CREDIBILITY OF SAAO IN EXTENSION SERVICES AS PERCEIVED BY THE FARMERS

MD. HASSAN TAREQUE

DEPARTMENT OF

AGRICULTURAL EXTENSION AND INFORMATION SYSTEM

SHER-E-BANGLA AGRICULTURAL UNIVERSITY
DHAKA 1207

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BY

MD. HASSAN TAREQUE

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APPROVED BY:

(Prof. Mohammad Hossain Bhuiyan)	**(Dr. Md. Sekender Ali)**
Supervisor	Co-supervisor

(Prof. Dr. Md. Rafiquel Islam)
Chairman
Examination Committee

DEDICATED
TO
MY BELOVED ***PARENTS***

Memo No: SAU/

CERTIFICATE

This is to certify that the thesis entitled **"Credibility of SAAO in Extension Services as Perceived by the Farmers"** 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. HASSAN TAREQUE**, Registration No. 00843 under my supervision and guidance. No part of the thesis has been submitted for any other degree or diploma.

I further certify that any help or source of information, received during the course of this investigation has been duly acknowledged.

Dated:
Dhaka, Bangladesh

Prof. Mohammad Hossain Bhuiyan
Supervisor
&
Professor
Department of Agricultural Extension and Information System
Sher-e-Bangla Agricultural University

Sher-e-Bangla Nagar, Dhaka-1207

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ABSTRACT

The study was conducted to determine and describe the credibility of Sub-Assistant Agricultural Officer (SAAO) in extension service as perceived by the farmers and explore the relationship between the selected characteristics of the farmers and their perception of creditability of SAAO of DAE in the Bhaluka Upazilla under Mymensingh District. Kachina Union among the 11 Union of Bhaluka Upazilla selected purposively as the locale of the study. Farmers of Kachina, Batazor and Palgoan village under Kachina Union constituted the population of the study. A list of 1051 farmers from the selected villages was prepared with the help of Sub-Assistant Agricultural Officer of this area. Ten (10) percent of the population was randomly selected from the list of total population. Thus, 105 farmers constituted the sample of the study. The independent variables were: age, level of education, family size, farm size, annual income, training exposure, reading of newspaper, reading of agricultural printed materials, listening farm radio talk and watching agricultural TV programs. The dependent variable of this study was the credibility of SAAO in extension service as perceived by the farmers. The highest (59.05 percent) of the respondents opined belongs the medium level of creditability compared to 21.90 percent low and 19.05 low and high level of as perceived by the farmers. Level of education, annual income and reading of agricultural printed materials had significant positive relationship with the credibility of SAAO in extension service as perceived by the farmers.

CHAPTER 1

INTRODUCTION

1.1 General Background

Bangladesh is an agro based country with an area of 147,570 square kilometer and 14.1 million hectares of crop land with cropping intensity is 184 percent (Anon., 2006). About 21.20 percent of the Gross Domestic Product (GDP) comes from agriculture sector (BBS, 2008). Every year the country is badly affected by the adverse environmental disasters, such as low rainfall, drought, extreme temperature, flood, tornado and other natural hazards. Very recently the country was affected by the SIDR, Nargis and Aila that grasped crops, livestock and other resources. Frequent natural disaster is the main cause of loss of lives, damage of infrastructure and economic assets that adversely impacts on lives and livelihoods, of the people.

To meet the increasing demand of food, shelter and fuel for the increasing population men manipulate nature with the passage of time. Gradually, more pressure was exerted to exploit the resources of nature to satisfy ever-increasing requirements of human beings. With the advent of technology and the growing population, man started to manipulate all the available resources on earth without thinking the laws of nature. For achieving rapid progress of civilization, forests were destructed; urban areas were expanded, industries were incepted; as a result of which soil, water, air were polluted with harmful and noxious materials. All these activities done by men have led to a widespread exploitation of environment causing almost unrecoverable damage to it. On the other hand, extensive alteration of natural landscape has taken place through agriculture, dams, embankments, polders, canals, roads, highways, railways, etc. which also created several environmental and ecological problems.

