 100 degrees of freedom at 0.05 level of probability.
- The correlation coefficient between the concerned variable was insignificant at 0.05 level of probability.
- Although the ' r ' value was found to be insignificant but its tendency was near to be significant.

On the basis of above findings, the null hypothesis could be accepted. Hence, the researcher concluded that age of the elite rural people had no significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. That is irrespective of age category all the respondents of the study were hold more or less similar attitude towards the performance of DAE personnel.

4.3.2 Relationship between education and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

The relationship between education and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was examined by testing the following null hypothesis:

“There is no relationship between education and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

The correlation coefficient (r) between education and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was found (0.619) in table 4.12. This led to the following observation regarding the relationship between the variables under consideration:

- The relationship showed a positive trend.
- The computed value of ' r '=0.619 which was much greater than the table value (r =0.254) with 100 degrees of freedom at 0.01 level of probability.
- The correlation coefficient between the concerned variable was significant at 0.01 level of probability.

On the basis of above findings, the null hypothesis was rejected. Hence, it could be concluded that education of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. And with increasing elite rural people's level of education they would form favorable attitude towards the extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.3.3 Relationship between farm size and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

The relationship between farm size and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was examined by testing the following null hypothesis:

“There is no relationship between farm size and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

The correlation coefficient (r) between farm size and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was found (0.562) in table 4.12. This led to the following observation regarding the relationship between the variables under consideration:

- The relationship showed a positive trend.
- The computed value of ' r '=0.562 which was much greater than the table value (r =0.254) with 100 degrees of freedom at 0.01 level of probability.
- The correlation coefficient between the concerned variable was significant at 0.01 level of probability.

On the basis of above findings, the null hypothesis could be rejected. Hence, therefore it could be concluded that farm size of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. And the elite rural people's having large farms are generally economically solvent and they showed favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.3.4 Relationship between time spent for farm work and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

The relationship between time spent for farm work and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was examined by testing the following null hypothesis:

“There is no relationship between time spent for farm work and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

The correlation coefficient (r) between time spent for farm work and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was found (0.455) in table 4.12. This led to the following observation regarding the relationship between the variables under consideration:

- The relationship showed a positive trend.
- The computed value of ' r '=0.455 which was much greater than the table value (r =0.254) with 100 degrees of freedom at 0.01 level of probability.
- The correlation coefficient between the concerned variable was significant at 0.01 level of probability.

On the basis of above findings, the null hypothesis could be rejected. Hence, it was therefore concluded that time spent for farm work of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. And with more engaging in farming activities help elite rural people to form favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.3.5 Relationship between annual family income and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

The relationship between annual family income and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was examined by testing the following null hypothesis:

“There is no relationship between annual family income and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

The correlation coefficient (r) between annual family income and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was found (0.079) in table 4.12. This led to the following observation regarding the relationship between the variables under consideration:

- The relationship showed a positive trend.
- The computed value of ' r '=0.079 which was smaller than the table value (r =0.195) with 100 degrees of freedom at 0.05 level of probability.
- The correlation coefficient between the concerned variable was insignificant at 0.05 level of probability.

On the basis of above findings, the null hypothesis could be accepted. Hence, the researcher concluded that annual family income of the elite rural people had no significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.3.6 Relationship between organizational participation and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

The relationship between organizational participation and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was examined by testing the following null hypothesis:

“There is no relationship between organizational participation and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

The correlation coefficient (r) between organizational participation and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was found (0.612) in table 4.12. This led to the following observation regarding the relationship between the variables under consideration:

- The relationship showed a positive trend.
- The computed value of ' r '=0.612 which was much greater than the table value (r =0.254) with 100 degrees of freedom at 0.01 level of probability.
- The correlation coefficient between the concerned variable was significant at 0.01 level of probability.

On the basis of above findings, the null hypothesis could be rejected. Hence, it could be concluded that organizational participation of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. More organizational participation enables them to broaden their mental make up as well as to form favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.3.7 Relationship between cosmopolitaness and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

The relationship between cosmopolitaness and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was examined by testing the following null hypothesis.

“There is no relationship between cosmopolitaness and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

The correlation coefficient (r) between cosmopolitaness and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was found (0.579) in table 4.12. This led to the following observation regarding the relationship between the variables under consideration:

- The relationship showed a positive trend
- The computed value of ' r '=0.579 which was much greater than the table value (r =0.254) with 100 degrees of freedom at 0.01 level of probability.
- The correlation coefficient between the concerned variable was significant at 0.01 level of probability.

