USE OF TELEVISION IN RECEIVING AGRICULTURAL INFORMATION BY THE SUB-ASSISTANT AGRICULTURAL OFFICERS

BY
MD. FARIDUZZAMAN
Reg. No. 04-01235

A thesis
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

SEMESTER: January-Jun/10

Approved by:

Prof. Dr. Md. Rafiquel Islam
Supervisor

Prof. Dr. Md. Sekender Ali
Co-supervisor

Prof. Dr. Md. Rafiquel Islam
Chairman
Examination Committee

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

CERTIFICATE

This is to certify that the thesis entitled, **"USE OF TELEVISION IN RECEIVING AGRICULTURAL INFORMATION BY THE SUB-ASSISTANT AGRICULTURAL OFFICERS"** 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. Fariduzzaman, Registration No. 04-01235 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 or source of information, as has been availed of during the course of this investigation has been duly acknowledged.

Dated:

Dhaka, Bangladesh

(Prof. Dr. Md. Rafiquel Islam)

Supervisor

DEDICATED TO

MY

BELOVED PARENTS

ACKNOWLEDGEMENT

All praises are due to the 'Almighty Allah' the Omnipotent, Omnipresent and Omniscient, who enabled the author to pursue for the successful completion of this research work.

The author reckons at first a great pleasure and honor to express his heartfelt gratitude, deepest sense of appreciation, best regards and profound indebtedness to his reverend research supervisor, Professor Dr. Md. Rafiquel Islam,Chairman, Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka under whose scholastic guidance, continuous supervision, valuable suggestions and instructions, constructive criticisms, constant encouragement and inspiration this the research work was done.

The author highly indebted and grateful to his respective teacher and co-supervisor, Professor Dr. Md. Sekender Ali, Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka for his helpful comments and suggestions, sincere encouragement, heartfelt and generous co-operation and inspiration in improving the manuscript.

The author feels proud to express his sincere gratitude, grateful acknowledgement and profound thanks to Professor Md. Shadat Ulla, Professor Mohammad Hossain Bhuiyan, Professor M. Zahidul Haque, and Lecturer Mohummed Shofi Ullah Mazumder, Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka. The author thanks to his classmates for their continual encouragement, help and valuable suggestions during period of study.

The researcher reckons special thanks to Md. Rahul Amin, Md. Asifur Rahman Khan and Masum Sharif Sazidy the SAAOs of Suzanagar Upazila for his cordial support and also deems his heartfelt gratitude to Kbd. Md. Yusuf Ali, Upazila Agriculture Officer, Suzanagar Upazila. The researcher is grateful to Md. Hasnat Rahman, Mr. Atul Roy and Md. Rashedul Islam for their cordial help during the data collection of this study.

Finally, the researcher expresses his thanks and gratefulness to all of his parents and all of his well wishers.

The Author

LIST OF CONTENTS

CHAPTER III

CHAPTER IV

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDIX

ACRONYMS AND ABBREVIATIONS

BARI	Bangladesh Agricultural Research Institute
SAU	Sher-e-Bangla Agricultural University
BAU	Bangladesh Agricultural University
BBS	Bangladesh Bureau of Statistics
DAE	Department of Agricultural Extension
FAO	Food and Agricultural Organization
NGO	Non-Government Organization
GO	Government Organization
TV	Television
AEO	Agricultural Extension Officer
SAAO	Sub-Assistant Agricultural Officer

USE OF TELEVISION IN RECEIVING AGRICULTURAL INFORMATION BY THE SUB-ASSISTANT AGRICULTURAL OFFICERS

Md. Fariduzzaman

ABSTRACT

The main objective of this study was to determine and describe the use of television by the Sub Assistant Agriculture Officers (SAAOs) in receiving Agricultural Information and to explore the relationship between the selected characteristics of SAAOs. The selected characteristics were age, annual family income, service length, training received, level of education, academic achievement, job facility, job satisfaction and use of Television channels. Four upazilla's in Pabna district were Pabna sadar, Ishwardi, Sujanagar and Chatmahar selected randomly as the study area. Pearson's Correlation Co-efficient were used to test the relationship between the selected characteristics of SAAOs and their use of Television in receiving agricultural information. The findings revealed that 41.90% of the SAAOs belonged to medium use category while 40% respondents were low and 18.10% very low category in using Television. In respect of use of different Television channels Channel-I ranked first followed by BTV and BTV World. The fourth and fifth channel was ATN Bangla and Bangla Vision. Pearson Product-Moment Co-Relation analysis also revealed that age, annual family income, service length, academic achievement, job facility and job satisfaction had positive significant relationship with the use of Television in receiving agricultural information. Training received and level of education had no significant relationship with the use of Television in receiving agricultural information.

CHAPTER I

INTRODUCTION

1.1 General Background

Bangladesh is basically a rural based agricultural country. Agriculture is the back bone of Bangladesh's economy. The major portions of the population live in the villages and two-thirds of labor forces (59.2 percent) are engaged in agriculture (BBS, 2003). So, agriculture plays a vital role in employment generation, poverty alleviation, food security, standard of living and in increase of earnings.

Bangladesh is one of the most densely populated countries in the world with a population of over 139.76 million with a growing rate of 1.48 percent per annum (BBS, 2005) and 76.61 percent of the population live in rural area. Population density is 928 persons per square kilometer in this country (BBS, 2005). The per capita income is about $ 470 and its people have a life expectancy of 64.9 years (BBS, 2005). Most of the rural people (85 percent) are deprived of many of the amenities that have largely associated with urban people like education, electricity, water supply, housing and health facilities. About half of them (50.9 percent) are illiterate (BBS, 2005). They mainly depend on nature for their livelihood. The mass illiteracy in the rural population had become a hurdle to mass communication. Though most of the people are engaged in agriculture, the figure indicates poor efficiency of Bangladesh agriculture. The majorities of the rural people are self-employed and remain fully-occupied in peak seasons, but the employment rate drops during the lean seasons. Moreover, 45% of the farmers are landless (holding less than 0.2 ha.) and per capita land holding is only 0.1 ha. (Nasiruddin, 1998). Hence, the contribution of this sector

to the GDP is decreasing day by day. In 2003-2004, this sector provides 20.14 percent of the GDP (BBS, 2005).

The development of agriculture is mostly dependent on the use of modern technologies by the farmers. About 20.14 percent of the country's Gross Domestic Product (GDP) and 63.2 percent of the employment opportunity comes from agriculture (BBS, 2005). The country is supplying to meet the basic need of her population from its net cultivable land which is estimated around 7.19 million hectare. In order to increase and maximize agricultural production by the use of improved agricultural technologies with great care, adaption of new technologies by the farmers is the key for achieving desired progress in agriculture. But most of the farmers have not yet adapted improved agricultural technologies even if technologies are available. One may quite logically assume that the message of improved technologies has not yet been properly conveyed to the farmers. It may also happen that the technologies which are being developed do not reach to the bonafide users effectively for their application (Halim and Miah, 1996).

The Department of Agricultural Extension (DAE) and some other government and non-government organization are working in the field in transferring information/ technology from a research system (source of technology) through an extension system (interpreter and dissemination of technology) to the client system (users of technology) (Kashem and Halim, 1991). The Department of Agricultural Extension (DAE) is the largest extension organization in Bangladesh which is directly involved in motivating farmers for using modern agricultural technologies in order to improve productivity and to increase production. The DAE introduced training and visit (T & V) system of extension work since 1978. Then the procedure of conducting extension work of the DAE has been partially modified under the Agricultural Support Service

Project (ASSP). The ASSP is also being recognized under New Agricultural Extension Policy (NAEP). The role of agricultural extension is to assist farmers through education in improving farming methods and techniques, increasing production efficiency and income and enhancing their quality of life. It provides scientific and factual information to farmers and also provides training and guidance in the application of such information to the solution of their problems. It also tries to find out the unsolved issues and problems to the notice of research and other related institution for solving those problems. So, it can say that agricultural extension maintains a linkage between research and farmers.

The Sub-Assistant Agriculture Officers (SAAOs) are the grassroots level workers of DAE, working in the block level. They are directly communicating with the rural farmers. DAE provides their support to the farmers through SAAOs. The success of extension service of DAE largely depends on SAAOs. So, it is very important for SAAOs that they perform their duties and responsibilities properly. But a large gap still exists between extension service and the farmers, because most of our farmers are illiterate, unaware and poor. For narrowing this gap a vigorous and well organized extension service for more efficient technology transfer is an imperative need. The agriculture production process, researchers, extension workers and farmers need to work hard together. Most of the farmers of rural areas largely depend on interpersonal channels of communication. Due to mass illiteracy and limited urbanization they have not good access to printed media like newspaper, magazines, books, radio and television. For this reason, it is important that the extension workers should concentrate their activities and efforts more on interpersonal communication rather than mass communication media. In this regard, it is necessary to know the use of TV of Sub-Assistant Agriculture Officers (SAAOs) regarding new production

technologies. So, for the development of a country an effective communication media is important in view of the advancement of technology and importance of communication, its swiftness in the 21th century, it is necessary to expend the use of mass media as the important means for accelerating dissemination for information regarding various aspects of agricultural and rural development.

Bangladesh as a member of the world community should think about the extension methods which are appropriate. For effective communication strategy in agriculture the opinion of the farmers their socio-economic status and level of living should be considered. Preference of farmers in this respect should be measured.

1.2 Statement of the problem

Generally most of the farmers of our country are small category farmers, having subsistence land holdings capacity. Unemployment is one the major problems in the rural areas. On the other hand, the rural culture is a traditional one where traditional norms, values and beliefs are predominant which are somewhat difficult to change. Because of mass illiteracy, the impact of television (TV) is very limited on their life, while interpersonal communication dominates in the rural areas. For this reason, any change takes place in the rural areas occurs very slowly. To achieve the changes in crop production, the role of SAAOs is very important. The SAAOs are the key workers who are engaged in rural areas for transferring agricultural information to the farmers. The success of any technology depends on its dissemination among the potential users. It is assumed that notable improvement can take place in Bangladesh agriculture if the available technologies are accepted and adopted by farmers. SAAOs can help the farmers to adopt the improved technologies for increasing rice production.

"Television show better result to create awareness and increase knowledge and increase adoption with the audience of low knowledge, attitude and practice level" (Adhikarya, 1994). The present study attempts to determine the use of television by SAAOs in receiving updated agricultural information. The study is also aimed to have an understanding of the selected characteristics of the SAAOs and their relationship with the use of TV.

On this consideration, the study is mainly deal for finding the answer of the following questions:

1. What characteristics of the SAAOs influence their use of television in receiving agricultural information?
2. Is there any relationship between characteristics of SAAOs and their use of television in receiving agricultural information?

For getting clarification of the above questions the researcher undertook this study entitled 'Use of television (TV) in receiving agricultural information by the SAAOs. The study also tried to explain the relationship of some selected characteristics of the SAAOs such as age, annual family income, service length, training received, level of education, academic achievement, job facility and job satisfaction with their use of Television in receiving agricultural information.