Agricultural research all over the world has developed useful innovations, which are promising to increase agricultural production. However, farmers who are the backbone of the nation, are mostly illiterate and traditional, they are often skeptical towards new ideas and practices in agriculture, they often become frustrated with new practices in agriculture due to lack of proper understanding of the relevant factors. Therefore, the prerequisite for agricultural development is the communication of the benefit and know-how of improved agricultural practices among the farmers so that they move forward to use them in crop production. Dennis and Andersion (1998) reports regardless of their source and socio-metric status, farmers will adopt new technologies and modify their resource use when they believe that a proposed change is relevant to their circumstances.

Rural development depends not only on technology generation but also on dissemination of technology as per the needs of the target groups in a particular farming system (Mettric, 1993). Effective dissemination of generated innovation, the combined effort of extension personnel along with the farmers is a mandatory. Sub-Assistant Agricultural Officers (SAAO) are the field level change agent of DAE and play a vital role in disseminating agricultural innovations or practices among the farmers. As SAAO are trying to bring about changes in behavior of farmers through motivation and communication, their own attitude towards a practice is a vital determinant for its smooth diffusion. Moreover, extension programs would be highly acceptable if there is opportunity for farmers participation in the programs.

The tasks to inform, teach and motivate farmers about the improved agricultural practices, popularly known as agricultural extension, entrusted to the Department of Agricultural Extension (DAE). For carrying on extension educational program, DAE has one Sub-assistant Agricultural Officer for a block and he/she has to look after on an average 900 farm

families. It is difficult for an extension worker alone to discharge their duties effectively among such a large number of farmers. However, the success of extension education rendered by DAE depends upon how the SAAOs are credible to the farmers in respect of their advisory and technical responsibilities. Credibility refers to ‘’the degree to which a communication source or channel is perceived as trustworthy and competent by the receiver (Rogers and Shoemaker, 1971). Experimental studies showed that bringing about the change of client’s attitude is the most challenging task and is positively related to the credibility. If a client perceives that a change agent possesses relatively higher credibility than various other sources and channels, the client can be expected to receive more messages that change agent (Rogers and Svenning, 1969). The credibility of SAAO enhances the acceptance of innovation by the farmers. But very few researches have been conducted regarding the credibility of SAAO in extension services as perceived by the farmers.

Considering the above mentioned facts and socio-economic condition of the farmers of our country the researcher felt a keen interest to conduct a study entitled “Creditability of SAAO in Extension Service as Perceived by the Farmers”.

1.2 Statement of Problem

Practicing of improved innovations for boosting up agricultural production is increasing in Bangladesh day by day. A dynamic change in agricultural production has already been observed in Bangladesh. For carrying of extension program, DAE has one Sub-assistant Agricultural Officer for a block. The information, education and motivation functions of DAE have been entrusted to SAAO. The credibility of SAAO in one of the key factors for the acceptance of innovation by the farmers. The researcher undertook the investigation entitled, “Credibility of SAAO in Extension Service as Perceived by the Farmers” in order to have an understanding the perception of farmers about the credibility of SAAO. Research

information is also required by the policy maker regarding the credibility of SAAO. In order to make the study manageable, the following research questions were taken into consideration.

i) What is the extent of perception about the credibility of the SAAO in extension service by the farmers of the study area?

ii) What characteristics of the farmers influence her/him to determine SAAOs' credibility?

iii) What relationships exist between the farmers selected characteristics and their perception of credibility of SAAO in extension service.

1.3 Specific Objectives of the Study

In order to attain the answer of the above mentioned research questions, the following objectives were formulated to give proper direction of the study.

1. To determine and describe the credibility of Sub-Assistant Agricultural Officer (SAAO) in extension service as perceived by the farmers;

2. To determine and describe some selected characteristics of the farmers. The characteristics are:

    i) Age

    ii) Level of education

    iii) Family size

    iv) Farm size

    v) Annual income

    vi) Training exposure

    vii) Reading of newspaper

viii) Reading of agricultural printed materials

ix) Listening farm radio talk

x) Watching agricultural TV programs

3. To explore the relationship between the selected characteristics of the farmers and their perception of creditability of SAAO of DAE.

1.4 Scope of the Study

The findings of the study would particularly be applicable to the Department of Agriculture Extension of Mymensingh District. However, the findings may also be applicable to other districts of Bangladesh and other similar areas where the socio-economic, cultural, physical and geographical conditions do not differ much from those of the study area. Thus, the findings of the study are expected to be useful to reveal the socio-economic cultural profile which might be helpful to the extension workers in formulating different strategies for promotion of agricultural programs.