On the basis of above findings, the null hypothesis could be rejected. Hence, it was therefore concluded that cosmopolitaness of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. Through increasing cosmopolitaness an individual becomes more aware of the recent information and consequently they form favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.3.8 Relationship between extension contact and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

The relationship between extension contact and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was examined by testing the following null hypothesis.

“There is no relationship between extension contact and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

The correlation coefficient (r) between extension contact and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was found (0.594) in table 4.12. This led to the following observation regarding the relationship between the variables under consideration:

- The relationship showed a positive trend.
- The computed value of ' r '=0.594 which was much greater than the table value (r =0.254) with 100 degrees of freedom at 0.01 level of probability.
- The correlation coefficient between the concerned variable was significant at 0.01 level of probability.

On the basis of above findings, the null hypothesis could be rejected. Hence, the researcher concluded that extension contact of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. With increasing extension contact the elite rural people form more favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

4.3.9 Relationship between knowledge on agriculture and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

The relationship between knowledge on agriculture and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was examined by testing the following null hypothesis.

“There is no relationship between knowledge on agriculture and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel”.

The correlation coefficient (r) between knowledge on agriculture and attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel was found (0.590) in table 4.12. This led to the following observation regarding the relationship between the variables under consideration:

- The relationship showed a positive trend.
- The computed value of ' r '=0.590 which was much greater than the table value (r =0.254) with 100 degrees of freedom at 0.01 level of probability.
- The correlation coefficient between the concerned variable was significant at 0.01 level of probability.

On the basis of above findings, the null hypothesis could be rejected. Hence, it could be concluded that knowledge on agriculture of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. Higher knowledge of the elite rural people increases the formation of favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.



Chapter 5

Summary, Conclusions and Recommendations

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

5.1.1 Introduction

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. 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. In this regard it is necessary to know the “Attitude of Elite Rural People towards Extension Activities of DAE Performed by Upazilla Agricultural Extension Personnel”.

5.1.2 Specific Objectives

The following specific objectives were formulated to give proper direction of the study.

1. To determine and describe the attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

2. To determine and describe some selected characteristics of elite rural people.

The selected characteristics were as follows:

- I. Age
- II. Education
- III. Farm size
- IV. Time spent for farm work
- V. Annual family income
- VI. Organizational participation
- VII. Cosmopolitaness
- VIII. Extension contact
- IX. Knowledge on agriculture

3. To explore the relationship between the selected characteristics of elite rural people and their extent of attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

5.1.3 Major Findings

5.1.3.1 Attitude elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel

Highest proportion (43.14 percent) of the respondents had moderate favorable attitude compared to 33.33 percent having high favorable attitude and 23.53 percent had less favorable attitude.

5.1.3.2 Characteristics of the elite rural people

Age

Middle aged elite rural people constituted the highest proportion (52.94 percent) followed by young aged category (25.49 percent) and old aged category (21.57 percent).

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.

Farm size

Majority (63.73 percent) of the respondents belonged to medium farm size category, 17.64 percent of the respondents had small size farm size and 18.63 percent of the respondents had large farm size.

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 people 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).

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.

5.1.3.3 Relationship of the selected characteristics of the elite rural people with their attitude towards extension activities of DAE performed by Upazilla Agricultural extension Personnel

Out of 9 selected characteristics of the elite rural people, 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 of DAE performed by Upazilla Agricultural extension Personnel.

Age and attitude

The null hypothesis was accepted on the basis of estimated 'r' value at 0.05 level of probability with 100 degrees of freedom. Hence, the researcher concluded that age of the elite rural people had no significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Education and attitude

The null hypothesis was rejected on the basis of estimated 'r' value at 0.01 level of probability with 100 degrees of freedom. Hence, it could be concluded

that education of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Farm size and attitude

The null hypothesis was rejected on the basis of estimated 'r' value at 0.01 level of probability with 100 degrees of freedom. Hence, therefore it could be concluded that farm size of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Time spent for farm work and attitude

The null hypothesis was rejected on the basis of estimated 'r' value at 0.01 level of probability with 100 degrees of freedom. Hence, it was therefore concluded that time spent for farm work of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Annual family income and attitude