1.3 Specific objectives of the study

Objectives help researcher to get into the right track. Meaningful, clear-cut and achievable objectives are the key factors in all kinds of research work. The following objectives were formulated in order to give proper direction of the study:

1) To determine and describe the use of television by the SAAOs in receiving Agricultural Information
2) To describe the following selected characteristics of the SAAOs:
    a) Age
    b) Annual family income
    c) Service length
    d) Training received
    e) Level of Education
    f) Academic achievement
    g) Job facility
    h) Job satisfaction
3) To explore the relationship between the selected characteristics of the extension workers and the use of Television
4) To compare the television channels used by the Sub-Assistant Agriculture Officers in receiving agricultural information

1.4 Scope of the study

The present study was conducted to determine how the SAAOs receive the agricultural information from using television so that it may be passed on to farmers. It is expected that the findings of the study will be helpful in selecting a proper way of receiving agricultural information of the extension workers and it will also be helpful for designing an information receiving strategy for gathering latest technological information. This study was also identified some selected characteristics of the SAAOs which influenced the use of TV.

The findings of the study will be useful for planning and executions of the programs of extension services of The Department of Agricultural Extension (DAE) and other related development agencies.

1.5 Limitation of the study

The study was undertaken with a view to have an understanding of the use of television in receiving agricultural information by SAAOs. But considering the time and fund, the study was conducted with the following limitations:

1) The study was confined to only Pabna district of Rajshahi region.
2) The characteristics of the SAAOs are many and varied, but in the present study only nine personal and situational characteristics were taken into consideration.
3) Population of the study were limited to 105 SAAOs of the selected area.
4) The facts and figures collected by the investigator applied to the situation prevailing during -February-March, 2011.

1.6 Justification of the study

Contact with information source is a pre-condition to receive information and to use of technology in real situation (Kashem and Halim, 1991). For agricultural development, technology generation, diffusion and its adoption are important. Agricultural research and agricultural extension has symbiotic relationship and each of them uses communication channels to send technological information among their own staffs and farmers as well. Lack of effective communication media among them results in the low agricultural productivity anywhere in the world. The dissemination of technology for modernizing agriculture requires three system: (a) the research system which generates knowledge and develops technology, (b) the extension system performing the task of communication links between the research and the client (farmer) system, and (c) the client system consisting of ultimate users of technology (Coughenour, 1968). Each of the three systems is equally important in the process of modernizing agriculture (Rogers and Srenning, 1969). The more is the communication within and between the systems, the faster will be the dissemination of information in the process of modernization of agriculture (Lionberger and Chang, 1970). But in Bangladesh, very few researchers have so far been conducted for studying use of television in receiving agricultural information by SAAOs though considerable studies have been conducted in other countries. For dissemination of information, the role of SAAOs is very important. They are the key extension workers in this purpose. Farmers seek advice and information from them. So it can be opined that use of television by SAAOs in receiving agricultural information will be helpful for determining the increasing the crop production of the country.

1.7 Assumption

An assumption is the supposition that an apparent fact on principle is true in the light of available evidence (Goode, 1945). An assumption is taken as a fact or believes to be true without proof. The researcher had the following assumptions while under taking this study:

1. The respondents included in the sample of the study were able to provide their opinions and were competent enough to satisfy the queries.
2. The information furnished by the respondents was valid and reliable.
3. The researcher acted as the interviewer was well adjusted to the social environment of the study area. Hence, the collected data can be treated as reliable.
4. The communication media included in the study were known to the respondent.
5. The data collected from the respondent were free from any bias.
6. Views and opinion furnished by the respondents included in the sample were the representative views and opinions of the whole population of the area concerned.
7. The findings of the study are expected to be useful for planning and execution of various programs in connection with the using of television (TV) in receiving agricultural information.

1.8 Hypothesis of the study

A hypothesis simply means a mere assumption or some supposition to be proved or disproved. But for a researcher, hypothesis is a formal question that he intends to resolve. "A hypothesis is a proposition or a set of proposition set forth as an explanation for the concurrence of some specific group of phenomena either asserted

merely as a provisional conjecture to guide some investigation or accepted as highly probably in the light of established fact"(Kothari, 1994). 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 related either generally or specifically variables to variables." As defined by Goode and Hatt (1952) "A hypothesis is a proposition which can be put to test to determine its validity. It may be contrary to or in accord with the common sense. It deals to an empirical test." In broad sense, hypothesis may be divided into two categories, (a) research hypothesis (Hi) and (b) null hypothesis (Ho). However, for the present study the hypothesis were formulated in null form.

The following null hypothesis was formulated to explore the relationship between use of TV of Sub-Assistant Agriculture Officers (SAAOs) and their selected characteristics regarding rice production technologies.

"There is no relationship of each of the selected characteristics of the SAAOs viz. age, annual family income, service length , training received, level of education, academic achievement, job facility and job satisfaction with their use of Television in receiving agricultural information.

1.9 Definition of Terms

For clarity of understanding, certain terms used throughout the study are defined as follows:

Television

Television is an audio visual media for diffusing information and fall under mass media. Along with news, various educational, recreational space programs and Mati-

O-Manus- one important agricultural programme are telecasted through BTV. It is a media that can support the effects of extension stuff in spreading awareness, giving warnings, facilitating farmers to farmer's communication etc. It communicates with the vast and heterogeneous mass of people, without taking into consideration their individual or group identity. It disseminates the news about modern technology quickly.

Technology

Technology is a design of instrumental action that reduces the uncertainty in the cause-effect relationship involved in achieving a desired outcome (Rogers, 1995). In other words, technology refers to the combination of knowledge, inputs and manages mental practices, which are used together with productive resources to gain desired output.

Sub-Assistant Agricultural Officer (SAAO)

Sub-Assistant agricultural Officer is a grass-root level extension agent of Department of Agricultural Extension (DAE) working in the block level for dissemination of information.

Age

Age is defined as the period of time from the birth of the SAAOs to the time of interview. It was measured in terms of years.

Annual family income

Annual family income referred to the total earnings of a respondent and others members of his family from service and other sources (agriculture, business etc.) during a year.

Level of education

Level of education refers to the stage of learning that occurs at academics, universities, colleges and institutes of technology.

Academic achievement

Academic achievement or performance is the outcome of education, the extent to which a student has achieved educational goals. Academic achievement was measured by assigning weights on the results of different academic achievements.

Service length

This refers to the total length of service expressed in completed years by the respondent. Total service length was measured by assigning a score of one for each completed year of service in any organization.

Training received

This refers to the days of training which an individual received during his service carrier pertaining to his job. Each training was given attention by considering its duration. In this study training on technical matters of various technologies were taken into consideration.

Job facility

It refers to the factors which help to facilitate one's job performance. It includes salary, technical suggestion, co-operation from the other personnel, training, traveling facilities, working environment and so on.

Job satisfaction

Job satisfaction has been defined as a pleasurable emotional state resulting from the appraisal of one's job; an affective reaction to one's job and an attitude towards one's job. Weiss (2002) has argued that job satisfaction is an attitude but points out that researchers should clearly distinguish the objects of cognitive evaluation which are affect (emotion), beliefs and behaviors. This definition suggests that we form attitudes towards our jobs by taking into account our feelings, our beliefs, and our behaviors (Locke, 1976, Brief, A. P., & Weiss, H. M. 2001).

Chapter II

REVIEW OF LITERATURE

The purpose of this study was to have an understanding of the use of Television by the Sub-Assistant Agriculture officers (SAAOs) and its relationship with their selected characteristics. Little work had been done in Bangladesh in this matter. However, the investigator of this study had come across related studies conducted in other countries. This chapter is divided into two sections. First section deals with the findings on the use of television (TV) by Sub-Assistant Agriculture officers (SAAOs) on related matters, second section is devoted to a discussion on the findings of the studies exploring relationships of the selected characteristics of the Sub-Assistant Agriculture officers (SAAOs) with their use of Television. The third section deals with the conceptual framework of the study.

2.1 Use of Television by Sub Assistant Agriculture Officers on related matters

Lionberger and Chang (1970), Rogers and Yost (1962) and Akhouri (1973 reported that fewer extension personnel used radio as a channel for obtaining farm information.

Elahi (1977) recommended that personal contact is an excellent medium for channeling information to rural communities where the mass media could not penetrate because of educational under development.

Van Den Ban (1981) found that the people may aware new ideas from the mass media, but usually wait for confirmation from personal sources of information.

Patil *et al.* (1984) found that contact farmers received information on improved agricultural technology from village extension workers (91.84%), neighboring

farmers (59.18%), progressive farmers (56.12%), agricultural officers (31.63%), group discussion (16.33%), demonstration (14.28%), radio (88.77%) and newspaper (50.20%).

Nataraju and Channegowda (1985) found in a study that respondent used radio (54%) newspaper (46%) neighbors (23.3%) demonstration (10.6%) and group meetings (6%) in receiving information on improved dairy management practice.

Mekabutra (1985) conducted a study in Thailand and reported that among the mass media that offered more knowledge in agriculture was radio, followed by television and newspaper respectively. Considering knowledge gained from mass media that were applicable to their work, farmers opined the television provided about 83.5 percent, radio 78 percent and newspaper 77 percent.

Sinha (1985) in a study in Bihar on mass media and rural development found that television has a very positive role to play in village development, but that it is essential to support it with appropriate development infrastructure and onsite advisory office.

Samanta (1986) in a study in India found that demonstration is the best credible source of information by the farmers followed by scientist, block supervisor, progressive farmer, television, radio and printed materials.

Tabbada (1988) in a study in Philippines found that television was superior over radio, and the dialogue type broadcast was more effective than lecture type.

Chidanandappa and Veerabhadraiah (1988) examined different mass media sources used by extension personnel and reported that extension personnel made use of the

package of practices like booklets, extension folders, radio, newspapers, and farm magazine to a large extent as media of information.

Van den ban and Hawkins (1988) reported that in industrialized countries peopled spend more time with television and radio than printed word. Radio is most important mass medium for farmers of less industrialized countries. The urban middle class in less industrialized countries now also spend considerable time watching television but it is not yet a very important medium in rural areas of these countries.

Khan (1989) conducted a study among three resource status group based on income farm size and land holding in North-west Frontier and reported that about 40% of the farmers obtain agricultural information through radio and television broadcast. Less than 40% of the farmers read printed agricultural materials or attained extension sponsored group activities.

Joshi and Laharia (1990) reported that as many as 70% of the items of Krishi Darshan programme of Delhi Door Darshan Kendra were considered 'Timely'. But it is sad that about one third of the times were either too early or too late. Because of untimely telecast these telecasts might not have much practical utility. As far as relevancy of the message of the farmers of Haryana state is considered it was found that almost all items were highly relevant. Only one item under field crop was reported to be much utility.

De-la-Vega (1990) conducted a study in Philippines and found that in terms of availability of mass communication media channels radio and TV were the most available. A great majority of the respondents listen the radio everyday and consider it as their main source of information. The communication channels they preferred as credible radio, interpersonal source and TV.

Sauquet (1990) based on the experience of Brazilian extension service reported that television plays an important role where in every Sunday morning an agricultural programme is wached by a millions of farmer.