The study revealed the credibility of SAAO in extension service as perceived by the farmers. It is felt that, these findings of the study would be helpful for policy makers and administrators of the country to formulate appropriate approach in this regard. The study would also be helpful to the extension workers to set up appropriate strategies which would be suitable

for the Department of Agricultural Extension as well as for the ministry of Agriculture.

1.5 Assumptions of the Study

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

1. **The farmers included in the sample for this study were competent to furnish proper response to the questions included in the interview schedule.**
2. **The credibility of SAAO in extension service was assumed on the basis of perception as perceived by the farmers for the study.**
3. **Views and opinions furnished by the farmers included in the sample were representative of the whole population of the study area.**
4. **The responses furnished by the farmers included in the sample were valid and reliable and expressed the truth about their conviction and opinions.**
5. **The researcher who acted as interviewer was well adjusted to the social environment of the study area. Hence, the data collected by him from the respondents were free from bias.**

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

1.6 Limitations of the Study

In order to keep the study under manageable limit, meaningful, and considering the time, money and other necessary resources available to the researcher, the following limitations were recognized.

1. **The study was confined to Kachina Union under Bhaluka Upazila of Mymensingh District.**
2. **The major areas of investigation were mostly confined to the farmers perception about the credibility of SAAO in extension service.**
3. **The characteristics of the farmers are many and varied. But only 10 characteristics were selected for this study.**
4. **Population for the study was kept confined to the farmers who were involved in agricultural activities at least for the five years.**
5. **For information about the study, the researcher was depended on the data furnished by the respondent farmers.**

1.7 Definition of Terms

A concept is an abstract of observed things, events or phenomenon or in other words, it is a short hand representation of variety of facts. A researcher needs to know the meaning and contents of every term that he used in his dissertation. It should clarify the issue as well as explain the fact to the investigator and readers. For clarity of understanding, a number of key concepts/terms frequently used throughout the study defined as follows:

Perception: **Perception referred to the process through which the individuals become aware of the particular environmental phenomenon. It would be more accurate to say that perception is the process whereby the individual experiences with his/her environmental issue frequently. In this study farmers' perception is used to refer to the knowledge, understanding and feeling of them regarding the credibility of SAAO in extension services.**

Sub-Assistant Agricultural Officer: Frontline extension workers of Department of Agricultural Extension (DAE) are known as Sub-Assistant Agricultural Officer (SAAO). They inspire the farmers in rural areas to increase agricultural production by using modern agricultural innovations. They communicate extension message to the farmers and motivate them to adopt innovation.

Creditability: Creditability refers the perception of information sources by the information users considered as the most credible source for using agricultural technology.

Innovation: An innovation is an idea or practice perceived as new by the individuals. It is the newness of the idea to the individual that determines his reaction to it.

Variable: Variable referred to a general indication in statistical research of characteristic that occurs in a number of individuals, objects, groups etc. and that can take on various values. As

an example the age of an individual is a variable.

Age: **Age of farmer has been defined as the period of time from his/her birth day to the time of interview.**

Level of education: Empirically it was defined to the development of desirable changes in knowledge, skill and attitudes in an individual through reading, writing, observation and other selected activities. It was measured on the basis of classes a farmer has passed from a formal educational institution.

Family size: **It referred to the total number of members of the respondent's family who jointly live and eat together and share each other's income.**

Farm size: Farm size referred to the quantity of land, which is devoted to the maintenance of farming enterprise (s) by a farmer. It included the homestead, own land under own cultivation, land taken from or given to others on borga, land taken from or given to others on lease and miscellaneous land holdings which the farmer has got ownership upon and have the prospect of engaging in farming as and when he wishes.

Annual income: Annual income of a respondent referred to the total earning by him and other members of his family from agricultural (field crop, fish, livestock, poultry, fruits and vegetables and timbers, etc.) and other sources (service, business, etc.) during a year. Annual income of the respondent also included the cost of maintaining his family. It was expressed in Taka.

Training exposure: **Training exposure referred to organized instruction aimed at improving knowledge, skill and attitude of SAAOs that they can**

perform his/her functions more effectively. Training experience referred to number of days the respondents received training in different aspects of agriculture.