The null hypothesis was accepted on the basis of estimated 'r' value at 0.05 level of probability with 100 degrees of freedom. Hence, the researcher concluded that annual family income of the elite rural people had no significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Organizational participation and attitude

The null hypothesis was rejected on the basis of estimated 'r' value at 0.01 level of probability with 100 degrees of freedom. Hence, it could be concluded that organizational participation of the elite rural people had positive significant

relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Cosmopolitanism and attitude

The null hypothesis could be rejected on the basis of estimated 'r' value at 0.01 level of probability with 100 degrees of freedom. Hence, it was therefore concluded that cosmopolitanism of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Extension contact and attitude

The null hypothesis was rejected on the basis of calculated 'r' value at 0.01 level of probability with 100 degrees of freedom. Hence, the researcher concluded that extension contact of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

Knowledge on agriculture and attitude

The null hypothesis was rejected on the basis of calculated 'r' value at 0.01 level of probability with 100 degrees of freedom. Hence, it could be concluded that knowledge on agriculture of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.



5.2 Conclusions

The researcher observed the attitude elite rural people towards extension activities of DAE performed by Upazilla Agricultural extension Personnel with a great care and put forwarded the following conclusions on the basis of the findings and its logical interpretations:

1. Most of the elite rural people (43.14 percent) had moderate favorable attitude towards extension activities of DAE performed by Upazilla Agricultural extension Personnel. It is quite logical that most of the elite rural people had medium education, medium farm size, medium organization participation, medium cosmopolitaness, medium extension contact, medium agricultural knowledge, so they showed moderate favorable 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 favorable attitude would convert favorable attitude towards extension activities of DAE performed by Upazilla Agricultural extension Personnel might grow in their mind.
2. Findings of the study showed a significant relationship of education with the attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. Education is a contributory factor of gaining knowledge and skill and has created positive attitude in an individual towards good things. There is a need to enhance the educational level of the elite rural people. It may, therefore, be concluded that enhancement of education among the farmers may would form favorable attitude towards the extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

3. In the study area, an overwhelming majority (82.36 percent) of the elite rural people possessed medium to large farm size and only 17.64 percent possessed small farm size and showed positive and significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. It indicates that with increasing farm size elite rural people showed favorable attitude. The elite rural people having large farms are generally economically solvent and they showed favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. So, GOs and different NGOs should provide credit to the small farm sized elite rural people which help them to increase their farm size in proper way.
4. Time spent for farm work of the elite rural people had a significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. In the study area most of the elite rural people (55.88 percent) were engaged in medium farming time. Therefore it may be concluded that upazilla agricultural extension personnel should provide modern technological information to the elite rural people. And if it is possible then the elite rural people may show interest to spend more time for farm work.
5. Organizational participation of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. This indicates that with the increase of organizational participation of the elite rural people, they showed favorable attitude due to organizational participation enhances to share their knowledge and experience with other personnel. Thus, it may be concluded that organizational participation enables them to broaden their mental make up as well as to form favorable attitude towards extension activities of DAE performed by Upazilla

Agricultural Extension Personnel. Therefore necessary steps may be taken by extension agencies to increase their organizational participation.

6. Attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel had a significant positive relationship with their cosmopolitanness. Through cosmopolitanness an individual becomes aware of the recent information and consequently they form favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel due to influenced by others. It may be concluded that by increasing cosmopolitanness, elite rural people may possess favorable attitude for their better awareness.
7. From the findings, it was revealed that there was a significant positive relationship between extension contact of the elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. So it may be concluded that extension contact had an important role in order to form favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. In the study area it was found that most of the farmers (40.20 percent) had medium extension contact. Therefore it may be conceived that as most of the elite rural people had medium extension contact, so most of the elite rural people showed moderate favorable attitude. However, if the elite rural people's contact with extension media increased, it will help elite rural people to increase more favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.
8. Knowledge on agriculture of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE

performed by Upazilla Agricultural Extension Personnel. It had significant contribution to form favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. Again, an overwhelming majority (85.29 percent) of the respondents had medium to high knowledge on agriculture. These facts lead to the conclusion that higher knowledge of the elite rural people increase the formation of favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

9. Since there was no significant relationship among age, annual family income of elite rural people and their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. It may be concluded that there was no vital role of age and annual family income on attitude elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