Batte, Schnitkey (1990) conducted a study on cash growing farmers of Ohio where radio and television broadcast were more frequently cited as most source of marketing information by older farmers and operators of small farmers.

Chugh (1991) in a study observed that the press, radio and television were regarded as important vehicles of information which ensured the supply of inputs to those who really read them.

Wate and Rivera (1991) in their study examined the application of new technologies in agricultural information transfer process and explored future perspectives of new technologies as force of change in developing countries. They found that print media, electronic media, radio, television, satellite computers and mobile audio visual media were the important sources of spreading information.

Hadiwisastara (1992) in a study in Indonesia found that group communication productivity tended to be affected by radio and television ownership, radio programme preference, respondents listening to rural programs, the availability of village information centre.

Sianturi (1992) conducted a study in rubber development project observed that radio was the highest rated sources of agricultural information followed by television.

Stanturi (1992) found in a study that radio was the highest rated sources of agricultural information followed by television.

Diaz-Knauf et al. (1993) stated in a study on consumer attitude towards food safety of production in Costa Rica that information sources on which consumer rely were television (92%), radion (73%) and news paper (63%).

Halse and Anderson (1994) found that information flow between researchers, extension workers and farmers was effectively used to extent the complex issues involved in modification to farming systems to Australia and in Wes Asia and North Africa the interaction farmers, extension workers and researchers had not been achieved.

Galindo (1994) in his study in Mexico on communication media used by farmers revealed that television and radio were the most widely used communication media, and talks, demonstration and training courses were the preferred media for receiving information.

Khan and Paracha (1994) conducted a study in two villages in Pakistan, one innovative and other non innovative, among the farmers of a cotton producing district and reported that the main channels of communication were mass media and interpersonal communication. The mass media were centrally organized and included radio, television and news paper.

Ahmed et al. (1994) conducted that the farmer receives more amount of information from radio than TV. It may be due to the reason that farmers have more access exposure to radio because number of farm broadcasting programs was more in radio than TV.

Kabir and Bhattachargee (1994) conducted a study on the impact of television on rural people and found that responses regarding the usefulness of TV programme

were similar to responses regarding usefulness of radio broadcast. All of the telecasts were of average benefit to most of the male and female audiences. Among the need based telecast "Apnar Shastha" seems to be most effective programme for the male viewers about 53% of the male respondent wached this programme. The next important was "Mati-O-Manush" having 35.25% viewers.

DAE (1995) reported that the media cell has been established within the Department having responsibility for overseeing all media issues. The main tasks of the media cell are to:

- Coordinate the production and dissemination of technical bulletins.
- Assist Radio Bangladesh and Bangladesh Television in the production of farm broadcast.
- Create publication formatted for the DAE.
- Assist district and thanas with their extension publication.

Halim and Miah (1996) conducted a study and found that the women of modern villages with higher socio-economic status used more cosmopolite media of information rather than local media. Cosmopolite media included radio, television, extension agents etc. Among the mass media they used radio and television as vital source of information. Radio was very frequently (69.7%) used by all category of farm women while TV was used by less number of women (26.9%).

Islam (1996) in his study found that highest proportion of respondents (44.55) belonged to medium media exposure category and 38.18% belonged to low exposure and 17.27% belonged to high exposure group. He also found that among 15 media, radio ranked 6; television 7, fair 8, agricultural publication15 and the rank 1-5 was for individual media.

Islam (1998) reported that the innovativeness of the farmers and their opinion on the "Mati-O-Manush" TV programme in dissemaniting agricultural information was fovarable and very effective. It was very helpful to the farmers for adoption of innovations received from television programme.

Wabhitkar *et al.* (1998) reported that contact with extension agencies and mass media exposure were found to be significantly related to adoption.

Egbule and Njoku (2001) in their study on mass media for adult education in Nigeria found that mass media have performed poorly than individual media in disseminating requisite agricultural information to farmers.

Singh *et al.* (2003) reported that the important source of acquisition of farm technology for extension personnel was state department of agriculture and the important modes were staff meetings, trainings, leaflets /pamphlets, departmental circulars and subject matter specialists while the least used modes were scientists, agro-industry, telecast, journals, radio and personal correspondence with researchers.

2.2 Relationship between selected characteristics of SAAOs and their use of Television on related issues

2.2.1 Age

Austman (1961) found a positive relationship between age and exposure to different media of the beginning male county extension agents.

Haque (1972) observed in a study that there was no significant relationship between age and use of information sources.

Rahman (1974) concluded in his study that the age had no significant influence on the use of information sources.

Annisuzzaman (2003) concluded that age of the respondent had no significant relationship with their use of communication media.

2.2.2 Annual family income

Karim (1994) found a positive and significant relationship between income and communication behaviour of extension workers.

Nuruzzaman (2003) revealed that there was no relationship between annual income of the respondent and their use of mass media in receiving agricultural information.

Anisuzzaman (2003) revealed that the annual income of the respondents had no significant relationship with their use of communication media.

2.2.3 Service length

Akhouri (1973) reported that the positive relationship of communication efficiency with extension work experience suggests that those who have sufficient experience of extension work are most efficient in communication work.

2.2.4 Training received

Sanoria (1977) in his study conducted in India found that training of the agricultural extension personnel was associated with their communication efficiency.

Pandey (1979) revealed that in-service training of extension personnel was significantly and positively correlated with information input process. This statement was also established by Ambastha (1974), Akhouri (1973) and Shete (1979) who reported that information processing had significantly positive correlation with output among the extension personnel.

Joshi (1981) reported that there was significant increase in knowledge gained by village level workers as a result of in-service training.

Gangadharappa (1981) in his study found that trained persons had higher knowledge level and adoption behaviour as compared to untrained persons.

2.2.5 Level of education

Ko and kim (1988) conducted a study on watching behavior of rural television programme (RTV) by extension workers and found that the RTV ratings of the respondents were not significantly related to their educational background. However, older watchers indicated a greater trend to watch RTV programmes.

Kashem and Jones (1988) found in their study that education of the small farmers had significant positive relationship with their information sources.

Kumari (1988) showed that there was significant positive relationship between education of women and effectiveness of selected six media use.

Chakraborty (1992) showed that the education of the farmer had significant relation with their time spend in listening to radio. However, he found that there was no statistically significant relationship between their education and listening habit.

Sarker (1996) found in his study that education of the small farmers had significant positive relationship with the opinion of the farmers regarding effectiveness of agricultural information disseminated through agricultural radio programme.

Hossain (1996) observed a significant relationship between education of the TV viewer farmers and their usefulness of Television as an agricultural information media.

Islam (1998) in his study concluded that more the level of education of the farmers, the more will be their positive opinion the effectiveness of TV programme.

Nuruzzaman (2003) found that education of the farmers had positive and highly significant relationship with their use of mass media in receiving agricultural information.

Alam (2004) found that education of the farmers had positive and highly significant relationship with their opinion of the farmers on effectiveness of printed materials in getting farm information.

Islam (2005) found that education of the farmers had positive and highly significant relationship with their use of printed materials by the farmers in receiving farm information.

2.2.6 Academic achievement

No literature was found related to relationship between academic achievement and use of television channels.

2.2.7 Job facilities

No literature was found related to relationship between job satisfaction and use of television channels.

2.2.8 Job satisfaction

No literature was found related to relationship between job satisfaction and use of television channels.

2.3 The conceptual framework of the study

In scientific research, selection and measurement of variables constitute an important task. The hypothesis of a research while constructed properly contains at least two important elements i.e. "a dependent variable" and "an independent variable". A dependent variable is that factor which appears, disappears or varies as the researcher introduces, removes or varies the independent variables (Townsend, 1953). An independent variable is that factor which is manipulated by the researcher in his attempt to ascertain its relationship to an observed phenomenon. A simple conceptual framework for the study is shown in Figure 2.1

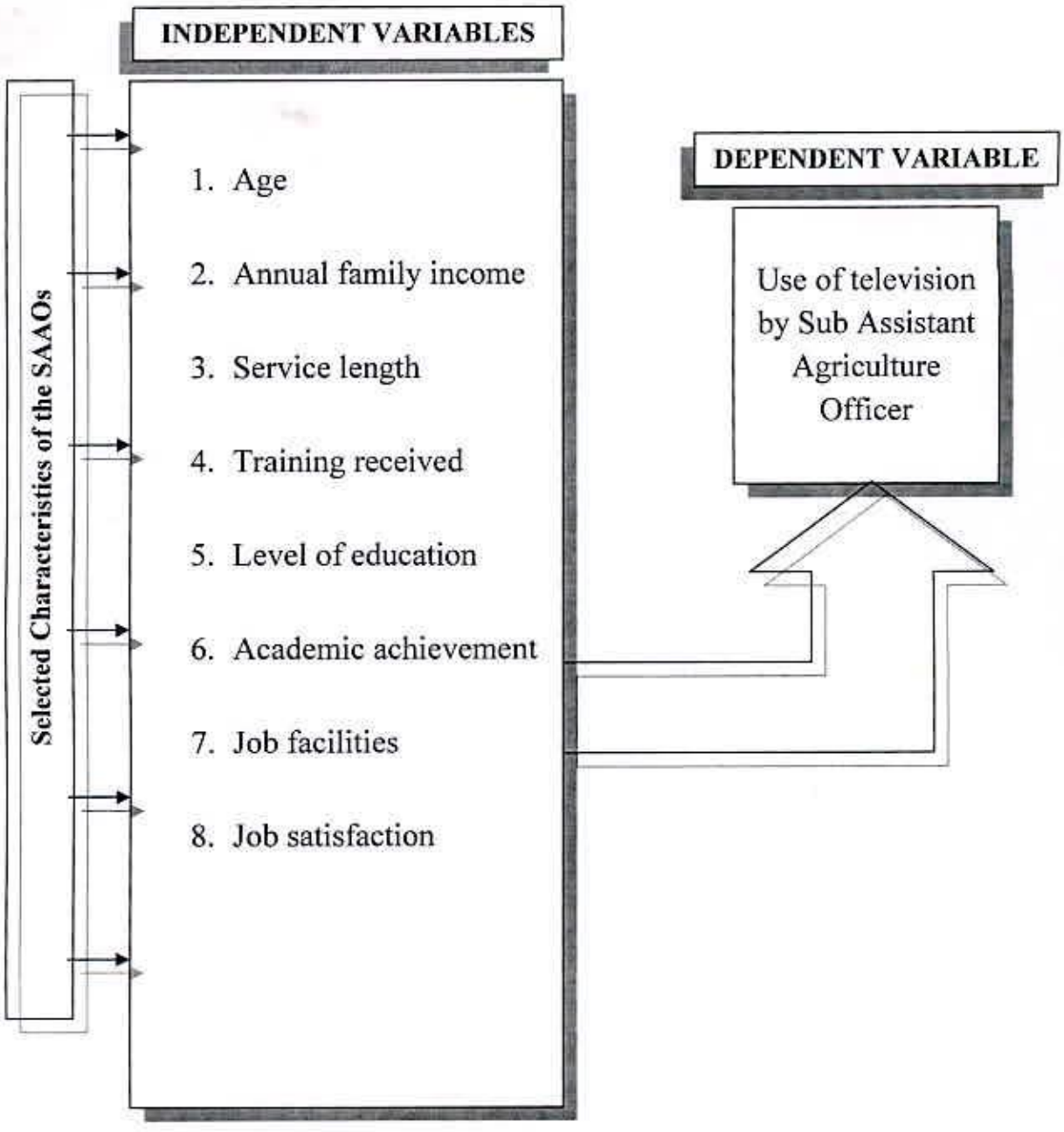

Figure 2.1 The conceptual framework of the study

Chapter III

METHODOLOGY

Methodology is very important in any research. The basic materials for conducting any research are the unbiased information and facts. The purpose of this chapter is to describe the study area, research design and sampling procedures.