Reading of newspaper and agricultural printed materials: **It referred to the extent of reading newspaper and printed materials related to agricultural information and other purposes. It was measured by the prior extend of reading newspaper and agricultural printed materials to which one exposed in a month prior to data collection.**

Listening farm radio talk: **It referred to one's exposure level to radio programs for agricultural information. It was measured by the extent of listening farm radio talk to which one was exposed in a month prior to data collection.**

Watching agricultural TV program: **It referred to one's exposure level to television programs for agricultural information. It was measured by the extent of watching agricultural TV program to which one exposed in a month prior to data collection.**

CHAPTER 2

REVIEW OF LITERATURE

This chapter deals with the review of past research works that relates to this investigation directly or indirectly. Despite frantic search, the researcher found only a few literature related to this study. The researcher came across with some expert opinions and has tried his best to collect needful information through searching relevant studies, journals, periodicals, bulletins, leaflets, internet etc. These enhanced the researcher's knowledge for better and clear understanding of the present study. This chapter has been presented in three sections as follows:

Section 1: Characteristics of change agent

Section 2: Credibility of communication Sources

Section 3: Sources of credibility

Section 4: Correlates of credibility of sources

Section 5: The development of conceptual framework of the study

2.1 Characteristics of change agent

2.1.1 Age

Halim (1968) in his study observed that out of 54 Union Agricultural Assistants, 31.5 percent were found less than 33 years old compared to 37 percent within age bracket of 33 to 44 years. The remaining 31.5 percent were found more than 40 years old.

Rahman (1991) in his study found that age of the Block Supervisors ranged from 25 to 55 years, the average being 35 years. The Block Supervisors were classified into three categories on the basis of their age distribution. The low (25 to 35 year) group was 66

percent, medium (35 to 45 years) was 30 percent and high category (46 to 55 years) was comprised of 4 percent.

Islam (1992) in his study evaluated the efficiency of the training conducted for the Female Block Supervisors. He found that the average age of the respondents was 28 years ranging from 22-35 years.

Hossain (1995) in his study observed that age of the Block Supervisors ranged from 25 to 52 years, the average being 36.6 years. The Block Supervisors were classified into three categories on the basis of their age distribution. The young (25 to 35 years) group was 45 percent, medium (36 to 45 years) group was 47 percent and old category (46 to 52 years) was 8 percent.

Lapitan (1981) in a Philippines study found that the age of 200 technicians ranged from 22-58 years and the average was 34 years. Fifty eight percent belonged to younger (upto 34 years) group and the rest 42 percent to older group.

Gapuz (1980) in another Philippines study found that Leyte technicians' (Extension agent) age ranged from 22 to 49 years with a mean of 28 years.

2.1.2 Education

Mahboob *et al.* (1978) indicated that the highest proportion (58 percent) of the union Assistants had Matriculation level education, while 30 percent had education below Matriculation level and 12 percent above Matriculation level.

Huque (1986) found that 93 percent of Filipino change agents had education at the bachelors level, 4 percent had above that level and only 3 percent had at the Secondary level, the letter being equivalent to SSC in Bangladesh.

Both Contado (1969) and Paderes (1979) found in their respective studies that majority of the extension workers had at least 10 years of schooling. Contado further reported that 57 percent of the farm management technicians (FMTs) did not have college degree and Paderes found that only 25 percent of the technicians had finished from 11 to 14 years schooling.

Rahman (1991) in his study observed that academic merit score of the Block Supervisors ranged from 4 to 58, with a mean of 32. The respondents were classified into three categories on the basis of their academic merit score. The highest proportion (52 percent) of the respondents had very good merit (scores of 32 and above) followed by 34 percent of poor merit (score upto 19) and 14 percent of good merit (scores of 20 to 31).

Mahboob *et al.* (1978) showed that the proportion of Union Assistants having medium academic achievement was the highest (41 percent) followed by 23 percent of high achievement 21 percent of no achievement and 15 percent of low achievement.

2.1.3 Family size

Hossain (1995) revealed that the family size of the Block Supervisors ranged from 2 to 10, the average being 4.85. It was further revealed that the highest proportion (69 percent) of the subjects had small (upto 5 members) family followed by 25 percent medium (6-7 members) family and 6 percent large (above 7 members) family.