5.3 Recommendations

5.3.1 Recommendations for policy implications

Recommendations formulated on the basis of experience, observation and conclusions drawn from the findings of the study and have been prescribed to the concerned authorities, planners and executioners are given below:

1. Though majority of the elite rural people (43.14 percent) showed moderate favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel, but attitude of elite rural people should be more favorable towards the same. Therefore, DAE should undertake need-based program for the elite rural people so that they may be more benefited in the field of agriculture.
2. Education of the elite rural people had significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel, where one fourth of the respondents (26.47 percent) had below secondary education. So, the concerned authority may arrange open school and open college program under Open University in order to increase the educational level of the elite rural people as they are elite people of the society.
3. Farm size of the elite rural people had positive significant relationship with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. In this study, 63.73 percent of the elite rural people had medium farms. These farmers could give more attention to their farming operation as they generally work on their farm. Hence, the upazilla agricultural extension workers should utilize the medium farm holding elite rural people in their extension activities to introduce improved farm practices on a significant scale.

4. Among the elite rural people only 22.5 percent were spend high time for farming. Reasonably time spent for farming work had positive significant relation with attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. In this case, if DAE can provide better technologies to elite rural people then they may be interested to spend more time for farming activities and also show favorable attitude towards the activities of DAE performed by Upazilla Agricultural Extension Personnel.
5. Since organizational participation had positive significant correlation with attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel, it is recommended that the concerned authorities should take necessary steps to mobilize the local organizations for the elite rural people such as DAE may involve rural elite in farmer field school (FFS), elite rural people may used input distribution by farming input supply organization.
6. Cosmopoliteness is a vital factor to increase knowledge and skill of an elite rural people. Persons with cosmopolite orientation come in contact with new people, new ideas and things and high cosmopoliteness makes the elite rural people well-informed towards different information on agriculture and relevant matter. So extension workers should try to utilize the elite rural people with cosmopolite orientation in their extension educational program like training.
7. Extension contact brings more opportunity for the elite rural people to talk with various persons. Thus helps elite rural people to collect up-to-date information on agriculture and other technological messages. It is therefore recommended that arrangement may be made by the DAE and their concerned to increase elite rural peoples' contact with the

extension personnel and other media. That means the extension worker should maintain a close link via personal letter, farm and home visit, farmers' rally, invitation, result demonstration, method demonstration etc. with the elite rural people. This would be helpful to form favorable attitude of the elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel.

8. More knowledge on agriculture leads to favorable attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. Therefore, it may be recommended that upazilla agricultural extension personnel need to take sincere steps like arrangement of training so that the elite rural people could increase their knowledge on agriculture.

5.3.2 Recommendations for further study

It is difficult to provide all information for proper understanding of the attitude of elite rural people towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel. On the basis of scope and limitations of the present study and observation made by the researcher, the following recommendations are made for future study:

1. The present study was concerned with the elite rural people of the Ratanpur and Rasullabad union under Nabinagar upazilla of Brahmanbaria district. Similar studies are required to be conducted in other sites of the country to verify the findings of this study.
2. This study investigated the relationship of nine selected characteristics of the elite rural people with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel as dependent variables. But besides these nine characteristics of the elite rural people there might be other factors. Therefore, it is recommended that further study may be conducted with other independent and dependent variables.
3. Further research should be conducted in order to determine the attitude elite rural people towards different NGOs and other public extension organization like DOF, DLS etc.
4. In the present study age and annual family income of the respondents had no significant relationships with their attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel as dependent variables. In this situation further verification may be necessary.

BIBLIOGRAPHY

- Afrad, M.S.A. 2002. Farmers' Attitude Towards vegetable cultivation in Dumki Upazila of Pareakhali District. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Ahmed, M.B. 2006. Attitude of the Farmer's towards Shrimp Farming in Selected Area of Khulna District. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Ahmed, M.R. 2002. Farmers' knowledge and Attitude towards BRRI Dhan 29 Variety of Rice. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Akanda, M.M.H. 2001. Farmers' Attitude towards Rice Fish Program of CARE in Muktagacha Upazilla of Mymensingh District. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Ali, M. 2002. Attitude of Block Supervisor Towards The Activities Of Non Government Organization. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Ali, M.O. 1995. Attitude of Rural Women of Bangladesh Agricultural University Extension Centre (BAUEC) towards Working in Groups. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