3.1 Locale of the study

Four upazillas in Pabna district was selected randomly as the study area out of nine upazillzs of the districts. The selected four upazilla are Pabna sadar, Ishwardi, Sujanagar and Chatmahar. These four upazillas constituted the locale of the study. The physical, social and cultural professional character of the SAAOs in this area were similar in many cases with other eastern areas of the country. Communication of the study area with Pabna town is facilitated by Pucca, Semi-pucca and Kutcha roads. SAAO officers are easily accessible by motorcycle, bicycle, van, tempo etc. A map of Pabna district showing the locale of the study area have been presented in **Figure 3.1**.

3.2 Population and sampling of the study

A list of 188 SAAOs from four selected upazillas was prepared with the help of Deputy Director, DAE, Pabna and Upazilla Agricultural Extension Officers worked in that area at the time of survey. This was considered as the population of the study. From the population of the study 105 SAAO's were selected according to proportionate random sampling procedure. A reserve list of 10 SAAO's were also prepared. If the SAAOs of this original list was not available during collection of data, SAAOs from reserve list was used. The distribution of SAAO's constituting the sample and reserve list of the study area has been shown in **Table 3.1**

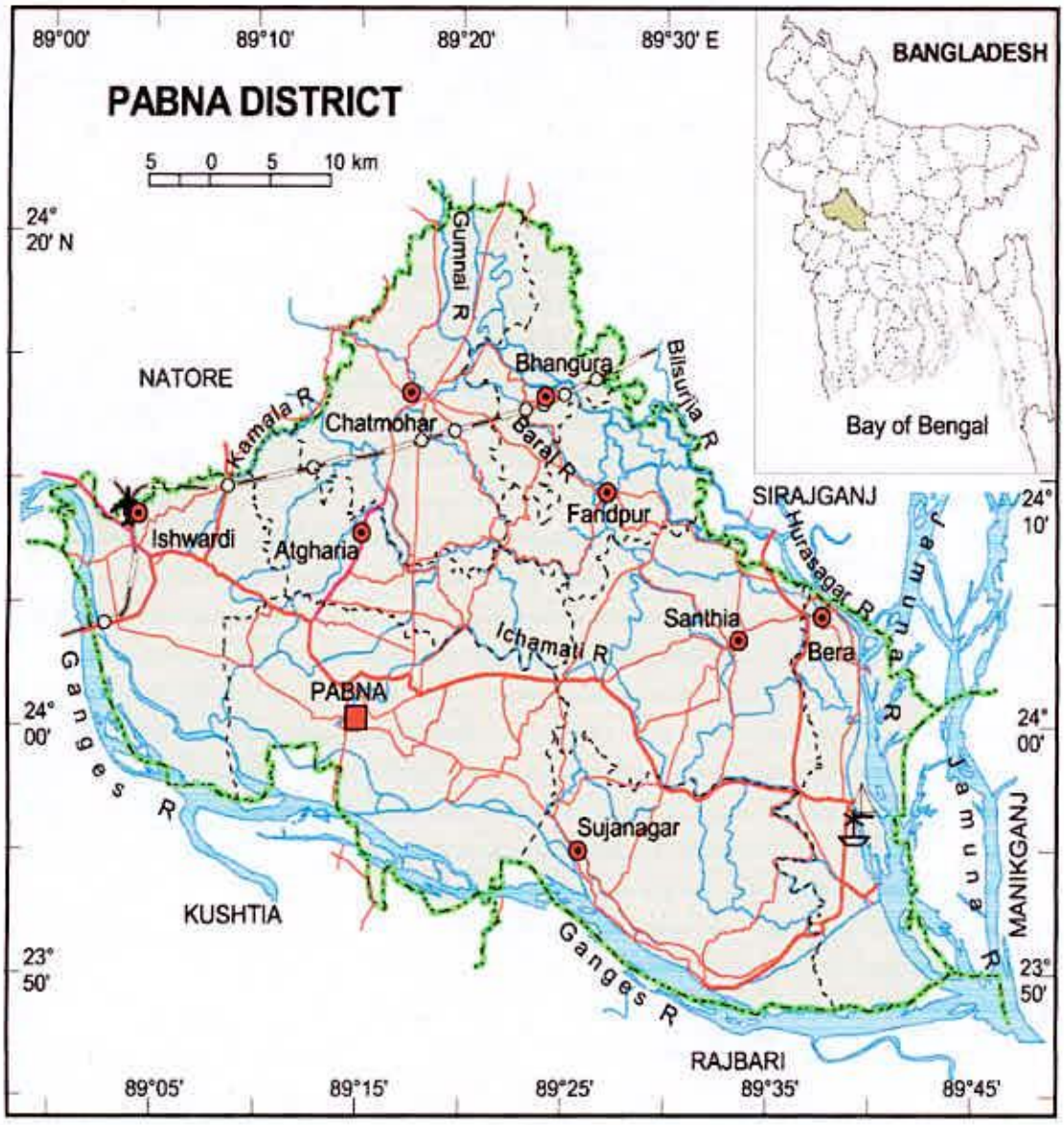

Figure 3.1: A map of Pabna district showing the location of the selected upazillas.

Table 3.1 Distribution of SAAO's according to population and sample

Selected Upazilas of Pabna District	No. of population	Sample size	No. of respondents in the reserve list
Pabna sadar	41	36	4
Ishwardi	26	24	2
Sujanagar	22	20	2
Chatmohor	27	25	2
Total	116	105	10

3.3 Research design

It was a fact finding inquiry of a social problem in communication system. The research design followed in this study was Ex-post-facto-design, because the researcher had no control over the variables, he could only report what had happened or what is happening regarding the SAAOs use and preferences of Television in receiving agricultural information.

3.4 The research instrument

A previously structured interview schedule was used as data gathering instrument in keeping the objectives of the study in mind. The schedule was prepared in Bengali for clear understanding of the respondents. Uses of Television based questions have been included in the schedule along with the selected characteristics of the respondents. It may be recalled that the schedules were pre-tested in actual field situations before using the same for final data collection among the respondents of the study area. Necessary corrections, additions and alternations were made in the interview schedule on the basis of results of pretest. The interview schedule was than cyclostyled in its final form. and English version of interview schedule has been shown in **Appendix-A**

3.5 Variables of the study

The hypothesis of a research generally contains two variables, an independent variable and a dependent variable. An independent variable is that factor which manipulated by the experimenter in his attempt to determine the relationship to an observed phenomenon. A dependent variable is that factor which disappears or varies as the experimentar introduces remove or varies the independent variable.

Independent and dependent variables of the study are presented below:

3.5.1 Independent variables

The selected characteristics of the SAAOs were considered as independent variables which are as follows:

1) Age
2) Annual family income
3) Service length
4) Training received
5) Level of education
6) Academic achievement
7) Job facility
8) Job satisfaction

3.5.2 Dependent variable

Use of Television by Sub-assistant Agriculture Officers (SAAOs) in receiving agricultural information was the dependent variable of the study.

3.6 Measurement of independent variable

3.6.1 Age

The term used to refer to the period from one's birth to the time of interview. It was measured in terms of complete years. Age of the SAAO in this study was measured in terms of actual years of the respondent from his birth to the time of interview. A score of one was assigned for each year of age.

3.6.2 Annual family income

This refers to the total earning in thousand taka of all the family members of a respondent from service, agriculture (crops, livestock and fisheries), business and other sources in a year. A score of 1 was given for each thousand taka. Data obtained in response to item no. 2 of the interview schedule were used to determine the annual family income of the respondents.

3.6.3 Service length

This refers to the total length of service expressed in complete years by the respondent. Total service length was measured by assigning a score of one for each complete year of service in any organization.

3.6.4 Training received

This refers to the days of training which an individual received during his service carrier pertaining to his job. Each training was given attention by considering its duration in days. The scores obtained in respect of all the training received by an individual respondent which were measured in days. A score of 1 was given for each days of training.

3.6.5 Level of education

Level of education of a respondent was measured in terms of classes passed by him in formal education system (i.e. school, college and university). A score of 1 was given for passing each year of educational level.

3.6.6 Academic achievement

Academic achievement or performance is the outcome of education. Based on the result of education, first division, second division and third division were scored as 3, 2 and 1 respectively. Finally, academic achievement of an individual was measured by the total score obtained by him from S.S.C. to above level of education.

3.6.7 Job facility

It refers to the factors which help to facilitate one's job performance. For measuring the job facility scores of a respondent, 15 job facilitating factors were identified and against each factor there were three alternative responses namely not at all available, available with difficulties, easily available. Scores were assigned to these responses as '0', 1 and 2 respectively. Job facility score was obtained for each respondent by summing the scores for his responses against the 15 job facilitating factors. Thus, job facility scores of the respondents could range from '0' to 30, where '0' indicated no facility and 30 indicated maximum job facility.

3.6.8 Job satisfaction

It is a pleasurable emotional state resulting from the appraisal of one's job. For measuring the job satisfaction scores of a respondent, 9 job satisfaction factors were identified and against each factor there were five alternative responses namely, very high satisfaction, high satisfaction, medium satisfaction, low satisfaction and no

satisfaction. Scores were assigned to these responses as 4, 3, 2, 1, and '0' respectively. A job satisfaction score was obtained for each respondent by summing the scores for his responses against all the 9 job satisfaction factors. Thus, job satisfaction scores of the respondents could range from '0' to 36, where '0' indicated no satisfaction and 36 indicated maximum job satisfaction.

3.7 Measurement of dependent variables

Use of Television in receiving agricultural information was the dependent variable of the study. It was measured on the basis of responses of the SAAOs in using 12 selected Television channels for receiving agricultural information by the them. The respondents were asked to indicate their extent of use of twelve Television channels by indicating four alternative responses as regularly, moderately, seldom and never used. A weight of 3, 2, 1 and '0' was given to those alternative responses respectively. Thus, Television use score of the respondents could vary for '0' to 36 where '0' indicating no use and 36 indicating highest use of Television in receiving agricultural information.

3.8 Comparison of Television channels used by the SAAOs

In order to make a better comparison, a Television Channel Use Index (TCUI) was computed by using the following formula for each of 12 selected Television channels:

$$TCUI = N_r \times 3 + N_m \times 2 + N_s \times 1 + N_n \times 0$$

Where,

TCUI= Television channel use index

N_r = Number of SAAOs using the Television channel regularly

N_m = Number of SAAOs using the Television channel moderately

N_s = Number of SAAOs using the Television channel seldom

N_n = Number of SAAOs using the Television channel never

The TCUI of the Television channels could range from '0' to 315, where '0' indicate no use and '315' indicate highest use.