Karim (1974) observed that about one half (49 percent) of the union assistants had small or medium families. He also found that almost four out of five (79 percent) of the union Assistants had families of six member or more.

Rahman (1991) in his study observed that Block Supervisors exposure to rural life ranged from 12 years to 39 years with a mean of 22. More than half (57 percent) of the Block

Supervisors had long rural orientation (23 years and above) compared to 25 percent had medium rural orientation (16 to 22 years) and the rest 18 percent had short rural orientation (15 years or less).

Hossain (1995) in his study on the Block Supervisors revealed that 24 percent of the respondents had rendered service for less than 10 years, compared to 64 and 12 percent who rendered 11 to 20 years and more than 20 years, respectively.

Lapitan (1981) found that 50 percent of the technicians had been with their mother agency (BPL or BAEX) for five years or less. But their length of service ranged from 1 to 28 years with a mean of 7.39 years.

2.1.4 Training

Rahman (1991) observed that 73 percent of the Block Supervisors had attended training in short duration followed by 16 and 4 percent of the BSs who attended to moderate and long duration of training. 7 percent of respondents had never attended any training courses.

Ayaso (1978) claimed that his HMTs had up-to-date in service training in the areas of their job each having eight training within a six- year period.

Gapuz (1980) found that his FMTs, on the average, had attended two training during the last three years for 19 days, mostly in crop production.

Rahman (1991) observed that Block Supervisors exposure to newspaper ranged from 6 to 90 issues in a month, the average exposure level was 45 issues. Fourteen percent of the subjects were exposed to low (1-15 issues), 25 percent to moderate (16-30 issues) and 61 percent to high (over 30 issues) level.

Lazo (1963) in his study reported that mass media have been used by the Municipal extension workers to a considerable extent.

Juliano (1981) observed that the technologists of Cagayan province seldom saw the agricultural publications and a few of them claimed to have read, but only some of those were especially exposed to mungo publication. A little over half of them read something within two years prior to data collection.

Mabesa (1980) showed that only 3 and 15 percent technicians were exposed to scientific journal to “very often” and “often” respectively and 11 and 30 percent to other Agricultural publications, in that order of intensity.

Rahman (1991) in his study observed that the achievement motivation score of the Block Supervisors ranged from 15 to 23 with a mean score of 19. A little over half (57 percent) of the subjects had high achievement motivation (scores of 20 or above) compared to 43 percent who had low motivation.

2.1.5 Job satisfaction

Kashem *et al* (1994) focusing on the Block Supervisors roles, perception and job satisfaction revealed that about two thirds (64 percent) of the respondents were highly satisfied their job.

Islam *et al*. (1986) carried out a survey on job satisfaction of the council officials of Barangay where they found that majority (68 percent) of the respondents were moderately satisfied while 11 percent highly satisfied and the same proportion slightly dissatisfied.

2.1.6 Attitude

Mahboob *et al*. (1978) in their study observed that attitude scores of the union assistants toward extension organization ranged from 2 to 40 with an average of 25. The scores could

range theoretically from 0 to 48. However, it was indicated that almost two fifth (38 percent) of the union Assistants were unfavourable toward extension organization and 6 percent were neutral. Just half (50 percent) of the union Assistants had favourable attitude compared to 6 percent who had high favourable attitude. These meant that almost half (44 percent) of the union Assistant had unfavourable or neutral attitude toward extension organization.

Rahman (1991) in his study observed that attitude scores of the Block Supervisors toward T & V system ranged from 23 to 47 with an average of 36. The scores could theoretically range from 12 to 60. However, it was indicated that 34 percent of the subjects had unfavourable attitude (scores upto 35) toward T & V system and 2 percent of them were neutral. Nearly two-third (64 percent) of them had favourable (above 35) attitude toward T & V system.

2.2 Credibility of Communication Sources

Credibility studies of various sources have been reviewed in this section. The studies which have some relevancy to credibility of sources have also been reviewed because of lack of exact literature.

Sangha and Gupta (1985), in their study of credibility of television as a source of information, observed that television was considered as the most credible source of information for agriculture by the rural TV viewers. It was followed by the Agricultural University, radio, Block Extension staff, relatives, friends and neighbors.

Swamy (1978) in an Indian study found that farmers attributed high credibility to Gramsevak as sources of information. Other credible sources in descending order were neighbors, village leaders, progressive farmers and friends, respectively.