- Allport, G.W. 1935, Attitude, Quoted in: C.M. Murchison (ed.) *Handbook of Social Psychology*. Clark University Press, Worcester, Mass, U.S.A.
- Anon. 2008. *Current Affairs*. Published by Masik Professor's Current Affairs. Dhaka.
- Asch, S. E. 1952. *Social psychology*. Prentice-Hall, Inc, Englewood Cliffs, N. J.
- Bari, M.A. 2000. Attitude of Farmers towards Hybrid Rice AALOK 6201. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- BBS. 2006. *Statistical Yearbook of Bangladesh*. Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning, Government of the Peoples' Republic of Bangladesh, Dhaka.
- BBS. 2001. *Statistical Yearbook of Bangladesh*. Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning, Government of the Peoples' Republic of Bangladesh, Dhaka.
- Canfield, B.R. 1960. *Public Relations: Principles, Cases, Problem*. Richard D. Irwin, Inc. Homewood, Illinois.
- Champbell, D.T, 1950. The Indirect Assessment of Social Attitudes. In: *Psychological Bulletin*. 47:15-38.
- Doob, L. W. (1966). *Public Opinion and Propaganda*. Hamden Conn.: Archon Books.
- Doob, L.W. 1948. *Public Opinion and Propaganda*. New York: Henry Halt.
- Drever, J. (ed.) 1968. *Dictionary of psychology*. UK: English Language Book Society and Penguin Books Ltd.
- Encyclopedia Britannica. 2005. *Encyclopedia Britannica Deluxe Edition*, Encyclopedia Britannica, Inc.

- Goode, W. J. and P. K. Hatt. 1952. *Methods in Social Research*, as quoted in: Wahab, A. M. F. (1975) *Attitude of Farmers towards the use of Fertilizers*. M. Sc. (Ag. Ext. Ed.) Thesis. Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Goode, C.V. 1945. *Dictionery of education*. Mc Graw Hill Book Company, Inc. New York.
- Habib, M. 2000. *Attitude of Block Supervisors towards the Use of Agrochemicals*. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Haque, A.T.M.S. 2006. *Comparison of Attitude towards Organic Fanning between Organic and Conventional Farmers*. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Haque, M.E. 2003. *Farmers' Attitude towards Extension Activities of the Department of Agricultural Extension*. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Hoque, M.M. 1993. *Adoption of Improved Practices in Sugarcane Cultivation by the Sugarcane Growers of Sripur Upazila under Gazipur District*, M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Islam, M.M .and M.A, Kashem. 1997. *Attitude of farmers towards the use of Agrochemical*. *Bangladesh Journal of Training and development* Vol. 10(1&2): 23-28.

- Islam, S.A, M.M. Rahman, M.A.Rahman, F. Khan, Sultan-Ul-Alam, A.K. Barbhmiya. 2000. Introduction to Behavioural Science, Dhaka: The University Press Limited.
- Kasem, M. A. 1987. Small Farmers Constraints to the adoption of Modern Rice Technilogy. The Bangladesh Development of Studies, 15(40): 18-30.
- Kendler, H.H. 1963. Basic Psychology, New York. Appleton-Century-Crofts, Division of Meredith Publishing Company.
- Kerlinger, T. 1993. Foundation of Behavioral Research. Educational and Physical Inquiry. New York: Holt, Rinehart and Winston. Inc.
- Krech, D, RS. Crntchfield and E.L. Ballachey. 1962, Individual in Society. New York: McGraw-Hill, Book Company Inc.
- Kumar, k. and H. K. verma. (1991). Correlates of Farmers Attitude towards Buffalo Management Practices. Research note. Indian Journal of Extension Education. Nol. XXVII (1&2), pp. 97-100.
- Mannan, M.A. 2001. Attitude of Proshika Farmers towards the Ecological Agricultural program in Saturia Upazila under Manikganj. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Microsoft Encarta. 2006. Microsoft Premium DVD Redmond, WA, U.S.A: Microsoft corporation.
- Noor, M.S. 1995. Farmers Attitude towards Cultivation of High Yielding Varieties of Potato. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangobandho Sheikh Mujibur Rahman Agricultural University, Gazipur.