3.9 Data collection

Data for the study were collected by interview procedure. The researcher himself collected data from SAAOs by using the interview schedule. All possible efforts were made to explain the purpose of the study to the respondents in order to get valid and relevant information from them.

Data were collected during the period from 10 February to 14 March, 2011. Before starting collection of data, the researcher met the Deputy Director (DD), Upazilla Agriculture Officers (UAO) and Agriculture Extension Officers (AEO). The researcher also discussed the objectives of the present study with the respondents so that they did not feel any hesitation at the time of interview. However, if any respondent failed to understand any question, the researcher took necessary care to explain the issue as far as possible. After completion of the interview, it was checked and editing was done in case of necessity. The researcher did not face any major problem in collecting data. Excellent cooperation and coordination were extended by the respondents and other concerned persons at the time of data collection.

3.10 Method of data analysis

The collected data were coded, complied, tabulated and analyzed in accordance with the objectives of the study. The statistical measures such as, number and percentage distribution, range, mean, standard deviation were used for describing the variables of

the study. For describing the various 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 the data and general understanding prevailing in the social system. The procedure for categorization of data in respect of different variables are elaborately discussed while describing those variables in Chapter 4. To find out the relationship between use of Television and the selected characteristics of the SAAOs, the Pearson's Product Moment Correlation co-efficient (r) was computed. Correlation matrix was also computed to determine the inter-relationships among the variables which is shown in Appendix-B. If the computed value of co-efficient of correlation 'r' was equalto or greater than the table value of co-efficient at designated level of significance 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 co-efficient of correlation was smaller than the tabulated value at the designated level of significance for the relevant degree of freedom, it was concluded that the null hypothesis could not be rejected and hence there was no relationship between the concerned variables.

CHAPTER IV

RESULTS AND DISCUSSION

Results and discussion is the focal point of whole research work. The quality of research exclusively depends upon how well the findings of the research are discussed and interpreted. So, to make the results and discussion meaningful, acceptable and universal the collected data were coded, categorized, tabulated, analyzed and statistically tested in accordance with the objectives of the study. A sequential and detailed discussion on the findings of the study has been presented in this chapter. The chapter is divided into four sections. In the first section, dependent variable (Use of Television) has been discussed. The second section deals with independent variables i.e. characteristics of the respondents. Third section deals the relationship between the dependent and independent variables. In the fourth section, comparisons of Television used by the SAAOs are presented.

4.1 Use of Television by the Sub Assistant Agriculture Officers

Television plays an important role in disseminating agricultural information to its intended audiences. The use of Television in disseminating agricultural information was measured on the basis of responses of the SAAOs. The use of Television scores of the SAAOs ranged from 1 to 24 against the possible range of '0' to 36 with an average of 11.94 and standard deviation of 5.14.

On the basis of the scores obtained, the respondents were classified into three categories which has been shown in Table 4.1

Table 4.1 Distribution of the SAAOs according to their use of TV

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Very Low (1 to 6)	19	18.10	11.94	5.14
Low (7 to 12)	42	40.00		
Medium (13to 24)	44	41.90		
Total	**105**	**100**		

Data contained in Table 4.1 indicate that 41.90 percent of the SAAOs belonged to medium use category while 40 percent respondents belongs to low category and 18.10 percent, very low use category. Findings further reveled that 58.10 percent of the SAAOs were very low to low users of television in receiving agricultural information. The SAAOs have a tight working schedule in the whole day. They always keep busy in innovation, decision making, field visit and information dissemination system. Thus, they have a limited time to watch Television after returning from their job. That's why the percentage of watching Television by SAAOs was not quite good.

4.2 Characteristics of the SAAOs

The selected characteristics of the SAAOs were age, annual family income, service length, training received, level of education, academic achievement, job facility and job satisfaction. General features and categorization of the characteristics of the SAAOs are discussed below:

4.2.1 Age

The age of the SAAOs ranged from 25 to 57 with an average of 44.37 and standard deviation of 9.52. On the basis of their age, the respondents were classified into three categories as shown in Table 4.2

Table 4.2 Distribution of the SAAOs according to their age

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Young (up to 35)	27	25.71	44.37	9.52
Middle aged (36 – 50)	44	41.90		
Old (above 50)	34	32.39		
Total	**105**	**100**		

Data contained in Table 4.2 indicated that the highest proportion (41.9%) of the SAAOs was in the middle aged group, while 25.71 percent of them was young and 32.39 percent, old. The middle aged SAAOs have greater chance to receive information from Television because they have higher eagerness to learn than the young and old aged SAAOs. They also have high information receiving capability than others.

4.2.2 Annual family income

The annual family income of the SAAOs ranged from 108 to 494 thousands, the average being 273.84 thousand and standard deviation 78.17. On the basis of their annual income, the respondents were classified into three categories. The categories and distribution of the respondents are shown in Table 4.3

Table 4.3 Distribution of the SAAOs according to their annual family income

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Low income (up to 200)	20	19.04	273.84	78.17
Medium income (201 – 300)	51	48.57		
High income (above 300)	34	32.39		
Total	**105**	**100**		

Data presented in Table 4.3 indicate that about half of the respondents (48.57 percent) had medium annual income, compared to 32.39 percent having high and only 19.04 percent low income. This finding indicates that annual income of the SAAOs was not high enough. It is quite logical that the SAAOs are the root level and 2nd class officers at DAE and only their salary was their income source. As a result, their income was medium.

4.2.3 Service length

The service length of the SAAOs ranged from 1 to 37 years with an average of 22.45 years and a standard deviation of 10.58. On the basis of the inservice length the SAAOs were classified into three categories as shown in Table 4.4.

Table 4.4 Distribution of the SAAOs according to their service length

Categories (in years)	Respondents		Mean	Standard deviation
	Number	Percent		
Low service length (up to 20)	29	27.62	22.45	10.58
Medium service length (21 – 30)	46	43.81		
High service length (above 30)	30	28.57		
Total	**105**	**100**		

Data presented in Table 4.4 indicated that majority (43.81 percent) of the SAAOs had medium service length while nearly equal proportion (28.57 percent) of the respondents had high service length and 27.62 percent of the respondents had low service length. It is expected that longer service length helps the SAAOs to gain experience to perform their duties better. In DAE, there is very little scope of promotion of the SAAOs. As a result, there was SAAOs having above 30 years of experience.

4.2.4 Training received

Training received scores of the SAAOs ranged from '0' to 500 days, with an average of 53.83 days and a standard deviation of 74.21. On the basis of their training received scores, the SAAOs were classified into four categories as shown in Table 4.5.

Table 4.5 Distribution of the SAAOs according to their training received

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
No training (0)	9	8.57	53.83	74.21
Low training (1 – 14)	26	24.76		
Medium training (15 – 30)	32	30.48		
High training (above 30)	38	36.19		
Total	**105**	**100**		

Data furnished in Table 4.5 indicated that highest proportion (36.19 percent) of the SAAOs received high training as compared to 30.48 percent of the respondents received medium training, 24.76 percent of the respondent received low training and a little proportion (9 percent) of them did not receive any training. Training helps the respondents to do their job better. An individual obtains knowledge, skill, views or attitudes towards different technologies through training. So, it is expected that more the training received, more the use of Television channels of the respondents.

4.2.5 Level of education

The education score of the respondent ranged from 13 to 18 with an average of 14.30 and standard deviation of 1.12. On the basis of the education score, the SAAOs were categorized into two categories such as medium level of education and high level of education. (Table 4.6)

Table 4.6 Distribution of the SAAOs according to their level of education

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Medium level of education (up to 14)	67	63.81	14.30	1.12
High level of education (above 14)	38	36.19		
Total	**105**	**100**		

The data shown in Table 4.6 revealed that the highest proportion (63.81 percent) of the SAAOs have medium level of education while high level of education have above one third (36.19 percent) of the total respondent. Education can help the respondent to understand the messages of Television channels in receiving agricultural information.

4.2.6 Academic achievement

The academic achievement score of the respondents ranged from 3 to 15 with an average of 5.67 and standard deviation of 1.47. On the basis of the academic achievement score, the SAAOs were categorized into three categories such as low achievement, medium achievement, and high achievement. (Table 4.7)

Table 4.7 Distribution of the SAAOs according to their academic achievement

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Low achievement (up to 4)	26	24.76	5.67	1.47
Medium achievement (5 – 8)	75	71.43		
High achievement (above 8)	4	3.81		
Total	**105**	**100**		

The data shown in Table 4.7 revealed that the majority (71.43 percent) of the SAAOs have medium level of academic achievement while low level of academic achievement have around one fourth (24.76 percent) of the total respondent and high level of academic achievement found in very little proportion (3.81 percent) of the respondent. It is expected that better performance in job may be achieved by better level of academic achievement.

4.2.7 Job facility

The term job facility was used to refer to the convenience caused by different environmental factors in the communication activities of the SAAOs. Job facility scores of the SAAOs ranged from 4 to 26, against the possible range of '0' to 30. The average was 9.60 with a standard deviation of 3.72. On the basis of job facility scores, the SAAOs were classified into three categories as shown in Table 4.8.

Table 4.8 Distribution of the SAAOs according to their job facilities

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Low (up to 10)	65	61.90	9.60	3.72
Medium (11 – 15)	34	32.39		
High (above 15)	6	5.71		
Total	**105**	**100**		

Data presented in Table 4.8 showed that majority (61.90 percent) of the respondents got low job facility as compared to nearly one-third (32.39 percent) of the respondents got medium job facility. But only 5.71 percent of the SAAOs were in a position to avail high job facility. High job facility influences the respondents in serving their job responsibility efficiently. It is expected that the higher job facility, the higher use of Television channels of the SAAOs.

4.2.8 Job satisfaction

Job satisfaction scores of the SAAOs ranged from 4 to 25 with a possible range of '0' to 36. The average score was 15.12 with a standard deviation of 4.57. On the basis of job satisfaction scores, the SAAOs were classified into three categories as shown in Table 4.9.

Table 4.9 Distribution of the SAAOs according to their job satisfaction

Categories	Respondents		Mean	Standard deviation
	Number	Percent		
Low (up to 10)	21	20.00	15.12	4.57
Medium (11 – 20)	70	66.67		
High (above 20)	14	13.33		
Total	**105**	**100**		

Data contained in Table 4.9 indicated that two third (66.67 percent) of the SAAOs had medium job satisfaction. But only 20 percent and 13 percent had low and high extent of job satisfaction respectively. So, it is expected that higher level of job satisfaction could help the respondent to perform better in job in receiving agricultural information from Television.

4.3 Relationship between the selected characteristics of the SAAOs and their use of Television channels

The purpose of this section is to examine the relationship of 8 selected characteristics of the SAAOs with their use of Television channels in receiving agricultural information. The selected characteristics of the SAAOs included age, annual family income, service length, training received, level of education, academic achievement, job facility and job satisfaction.