Patil (1982) observed that among the various sources of information consulted by the Bidi tobacco growers, the Agricultural Assistant was the most consulted source of information followed by progressive farmers, friends, neighbors and radio.

Raut (1974) in his study found that village level worker was the most important source for securing agricultural information. Neighbors and friends were the major sources and cooperative society played a dominant role in giving information.

Gupta (1980) in his study of "use of communication media by village level workers" observed that village level workers had top credibility for field trips followed by transistor sets for transferring agricultural technology to farmers.

Babu and Sinha (1985) observed that the credibility accorded to the sources of information by the extension personnel in terms of both trustworthiness and expertness were the scientists as the most credible source out of the four sources. The credibility of the remaining three sources in descending order was superior officers, Extension literature and radio.

Singh and Jha (1965) reported that the village level workers were the most important source of information source of information in all stages of adoption because of having access to farmers.

Sing and Prasad (1974) observed that progressive farmers ranked the village level worker with highest credibility. On the other hand, non-progressive farmers stated demonstration as the most credible with village level worker as the second.

Girianadhar (1977) conducted a study on relative source credibility and information seeking patterns of farmers. He found that Gramsevok was the most credible source in the areas of

soil management, improved seeds, fertilizers and protection compared to neighbours, friends and mass media.

Sivaramakrishnan (1976) observed that farmers rated formal personal sources as most credible, followed by radio, other farmers, newspaper, farm information Bureau and college of Agriculture in that order of the scale.

Angadi (1984) found that Jowar farmers perceived Agricultural Assistants was the most credible source of information followed by neighbours and friends, radio, progressive farmers and self experience

Hossain, Alam and Abedin (1990) conducted a study on dissemination of information and training for farm housewives. They found that the percentage of housewives having considered extension workers, radio and television as credible were 39, 27 and 4, respectively.

Ismail (1979) found that the sources of information perceived credible by the farmers differed with the specific type of message. The most credible sources for health, agriculture and education were midwives and nurses extension agent, and school teacher, respectively.

Karim (1974) in an American study found that neighbour and friend were the most credible source to the cotton farmers followed by agricultural magazine, result demonstration, meeting field tour, method demonstration, farm and home visit and other 12 sources.

Hovland and Weiss (1951) observed that the effectiveness of sources in communicating developmental information to the rural people depend on the people's perception of the credibility of these sources. A source that is perceived to be credible by the people will be more effective in persuasion.

Torres (1980) found that the top four communication media considered credible by the coconut farmers in descending order were radio, personal sources, television and magazine.

Orozco (1970) found that 94 and 1 percent of the respondents perceived the DTRI and UPCA dairy specialist as highly credible and low credible, respectively.

Huque (1982) in a philippines study found that masagana-99 farmers attributed highest rank to extension agent. Ranks of other sources in descending order were those of neighbour and relative, community leader, radio, commercial dealer, extension publication, demonstration, magazine, television and newspaper.

Cruz (1964) reported that the percentage of respondents having considered barrio persons, radio, printed media as credible were 60, 37 and 15 respectively.

Jain and Caldwell (1065) in a Canadian study found that the most credible source of his respondents was farm magazine followed by neighbours and friends, Ontario Agriculture college and agricultural representative.

Wilson (1929) making an investigation, found that friend and neighbour were the most credible source followed in descending order by farm visit, meeting, newsletter, result demonstration, office call and bulletin.

Wite (1961) reported that his agents ranked the five source media on importance by placing weekly newspaper first, followed in descending order by circular letters, daily newspaper, radio, and television.

Lindstorm (1958) found that farm advisers were considered by his respondents to be the best source of information leading to adoption followed by cooperative, members local meetings,

neighbours/relatives, result demonstration, method demonstration, merchants and agricultural school.

Knox (1962) asked his respondents to rank the media used by them on importance as source of extension information. The respondents listed in descending order of frequency-circular letters, radio, daily newspaper, television and weekly newspaper.

Bettinghaus (1973) observed that if an individual was rated by the receivers as highly credible, the supposition would be that such an individual would have, because of his perceived characteristics, great persuasive abilities.

Gangappa (1975) in an Indian study found that small farmers attributed high credibility to Gramsevok as sources of information. Other credible sources in descending order were neighbours, demonstration and radio, respectively.