- Nurzaman, M. 2000. Knowledge, Attitude and Practices of FFS and Non-FFS Farmers in Respect of IPM. M.S. (Ag. Ext. Ed) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Parveen, S. 1993. Attitude of Rural Women towards Homestead Agricultural Production.' M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh,
- Paul, S.K. 2000. Attitude of Farmers towards the Use of Urea Super Granule on Rice Cultivation. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Puttaswamy, T. 1977. A Study on Knowledge, Adoption and Attitudes of Small Farmers towards Mixed Farming in Sira and Aneket Taluks. Thesis Abstract. Haryana Agricultural University. Hissar, India. Vol. 11 (4). p. 256.
- Rana, G.M.R. 2007. Attitude of Women Beneficiaries towards the Activities of ASA in Selected Areas of Phultala Upazilla of Khulna District. (Ag. Ext. Ed) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Rahman, M.A. 2001. Attitude of Farmers towards BINA DHAN-6 in a Selected Are of Bangladesh. M.S. (Ag. Ext. Ed) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Rosenberg, M, J. and C. I. Hovelamd. 1960. Research on Communication and Attitude quoted in Triandis, H. C. 1971. Attitude and Attitude Change. John Wiley Publisher, New York.

- Sarker, M.A. 2002_a. Attitude of Rice Growers towards the Use of DAP on Rice Cultivation in Some Selected Areas of Rajbari District. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Sarker, M.A. 2002_b. Attitude of Farmers towards Activities of Bangladesh Agricultural University Extension Center (BAUEC). M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Sarker, M.A. 2001. Farmers attitude towards Organic Homestead Gardening Program of World Vision. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Siddique, A.B. 2002. Attitude of the farmers towards Improved winter Vegetable Production in a Selected Area of Gaffargaon Upazilla under Mymensingh District. M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Townsend, J. C. 1953. Introduction to Experimental Methods. New York" McGraw-Hill.
- Triandis, H.C. 1971. Attitude and Attitude Change. Wiley Foundations of Social Psychology Series. New York: John Wiley Publisher.
- Verma, H. K. and K. Kumar. 1991. Correlates of Farmers Attitude towards Buffalo Management Practices. Research note. Indian Journal of Extension Education. 27 (2& 3): 99-100.



- Vidvashankar, P. N. 1997. A Study of Differential Characteristics of Seed Growers and Non-Seed Growers of Bangalore District. Thesis Abstract. Haryana Agricultural University. Hissar, India. Vol. II (4). p. 256.
- Wahab, A.M.F. 1975. Attitudes of Farmers towards the Use of Fertilizers. M.S. (Ag. Ext. Ed) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.
- Warren, H.C. (ed.). 1934. Dictionary of Psychology, Boston, Houghton Mifflin.

Appendix I

English Version of the Interview Schedule
 Department of Agricultural Extension and Information System
 Sher-e-Bangla Agricultural University
 Dhaka-1207

Interview schedule for data collection for the research on “ATTITUDE OF ELITE RURAL PEOPLE TOWARDS EXTENSION ACTIVITIES OF DAE PERFORMED BY UPAZILLA AGRICULTURAL EXTENSION PERSONNEL”

(The interview schedule is entitled for a research study)

Serial No :
 Name of the respondent :
 Village :
 Upazilla :
 Zilla :

(Please answer the following questions. Secrecy will be strictly maintained.)

1. **Age:** How old are you? Age.....years
2. **Education:** Please mention your educational status
 - (a) Can not read or write.....
 - (b) Can sign only.....
 - (c) Read up to class
 - (d) Others (specify)

3. **Farm size:** Please mention your land area

Sl.No	Type of land	Area(bigha)	Area(hector)
1.	Own homestead		
2.	Own land under own cultivation		
3.	Own pond and garden		
4.	Own land given on barga to others		
5.	Land taken on barga form others		
6.	Land taken on lease form others		
7.	Others		
Total area =			

4. **Time spent for farm work:** How much time do you spent for farm work daily?hour

5. **Annual family income:** Please mention the annual income of your family

Sl. No.	Source of income	Income (TK)
1.	Agronomic crops	
2.	Horticultural crops	
3.	Poultry	
4.	Cattle	
5.	Fisheries	
6.	Service	
7.	Business	
8.	Others(Please mention)	
Total income =		