Each of the above characteristics constituted an independent variable while use of Television of the SAAOs. regarding receiving agricultural information was the only dependent variable in this study. Significant relationship as determined by co-efficient of correlation 'r' have been examined. The null hypothesis formulated for this study has been described in Chapter 1. Pearson's product-moment correlation co-efficient 'r' was computed to determine the relationship between any two variables concerned (Table 4.10).

A null hypothesis was rejected for this study when the observed 'r' value was equal to or greater than the table value of 'r' at 0.05 levels of probability. The relationship between the selected characteristics of the SAAOs and their use of Television has been presented in Table 4.10.

Table 4.10 Co-efficient of correlation showing relationship between selected characteristics of the Sub-assistant Agricultural Officer and their Use of Television

(N = 105)

Dependent variable	Independent variable	Computer value "r"	Tabulated value of "r"	
			at 0.05 level	at 0.01 level
Use of Television	Age	0.222*	0.192	0.251
	Annual family income	0.216*		
	Service length	0.222*		
	Training received	-0.110NS		
	Level of education	-0.034NS		
	Academic achievement	0.218*		
	Job facilities	0.247*		
	Job satisfaction	0.328**		

NS Not significant

* Significant at 0.05 level of probability

** Significant at 0.01 level of probability

4.3.1 Relationship between the age of SAAOs and their use of Television in receiving agricultural information

The relationship between age of the SAAOs and their use of Television in receiving agricultural information was examined by testing the following null hypothesis: "There is no relationship between age of the SAAOs and their use of Television in receiving agricultural information."

The co-efficient of correlation between age of the SAAOs and their use of Television channels in receiving agricultural information was found 0.222 in Table 4.10. The following observations were recorded regarding the relationship between the variables on the basis of the co-efficient of correlation:

Firstly, the relationship showed a positive trend. Secondly, the computed value of 'r' (0.222) was larger than the table value (r = 0.192) with 103 degree of freedom at 0.05 level of probability.

Based on the above findings, the null hypothesis was rejected and hence, the researcher concluded that age of the SAAOs had positive and significant relationship with their use of Television channels. This indicates that the use of Television channel of the SAAOs influenced significantly by their age. However the trend of relationship between age and the use of Television channes in receiving agricultural information was positive.

4.3.2 Relationship between the annual family income of SAAOs and their use of Television in receiving agricultural information

The relationship between annual family income of the SAAOs and their use of Television was examined by testing the null hypothesis: "There is no relationship between annual family income of the SAAOs and their use of Television."

The co-efficient of correlation between annual family income of the SAAOs and their use of Television 0.216 in (Table 4.10.) The following observations were recorded regarding the relationship between the variables on the basis of the co-efficient of correlation.

Firstly, the relationship showed a positive trend. Secondly, he computed value of 'r' (0.216) was larger than the table value (r = 0.192) with 103 degree of freedom at 0.05 level of probability.

Based on the above findings, the null hypothesis was rejected and hence, the researcher concluded that annual income of the SAAOs had positive and significant relationship with their use of Television. This indicates that the use of Television of the SAAOs was influenced significantly by their different income levels. The finding of the present study support the finding of Karim (1994) who suggested that annual income had positive and significant relationship with use of Television channels of the extension workers.

4.3.3 Relationship between the service length of SAAOs and their use of Television in receiving agricultural information

The relationship between service length of the SAAOs and their use of Television was examined by testing the null hypothesis: "There is no relationship between service length of the SAAOs and their use of Television."

The co-efficient of correlation between service length of the SAAOs and their use of Television channel was 0.222 (Table 4.10). The following observations were recorded regarding the relationship between the variables on the basis of the co-efficient of correlation.

Firstly, the relationship showed a positive trend. Secondly, computed value of 'r' (0.222) was larger than the table value (r = 0.192) with103 degree of freedom at 0.05 level of probability.

Based on the above findings, the null hypothesis was rejected and hence, the researcher concluded that service length of the SAAOs had significant and positive relationship with their use of Television. This indicates that the use of Television of the SAAOs was influenced significantly by their service length. The finding of the present study supports the study conducted by Akhouri (1973).

4.3.4 Relationship between the training received of SAAOs and their use of Television in receiving agricultural information

The relationship between training received of the SAAOs and their use of Television was examined by testing the following null hypothesis: "There is no relationship between training received of the SAAOs and their use of Television."

The co-efficient of correlation between training received of the SAAOs and their use of Television was found -0.110 (Table 4.10). The observations were recorded regarding the relationship between the concerned variables on the basis of the co-efficient of correlation:

Firstly, the relationship showed a negative trend. Secondly, the computed value of 'r' (-0.110) was smaller than the table value (r = 0.192) with 103 degree of freedom at 0.05 level of probability.

Based on the above findings, the null hypothesis could not be rejected and hence, the researcher concluded that training received of the SAAOs had no significant relationship with their use of Television. This indicates that the use of Television of

the SAAOs did not influence significantly by their various training program. The present study supports the findings of the studies conducted by Pandey (1979).

4.3.5 Relationship between the level of education of SAAOs and their use of Television in receiving agricultural information

The relationship between level of education of the SAAOs and their use of Television was examined by testing the following null hypothesis: "There is no relationship between level of education of the SAAOs and their use of Television."

The co-efficient of correlation between training received of the SAAOs and their use of Television was found -0.034 in (table 4.10). The following observations were recorded regarding the relationship between the variables on the basis of the co-efficient of correlation:

Firstly, the relationship showed a negative trend. Secondly, the computed value of 'r' (-0.034) was smaller than the table value (r = 0.192) with 103 degree of freedom at 0.05 level of probability.

Based on the above findings, the null hypothesis could not be rejected and hence, the researcher concluded that level of education of the SAAOs had no significant relationship with their use of Television. This indicates that the use of Television of the SAAOs did not influence significantly by their level of education. This indicates that the higher the education the less is the use of the Television among SAAOs.

4.3.6 Relationship between the academic achievement of SAAOs and their use of Television in receiving agricultural information

The relationship between academic achievement of the SAAOs and their use of Television was examined by testing the following null hypothesis: "There is no relationship between academic achievement of the SAAOs and their use of Television."

The co-efficient of correlation between training received of the SAAOs and their use of Television was found 0.218 in (table 4.10). The observations were recorded regarding the relationship between the variables on the basis of the co-efficient of correlation:

Firstly, the relationship showed a positive trend. Secondly, the computed value of 'r' (0.218) was higher than the table value (r = 0.192) with 103 degree of freedom at 0.05 level of probability.

Based on the above findings, the null hypothesis was rejected and hence, the researcher concluded that academic achievement of the SAAOs had significant and positive relationship with their use of Television. This indicates that the use of Television by the SAAOs was influenced significantly by their academic achievement.

4.3.7 Relationship between the job facility of SAAOs and their use of Television in receiving agricultural information

The relationship between job facility of the SAAOs and their use of Television was examined by testing the null hypothesis: "There is no relationship between job facility of the SAAOs and their use of Television."

The co-efficient of correlation between job facility of the SAAOs and their use of Television was found 0.247 in (table 4.10). The following observations were recorded regarding the relationship between the variables on the basis of the co-efficient of correlation:

Firstly, the relationship showed a positive trend. Secondly, the computed value of 'r' (0.247) was greater than the table value (r = 0.192) with 103 degree of freedom at 0.05 level of probability.

Based on the above findings, the null hypothesis was rejected and hence, the researcher concluded that job facility of the SAAOs had positive and significant relationship with their use of Television. This indicates that the use of Television by the SAAOs was influenced significantly by their various job facility factors.

4.3.8 Relationship between the job satisfaction of SAAOs and their use of Television in receiving agricultural information

The relationship between job satisfaction of the SAAOs and their use of Television was examined by testing the null hypothesis: "There is no relationship between job satisfaction of the SAAOs and their use of Television."

The co-efficient of correlation between job satisfaction of the SAAOs and their use of Television was found 0.328 in (table 4.10). The following observations were recorded regarding the relationship between the variables on the basis of the co-efficient of correlation:

Firstly, the relationship showed a positive trend. Secondly, the computed value of 'r' (0.328) was greater than the table value (r = 0.251) with 103 degree of freedom at 0.01 level of probability.

Based on the above findings, the null hypothesis was rejected and hence, the researcher concluded that job satisfaction of the SAAOs had positive and significant relationship with their use of Television. This indicates that the use of Television by the SAAOs was influenced significantly by their various job satisfaction factors.

4.4 Comparison of Television channels used by the SAAOs

The Television channel use index (TCUI) of each of the 12 selected Television channel ranged from 19 to 270 against the possible range '0' to 315. Rank order was made on the basis of descending order of TCUI of the television channels as shown in table 4.11

Table 4.11 showed that Channel-I ranked first on the basis of TCUI followed by BTV and BTV World. The fourth and fifth channels were ATN Bangla and Bangla Vision. My TV was were ranked last.

Table 4.11 Comparison of Television channels according to Television channel use index (TCUI) with rank order

Name of the channels	Regularly	Moderately	Seldom	Never	TCUI	Rank order
Channel I	71	27	3	4	270	1
BTV	47	52	12	14	217	2
BTV World	17	26	18	44	121	3
ATN Bangla	11	23	32	39	111	4
Bangla Vision	20	13	20	52	106	5
NTV	7	25	21	52	92	6
RTV	2	20	26	57	72	7
Ekushe TV	2	16	28	58	66	8
Boishakhi TV	9	6	26	64	65	9
Digonto TV	4	10	22	69	54	10
Desh TV		5	19	81	29	11
My TV		3	13	89	19	12

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is devoted for the summaries of the introduction, methodology and major findings of this piece of research work. Conclusions and recommendations are also included briefly in this Chapter.

5.1 Summary

5.1.1 Introduction

Bangladesh has a great potential in the sector of agriculture and the agricultural productivity of this country can be increased to a great extent by transferring the new technologies among the farmers. For improving our agriculture, we have to bring change in this sector. In this regard, we have to maintain an effective communication media which give the latest information to our field level extension workers. Communication is blood stream of development administration. In rural development nothing is more important than the transfer of useful ideas from the sources to users. In the process of communication lies the potential for millions of village people to overcome ignorance, poverty and disease to attain a status of economic and social well-being. Extension workers are the real change agents and key communicators, who play an important role in diffusion of innovations. To make farming communities, the SAAOs requires high quality knowledge.

Television is an important means of extension communication media. In the adoption of new ideas television can play an important role. It is not most effective when the audience aware of or interest in an idea. Messages through television can motivate, stimulate, induce and change basic attitudes of the people. Thus, most important

advantage of television is that it reaches at all cultural and age levels. Therefore, it has an audience that is not often reached by other mass media.

The frame work of this study stems from use of television media. The purpose of this study is to have an understanding about the preference of agriculture related Television programs in disseminating agricultural information through Bangladesh Television (BTV), Bangla Vision, Channel I, BTV (world), ATN Bangla, Boisakhi TV, Ekushe TV, My TV, Desh TV, RTV, NTV, Digonto TV by SAAOs of four upazilla in Pabna district was selected as the study area. The selected four upazilla are Pabna sadar, Ishwardi, Sujanagar and Chatmahar. The study also aims to explore the relationship of the selected personal and socio-economic characteristics of SAAOs with the use of Television channels.