6. Organizational participation:

Sl. No.	Name of the organization	Nature of participation (years)			
		No participation	Ordinary member	Executive member	President/Secretary
1.	Eidgah/Mosque/Temple Committee				
2.	School Committee				
4.	Bazar Committee				
5.	Co-operative society				
6.	NGO organized society				
7.	Deep tube well committee				

7. Cosmopolitaness: Please indicate how frequently you visit the following place within a specific period

Sl. No.	Place of visit	Nature of the visit				
		Regularly	Often	Occasionally	Rarely	Not at all
1.	Other villages	More than 3 times/ week	3 times /week	2 times /week	1 time /week	0 time/ week
2.	Local market	More than 6 times/ month	5-6 times/ month	3-4 times / month	1-2 times / month	0 time/ month
3.	Visit to other union	More than 3 times/ month	3 times / month	2 times / month	1 time / month	0 time/ month
4.	Upazilla DAE office	More than 6 times/ year	5-6 times / year	3-4 times / year	1-2 times / year	0 time/ year
5.	Other upazilla sadar	More than 6 times/ year	5-6 times / year	3-4 times / year	1-2 time / year	0 time/ year
6.	District DAE office	More than 3 times/ year	3 times / year	2 times / year	1 time / year	0 time/ year
7.	Other district sadar	More than 3 times/ year	3 times/ year	2 times/ year	1 time/ year	0 time/ year
8.	Visit to big cities	More than 3times/ year	3 times / year	2 times / year	1 time / year	0 time/ year

8. Extension contact: Please indicate the extent of contact with the following media

(a) Personal contact:

Sl. No.	Communication media	Extent of contact				
		Regularly	Often	Occasionally	Rarely	Not at all
1.	Upazilla Agriculture officer (UAO)	More than 6 times/year	5-6 times/year	3-4 times/year	1-2 times/year	0 time/year
2.	Sub Assistant Argil. Officer (SAAO)	More than 3 times/month	3times/month	2 times/month	1 time/month	0 time/month
3.	Agricultural extension officer (AEO)	More than 6times/year	5-6 times/year	3-4 times/year	1-2 times/year	0 time/year
4.	Assistant Agricultural Extension Officer (AAEO)	More than 6times/year	5-6 times/year	3-4 times/year	1-2 times/year	0 time/year
5.	Other extension officer (livestock, fisheries officer)	More than 6 times/year	5-6 times/year	3-4 times/year	1-2 times/year	0 time/year
6.	Field worker of NGO	More than 3 times/month	3times/month	2 times/month	1 time/month	0 time/month
7.	Dealer of Agril. Commodities	More than 3 times/month	3times/month	2times/month	1 time/month	0 time/month
8.	Progressive farmers	More than 3 times/month	3times/month	2 times/month	1 time/month	0 time/month
9.	Local leaders	More than 3 times/month	3times/month	2 times/month	1 time/month	0 time/month

(b) Group contact:

Sl. No.	Communication media	Extent of contact				
		Regularly	Often	Occasionally	Rarely	Not at all
1.	Group discussion	More than 3 times/month	3times/month	2 times/month	1time/month	0 time/month
2.	Field day	More than 3 times/year	3times/year	2 times/year	1 time/year	0 time/year
3.	Result demonstration	More than 3 times/year	3times/year	2 times/year	1 time/year	0 time/year
4.	Method demonstration	More than 3 times/month	3times/year	2 times/year	1 time/year	0 time/year

(c) Mass contact:

Sl. No.	Communication media	Extent of contact				
		Regularly	Often	Occasionally	Rarely	Not at all
1.	Listening argil. related program on radio	More than 3 times/ week	3times/ week	2 times /week	1 time/ week	0 time/ week
2.	Watching argil. related program and news on TV	More than 3 times/ month	3times/ month	2 times/ month	1 time/ month	0 time/ month
3.	Reading argil. related newspapers and magazines	More than 3 times/ month	3times/ month	2 times/ month	1 time/ month	0 time/ month
4.	Book let / leaf let	More than 6 times/ Year	5-6 times/ year	3-4 times/ year	1-2 times/ year	0 time/ year
5.	Poster	More than 6 times/ month	5-6 times/ month	3-4 times/ month	1-2 times/ month	0 time/ month
6.	Agril. Fair	More than 3 times/ year	3times/ year	2 times/year	1 time/ year	0 time/ year