5.1.2 Specific Objectives

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

1) To determine and describe the use of television by the SAAOs is receiving Agricultural Information
2) To describe the following selected characteristics of the SAAOs:
    a) Age
    b) Annual family income
    c) Service length
    d) Training received
    e) Level of Education
    f) Academic achievement

g) Job facility

h) Job satisfaction

3) To explore the relationship between the selected characteristics of the extension workers and the use of Television

4) To compare the television channels used by the Sub-Assistant Agriculture Officers in receiving agricultural information

5.1.3 Methodology

Four upazilla in Pabna district was selected as the study area. The selected four upazilla are Pabna sadar, Ishwardi, Sujanagar and Chatmahar. For the collection of the data an interview schedule was prepared. The Bangla version of the interview schedule was used to collect data from the respondents. The sample size of 105 randomly selected SAAOs from the whole district. Data were collected by the researcher himself. The selected individual characteristics of the SAAOs were the independent variables. The collected data were coded, complied, tabulated and analyzed in accordance with the objectives of the study. Various statistical measures were used in describing the variables.

The selected individual characteristics of the farmers were the independent variables and use of television in receiving agricultural information by the SAAOs was the dependent variable. All these variables of the study were measured by computing appropriate scores. Various statistical measures such as mean, standard deviation, percentage and range were used in describing both the independent and dependent variables. To explore the relationship between the independent and dependent variables Correlation Coefficient was measured.

5.1.4 Findings

The findings of the study and interpretation of the results have been presented elaborately in chapter IV. The findings of the study are summarized below:

5.1.4.1 Use of Television by SAAOs

The use of Television channels of the SAAOs ranged from 2 to 23 with an average of 11.94 and standard deviation of 5.14. The majority (58.10 percent) of the SAAOs belonged to very low to low use category while 41.90% respondents were in medium category.

5.1.4.2 Selected characteristics of SAAOs

Age: The highest proportion of the SAAOs (41.90 percent) felt in the middle age group, while (25.71percent) of the respondents felt in young and (32.39 percent) old age group.

Annual family income: Almost half of the respondents (48.57 percent) had medium income, compared to 32.39 percent had high and only 19.04 percent had low income.

Service length: Majority (43.81 percent) of the respondents had medium service length while nearly equal proportion (28.57 percent) of the respondents had high service length and (27.62 percent) of the respondents had low service length.

Training received: That highest proportion (36.19 percent) of the SAAOs received high training as compared to nearly (30.48 percent) of the respondents received medium training, (24.76 percent) of the respondent received low training and a little proportion (9 percent) of them received no training.

Level of education: The highest proportion (63.61 percent) of the SAAOs have medium level of education while high level of education have around one third (36.19 percent) of the total respondent.

Academic achievement: The majority (71.43 percent) of the SAAOs have medium level of academic achievement while low level of academic achievement have around one fourth (24.76 percent) of the total respondent and high level of academic achievement (3.81 percent) found in the selected population.

Job facility: The majority (61.90 percent) of the respondents got low job facility as compared to nearly one-third (32.39 percent) of the respondents got medium job facility. But only 5.71 percent of the SAAOs were in a position to avail high job facility.

Job satisfaction: The data indicate that majority (66.67 percent) of the SAAOs had medium job satisfaction. But only (20 percent and 13 percent) had low and high extent of job satisfaction respectively.

5.1.4.3 Relationship of the selected characteristics of the SAAOs with their use of TV in receiving agricultural information

Pearson Product-Moment Co-relation analysis revealed that age, annual family income, service length, academic achievement, job facility, job satisfaction had positive and significant relationship with the use of Television in receiving agricultural information. However, training received and level of education had no significant relationship with the use of Television in receiving agricultural information.

5.1.4.4 Comparison of Television channels according to their TCUI

Channel-I ranked first on the basis of TCUI followed by BTV and BTV World. The fourth and fifth channel was ATN Bangla and Bangla Vision. My TV was the used channel those were ranked last.

5.2 Conclusions

Based on the findings of this study the following conclusions are drawn:

1. The study indicated that 58.10 percent SAAOs were very low to low users of television in receiving agricultural information. This means that the information presented to the SAAOs through Television programmes were mostly low to medium effective in terms of their use in the real situation. For increasing knowledge by agricultural information, it is essential to increase the use of Television of the SAAOs for receiving agricultural information.

2. Age of the SAAOs had positive significant relationship with their use of Television in receiving agricultural information. Increasing of age of SAAOs increases knowledge, ideas, views on various innovations, which enhances use of Television of the SAAOs towards receiving agricultural information.

3. The statistical analysis shows that there was a positive and significant relationship between annual family incomes with the use of Television in receiving agricultural information. This lead to the concision that SAAOs with high annual family income enhance the use of Television in receiving agricultural information.

4. Service length of the SAAOs had positive significant relationship with their use of Television in receiving agricultural information. It was revealed that the SAAOs generally had discussions with their colleagues and their high officials to identify the field problems and also seek recent agricultural information from them. This means that the more the service length the more use of Television in receiving agricultural information.

5. Academic achievement of SAAOs had positive significant relationship with their use of Television in receiving agricultural information. Therefore, it may be concluded that more the academic achievement of the SAAOs, the more was there use of Television in receiving agricultural information.

6. Findings showed that there was a positive significant relationship between job facility and use of Television. It leads to the conclusion that job facility increases use of Television in receiving agricultural information of the SAAOs.

7. There was a positive significant relationship between job satisfaction and use of Television of the SAAOs. High job satisfaction may enhance use of Television of the SAAOs towards receiving agricultural information.

8. There was a few agricultural programme which influence the use of Television by SAAOs. Among them Mati-O-Manush which telecasted by the BTV is much popular, well known to everyone and informative too. It enhances the use of Television of the SAAOs towards receiving agricultural information.

5.3 Recommendations

5.3.1 Recommendations for policy implication

1. Very low and low percentages of SAAOs had used Television in receiving agricultural information. Therefore, it is recommended that there is necessity to provide a Television at SAAO office cum-residence at block level so that, he could use the television with farmers in receiving agricultural information.

2. Age of the SAAOs have positive significant relationship with their use of Television in receiving agricultural information. Therefore it may be recommended that Television programmes should be very carefully selected considering the age of the viewers.

3. As SAAOs annual family income had significant positive relationship with the use of Television in receiving agricultural information. For that reason the Television programmes should broadcast such type of agricultural information those application could increase the income of the farming community.

4. SAAOs having long service length have significant positive relationship with the use of Television in receiving agricultural information. Therefore, it is recommended that appropriate care should be given by the concerned authority to present quickly agriculture related programs which will provide a higher amount of useful information.

5. Academic achievement had a positive significant relationship with the use of Television in receiving agricultural information. For this reason it is suggested that quality information must be provided via Television channel.

6. Job facility had a positive relationship with the use of Television. So it is recommended that proper facilities should be given to SAAOs for use of Television in receiving agricultural information.

7. Electronic media such as Television seemed to have great impact in the diffusion of agricultural innovations. The Department of Agricultural Extension (DAE), GOs and NGOs needs to pay more attention to ensure the use of Television.

8. As Mati-O-Manush is very popular and well known programme so, it is necessary to give more emphasis to plan a effective way to transmit information at the remote areas of Bangladesh.

9. Agricultural programmes are prepared by general people. They have not a clear concept about that. They are talking about different new technologies which are not useful for the farmer. As for example cultivation of hybrid of different crops is not good. Different TV programme always show that hybrid is good and give better performance. In this situation the information they supplied is fully wrong. That's why SAAOs are not interested with this type of programme in real situation.

5.3.2 Recommendations for further study

A small and limited research work has been related to the present issue. Further studies should be undertaken on related matters. On the basis of scope and limitations of the present study and observation made by the researcher, the following recommendations are made for further study.

1. The present investigation explored the relationships between eight selected characteristics of the SAAOs and their use of Television in receiving agricultural information. Besides these, there are other characteristics which may also influence use of Television of SAAOs. Therefore, it is suggested to select other characteristics

and establish relationships with use of Television in receiving agricultural information of extension workers.

2. The study was concerned with the SAAOs of Pabna District. Similar studies may be replicated in other parts of the country to provide further valuable information.

3. In the present study, training received and level of education had no significant relationship with use of Television in receiving agricultural information. In this connection, further verification is necessary.

4. This research was limited on only 12 (twelve) Television channels, but Television channels are more varied. So, further research may be conducted including other Television channels of Bangladesh and abroad.

REFERENCES

Akhouri, M.M.P. 1973. Communication Behaviour of Extension Personnel. An Analysis of Haryana Agricultural System. *Ph.D. Thesis.* Indian Agricultural Reaserch Institute. New Delhi.

Ambastha, C.K. 1974. Communication Pattern in Farm Information Development, Extension and Client Systems in Bihar; a System Approach. *Ph.D. Thesis.* Indian Agricultural Research Institute, New Delhi.

Anisuzzaman, M. (2003). Use of Communication Media by the farmers the Adoption of Improved Rice Production technologies. M.S. (Ag.Ext.Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

Alam, S.M.A. (2004). Extent of Use of Communication Media by the Farmers in Receiving Information on Winter Vegetable Cultivation. M.S. (Ag.Ext.Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

BBS. 2005. *Statistical Year Book of Bangladesh.* Bangladesh Bureau of Statistics. Statistics Division, Ministry of Planning, Govt. of Peoples Republic of Bangladesh.

Batte, M.T., Schitkey, G.D. and Jones, E. (1990). Source, Uses and Adequacy of Marketing Information for Commercial Midwestern Cash Grain Farmers. *North Central Journal of Agricultural Economics.* **12**(2): 187-196.

Coughenour, M.C. 1968. Some General Problems in Diffusion from the Perspective of the Theory of Social Action. Diffusion Research Need. *North Central Regional Research Bulletin,* University of Missouri, U.S.A.

Chugh, P.L. 1991. Communication through Mass Media. *Rural Development Abstract.* 15(3): 251.

Chakraborty, D. (1992). A Study on the Importance of Radio as an Extension Medium among the Farmers. M.S. (Ag.Ext.Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

DAE, 1995. Agricultural Extension Manual. (June, 1995 revision). Department of Agricultural Extension, Ministry of Agriculture, Govt. of the People's Republic of Bangladesh.

DAE (1995). Agricultural Extension Manual. (June, 1995. revision). Department of Agricultural Extension, Ministry of Agriculture, Government of the People's Republic of Bangladesh.

De-la-Vega, M.B. (1990). Communication Profile and a Prototype Communication Strategy to Promote Co-operatives Among Comprehensive Agrarian Reform Programme (CARP) Beneficiaries. College, Laguna, Philippines.

Diaz-Knauf, K; C. Ivankovich; F. Aguilar; C. Bruhn and H. Schulz (1993). Consumes attitude towards food safety to product in Costarica. Journal of Food Service System, 7(2): 105-115.

Elahi, K. 1977. Role of Communication in Rural Development. *Journal of Rural Development Administration.* 12(1):42-47.