9. Knowledge on Agriculture:

Sl. No.	Question	Full marks	Marks obtained
1.	Give the name of two high yielding varieties of rice.	1	
2.	Mention two important diseases of rice.	1	
3.	Mention two harmful insects of rice.	1	
4.	What is the ratio of NPK fertilizer to be used in the rice field?	1	
5.	What is the difference between bio-fertilizer and chemical fertilizer?	1	
6.	What do you mean by balance fertilizer?	1	
7.	What is IPM?	1	
8.	Who play the vital role in extension activities at root level?	1	
9.	What is bird flue?	1	
10.	Name two trees which give food, fodder and fuel.	1	



10. Attitude towards extension activities of DAE performed by Upazilla Agricultural extension personnel:

Sl. No	Statements	Degree of attitude				
		Strongly agree	Agree	No opinion	Disagree	Strongly disagree
1. (+)	UAO ensures effective FINA within the Upazilla					
2. (-)	UAO cannot handle agricultural input crisis nicely					
3. (+)	UAO prepares high quality extension plan					
4. (-)	In distributing teaching materials NGO workers are more effective than UAO					
5. (+)	SAAO helps rural people to identify their problems and possible solutions to them					
6. (-)	SAAO doesn't make farm and home visit regularly					
7. (+)	AEO are efficient in imparting training					
8. (-)	In disseminating agricultural knowledge marginal farmers are ignored in extension activities					
9. (+)	UAO prepares good training materials for rural people					
10. (-)	AAEO are less credible than the NGOs worker in communicating with rural people					
11. (+)	SAAO identifies local leaders and their groups effectively					
12. (-)	SAAO cannot identify disease and insect infestation properly					
13. (+)	UAO maintains liaison with rural associations and other related agencies					
14. (-)	SAAO does not implement extension event within the block based on local needs effectively					

Sl. No.	Statements	Degree of attitude				
		Strongly agree	Agree	No opinion	Disagree	Strongly disagree
15. (+)	SAAO assists rural people to obtain information and other assistance from other extension partners					
16. (-)	AEO cannot provide extension information on current agricultural problem					
17. (+)	SAAO organizes farmers rallies, field days efficiently					
18. (-)	SAAO contacts with big farmers only					
19. (+)	UAO makes plan and implementation of thana fairs effectively					
20. (-)	AEO doesn't find out farmers own ideas and technologies					

Thank you for kind co-operation.

Date:

.....
Signature of the interviewer

APPENDIX II
Correlation Matrix

Inter-correlation between 9 characteristics and the dependent variable (N= 102)

	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	Y
X ₁	1									
X ₂	0.327(**)	1								
X ₃	0.404(**)	0.828(**)	1							
X ₄	0.394(**)	0.697(**)	0.941(**)							
X ₅	0.268(**)	0.366(**)	0.272(**)	0.214(*)	1					
X ₆	0.361(**)	0.955(**)	0.905(**)	0.771(**)	0.352(**)	1				
X ₇	0.394(**)	0.906(**)	0.970(**)	0.894(**)	0.338(**)	0.953(**)	1			
X ₈	0.384(**)	0.932(**)	0.947(**)	0.849(**)	0.354(**)	0.959(**)	0.983(**)	1		
X ₉	0.378(**)	0.895(**)	0.952(**)	0.871(**)	0.298(**)	0.948(**)	0.980(**)	0.963(**)	1	
Y	0.186 ^{NS}	0.619(**)	0.562(**)	0.455(**)	0.079 ^{NS}	0.612(**)	0.579(**)	0.594(**)	0.590(**)	1

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

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

^{NS} Not Significant

Legends:

Independent Variables		Dependent variable
X ₁ = Age	X ₆ = Organizational Participation	Y = Attitude towards extension activities of DAE performed by Upazilla Agricultural Extension Personnel
X ₂ = Education	X ₇ = Cosmopolitaness	
X ₃ = Farm Size	X ₈ = Extension Contact	
X ₄ = Time spent for farm work	X ₉ = Knowledge on Agriculture	
X ₅ = Annual Family Income		

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
শেখ হাসিনা কৃষি বিশ্ববিদ্যালয়
কেন্দ্রীয় গ্রন্থাগার
74 (.) AgExt.
তারিখ: ১২/০১/১০

Sher-e-Bangla Agricultural University
Library
Accession No. 37511
Sign: *[Signature]* Date: 20/01/14