Egbule, P.E. and E.M.C. Njoku. 2001. Mass Media Support for Adult Education in Agriculture in Southern Nigeria. *Adult Education and Development*. 56:179-186.

Goode, C.V. 1945. *Dictionary of Education*, New York and London: McGraw-Hill Book Company Inc.

Galindo, G. (1994). Communication Media Used By Farmers in The Central Region of Zacateca, Mexico Turrialba. 44:3.

Halim, A. and M.A.M. Miah (1996). Appropriate information for Communicating to Rural Farm Women. Proceeding of Workshop, Achievement of the Gender Research and Training Project BARC. Farmgate, Dhaka, Bangladesh.

Haque, M.M. 1972. Information Sources Used by the IRRI Rice Growers of Thakurgaon Thana Co-operative Tube-well Project. *M.Sc. (Ag. Ext. Ed.) Thesis.* Department of. Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.

Islam, M.M. (1996). Farmers Use of Indigenous Technical Knowledge (ITK) in the Context of Sustainable Agricultural Development. M.S. (Ag.Ext.Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

Islam, M.R. (1998). Effectiveness of Mati-O-Manush TV Programme in Dissemination Agricultural Information to the Television Viewer Farmers. M.S. (Ag.Ext.Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

Islam, M.R. (1998). Effectiveness of Mati-O-Manush Television Program in Disseminating Agricultural Information to the Television Viewer Farmers, an M.Sc. thesis, Department of Agricutural Extension Education, Bangaldesh Agricultural University, Mymensingh.

Joshi, N.N. and S.N. Laharia (1990). Content Analysis of Krishi Darshan Programe. Indian Journal of Extension Education, 26(1&2):22-31.

Kabir, M.K. and M.K. Bahttachargee (1994). Impact of Radio and Television on Rural People, Bangaldesh Accademy for Rural Development (BARD), Comilla.

Khan, A. (1989). Farmers Resource Status Information Availability and Utilization; A Study Within North Wertern Provience. Desertation Abstract International, Humanities and Social Science, University of Microfilms. Inc.

Kashem, M.A. and A. Halim. (1991). Use of Communication Media in the Transfer of Technology to Farmers: A Farm Level Study. *Research Monograph No.2.* Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

Kothari, C.R. (1994). Research Methodology: Methods and Techniques, 2nd ed. New Delhi, India.

Karim, M.R. 1994. Communication Patterns in Farm Information Development and Dissemination Systems Related to Rice Technology. *Ph.D. Thesis*. Bangladesh Agricultural University, Mymensingh.

Khan, M.A. and Paracha, S.A. (1989). Interpersonal Communication Network in Diffusion of Innovations at Innovative and Non-innovative Villages. *Journal of Rural Development and Administration*. **26**(2): 79-88.

Ko, S.C.and kim, S.S. (1988). Watching Behavior of Rural Television Programme by Extension Workers. *Journal of Korean Agricultural Education*. **20**(1): 45-52.

Kashem, M.A. and Jones, G.S. (1988). Small farmers Contact with Information Sources and its Relationships with some selected characteristics. *Bangladesh Journal of Extension Education*. **3**(1): 1-7.

Kumari, N. (1988). An Experimental Study on Effectiveness of Selected Six Media for Health Education. *Thesis Abstract*, Haryana Agricultural University, Hissar, India.

Lionberger, H.F. and H.C. Chang. 1970. *Flow of Farm Information for Modernizing Agriculture: The Taiwan System*. New York: Praeger Publisher.

Locke, 1976 cited in Brief, A. P., & Weiss, H. M. (2001). Organizational behavior: affect in the workplace. Annual Review of Psychology, 53, 279-307, p. 282.

Mekabutra, P. (1985). Farmers' Opinion towards receiving Knowledge in Agricultural from Mass Media in Chiyo District. Angthong Province,Bankok, Thailand.

Nataraju, M.S. and Channegowda, N.B. (1985). Source of Information Utilization for Adoption of improved Dairy Management Practices by Small, Marginal Farmers and Agricultural Laborers, *Indian journal of Extension Education.* **3**(4): 99-100.

Nuruzzaman, M. (2003). Use and Preference of Mass Media in receiving Agricultural Information by the Farmers. M.S. (Ag.Ext.Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

Patil, R.P., B.R. Desae and M.B. Kibey. 1984. Farm Information Used by the Contact and Non-contact Farmers under Training and Visit System in Dhule District. *Journal of Maharshtra Agricultural University*. 2(3): 334-335.

Pandey, S.N. 1979. Development of Marginal Farmers and Agricultural Laborers: A study in Mathura, New Delhi. Sri Ram Centre for Industrial Relation and Human Resources, India.

Rogers, E.M. and L. Srenning. 1969. Modernization among Peasants. Holt, Rinehart and Winston, New York, U.S.A.

Rogers, E.M. (1995). Diffusion of Innovations. 4th ed. New Work: The Free Press. p. 143.

Rahman, M.M. 1974. An Investigation into the Use of Communication Sources by the Registered Jute Seed Growers of Meherpur Thana. *M.Sc. (Ag. Ext. Ed.) Thesis*. Department of Agricultural Extension Education and Teachers' Training, Bangladesh Agricultural University, Mymensingh.

Sanoria, Y.C. 1977. Determinants of Job Satisfaction among the Agricultural Extension Officers of Punjab. *Indian Journal of Extension Education*. 13: 42-47.

Sarker, M.M.R. (1996). Effectiveness of Agricultural Information Disseminated to Farmers through Agricultural Radio Programme. M.S. (Ag.Ext.Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

Sauquet, M. (1990). New Tools for Participatory Communication in Agricultural Extension; Example, From Brazil. Training for Agricultural and Rural Development. FAO Economics and Social Development Serieses, No. 48.

Stanturi, M. (1992). Communication Support Resources and Structure of Smallholders Rubber Development Project and Adoption of Rubber Technology in Taluk Unit Riau Privince, Indonesia. Phillipines College, Laguna, The Phillipines.

Shete, N.B. 1974. A Study of Communication Behaviour of Extension Personnel of Maharastra Agricultural Extension System. *Ph.D. Thesis*. Indian Agricultural Research Institute, New Delhi.

Sinha, A.K. (1985). Mass Media and Rural Development: A Study of Village Communication in Bihar. Concept Publishing Company, New Delhi, India.

Shamanta, R.K (1986). Effectiveness of Agricultural Information Dissemination to Farmers through Agricultural Radio Programme. M.S. (Ag.Ext.Ed.) Thesis, Department of Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh.

Singh, B., R.S. Narwal and J.S. Malik. 2003. Communication Sources Used by Extension Personnel and Farmers. *Indian Journal of Extension Education.* 39(1&2): 26-30.

Townsend, J.C. (1953). Introduction of Experimental Methods: International Student Edition. New York: McGraw-Hill Book Company, Inc.

Van den Ban, A.W. (1981). A Communication System between Agricultural Research and the Farmers. *The Netherlands Way Journal of Extension Systems*. 3(1):26-34.

Wate, F.N. and Riveria, W.M. (1991). New Technologies for Transferring Agricultural Information. School of Mass Communication. University Taounda, B.P. 1328, Yaonda, Cameroon.

Wabhitkar, P.H., M.M. Rathor, H.B. Goramnagar and P.N. Ston. 1998. Socio-economic, Psychological and Communication Characteristics of Farmers Adopting High Yielding Varieties. *Journal of Soils and Crops.* 8(1): 88-90.

APPENDIX A

Department of Agricultural Extension and Information System
Sher-e-Bangla Agricultural University
Dhaka-1207
Interview schedule on the study of

"USE OF TELEVISION BY EXTENSION WORKERS IN RECEIVING AGRICULTURAL INFORMATION"

Respondent No.....

Name of Respondent.....

Place of posting: Block..... Block no.....Union.....

Upazila.....District.....Region.....

(Please answer the following questions)

1. **Age:**

   What is your present age (according to your S.S.C. certificate)...years

2. **Annual Family Income:**

   Please mention your last year family income.

Sources of Income	Amount of income(tk)
1 Service	
2 Agriculture	
3 Business	
4 Others	
Total	

3 **Service length: Please mention your service length.**
Years.....month.....days.....

4. Training Received: Arrange chronologically the particulars of in-service training attended during the tenure of your service life.

Sl no.	Field of training	Place of the training	Duration (in days)
1			
2			
3			
4			
5			

5. Please mention your level of education and academic achievement:

Name of the exam	Year of passing	Division/class
S.S.C.		
H.S.C.		
B. Ag Ed (Hons)		
Diploma in Agriculture (ATI)		
Others		

6. Job Facilities: Please indicate the extent of your agreement with the factors which facilitate to perform your responsibilities by putting tick mark against each factor in the appropriate box.

Sl no.	Facilitating Factors	Not at all Available	Available With Difficulties	Easily Available
1	Office Room			
2	Transport			
3	Promotion			
4	Residence			
5	Travel Allowance			
6	Office Stationary			
7	Training Materials			
8	Office Furniture			
9	Agricultural Publication			
10	Co-operation from local leader			
11	Agriculture Instrument and Inputs			
12	Appropriate Technology			
13	In Service Training			
14	Necessary Fund			
15	Others			

7. Job Satisfaction

Sl. No	Aspects of job environment	Extent of job satisfaction				
		Very high satisfaction	High satisfaction	Medium satisfaction	Low satisfaction	No satisfaction
1.	Pay allowance					
2.	Residential accommodation facility					
3.	Travel and transport facility					
4.	Support material (raincoat, shoe, dairy, bag etc)					
5.	Technical and Extension facility					
6.	Supervisor Relationship					
7.	Promotion Facility					
8.	Social and Organizational Recognition					
9.	Place of posting					

9. TV channels use: Please mention your preferred Television channel by putting tick mark against each factor in the appropriate box

Sl no.	name	Extent of use			
		Regularly	Moderately	Seldom	Never
1	BTV				
2	BTV WORLD				
3	CHANNEL I				
4	ATN BANGLA				
5	BOISAKHI TV				
6	DIGONTO TV				
7	EKUSHE TV				
8	MY TV				
9	DESH TV				
10	R TV				
11	BANGLA VISION				
12	N TV				

APPENDIX- B

Correlation matrix showing the interrelationships among the entire variable

	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	Y
X_1	1								
X_2	0.574**	1							
X_3	0.900**	0.529**	1						
X_4	0.183	0.159	0.108	1					
X_5	0.239*	0.327**	0.236*	0.146	1				
X_6	0.053	0.010	0.032	-0.007	0.294**	1			
X_7	0.018	0.161	0.015	-0.166	0.055	0.144	1		
X_8	0.223*	0.067	0.213*	-0.350**	-0.101	0.038	0.428**	1	
Y	0.222*	0.216*	0.222*	-0.110	-0.034	-0.233*	0.247*	0.328**	1

^{NS} Non-Significant

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

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

X^1 = Age
X^2 = Annual family income
X^3 = Service length
X^4 = Training received
X^5 = Level of education
X^6 = Academic achievement
X^7 = Job facilities
X^8 = Job satisfaction
Y = Use of television