2.3 Source Credibility

Rahman (1991) studied credibility of Block Supervisor as perceived by contact farmers on four dimensions, each having constituted of six traits. The respondents were 88 contact farmers who expressed their perception on a three point rating scale for trait.

The perceived scores under four dimensions of twenty four traits in descending order were as follows:

Safety dimension 1008	:	Honest-191, Safe-169, Just-168, Friendly-167, Kind 157, Dependable-156.
Qualification Dimension 939	:	Knowledgeable-163, Attractive-163, Skilled-160, Experienced-154, planning ability-150 Communication ability-149.

Dynamism dimension 879	:	Frank-155, Fast-155, Emphatic-151, Bold, 147, Active-139, Energetic-132.
Sociability dimension 954	:	Gentle-178, Accommodative-162, Approachable-158, Hospitable-158, pleasant-150, Cheerful-148.

It was observed that the comprehensive score for Safety, Sociability, Quality and Dynamisms were 1008, 954, 939 and 879, respectively. Based on this Qualification, the author found that a credible agent is one who is first, Safe; Second, Sociable; third, Qualified; and fourth, dynamic.

Sooksamrit (1987) conducted a study on credibility of community development workers in Thailand. He found that the community development workers were perceived by the respondents as credible only when they were first, dynamic; second, sociable; third, competent and fourth, trustworthy under these for dimensions.

Somuatanasak (1987) directed a study on contact farmers' perception of the credibility characteristics of Tambol agents (Extension agents) in Thailand. Results showed that the contact farmers perceived the Tambol agent to be credible if he possessed all four dimensions of credibility characteristics in this order of importance: first, dynamic, second, qualified, third, sociable, and fourth, safe. The contact farmers perceived their Tambol agents possessed safety and sociability enough to be credible but still they were lacking in the qualification and dynamism dimensions of credibility.

The pioneering work on source credibility in the philippines was that of Canedo (1976). He studied Maranao rice farmers' perception of a credible extension agent on normative conceptual framework with four dimensions, each having constituted of eight traits. The respondents were 150 rice farmers who expressed their perception on a three-point raging

scale. The perceived scores under four dimensions of thirty two traits in descending order were as follows:

Safety dimension	:	Friendly-448, Kind-447, Muslim (similar religion)-446, Maranao (same ethnic group) -444, Honest-442, Just-440, safe-438, and similar values-431.
Qualification dimension	:	Informed-447, Trained-446, Authoritative-445, Experienced-444, Skilled-443, Higher education- 427, Higher status-386, older-382.
Dynamism dimension	:	Active-449, Energetic-449, Emphatic-449, Fast-447, Frank-446, Aggressive-441, Bold-427, Forceful-390.
Sociability dimension	:	Approachable-449, Congenial-449, Gentle-449, Hospitable-449, pleasant-449, Forgiving-448, Cheerful-445, Agreeable-444.

It was revealed that the comprehensive score for Sociability, Safety, Dynamism and Qualifications were 3582, 3536, 3497 and 3420, respectively. Based on this, the author observed that a credible agent is one who is first, sociable, second, safe; third, dynamic; and fourth qualified.

Torres (1980) found that the perception scores of his respondents for Sandiwa (a community newspaper) measured on nine dimensions were as follows: newsworthiness (2131), understandability (2116), community leadership (2113), objectivity (2093), content (2068), accuracy (2054), integrity (2035), responsibility (1993) and lay-out and legibility (1943).

2.4 Correlates of Credibility of Sources

In this section, findings showing relationships of clients' characteristics to their attributed credibility on sources are presented.

Ismail (1979) observed that farmers' age, contact with extension agent, and exposure to mass media were not related to their perception of the interpersonal sources. However, education and cosmopoliteness were related to their perception.

Bhat (1980) observed that Agricultural Assistants' experience, training, social participation was found to influence the source credibility pattern to greater extent. But age, education had no influence on their source credibility.

Shastri (1984) in his study in India found that source of information showed no relationship between age, education, scientific orientation, risk preferences and socio-economic status. However, relationship was found between farm size and economic motivation of farmers with their most credible source of information. It was also noted that older farmers considered formal source of information more credible than middle age group farmers.

Shridhar (1978) in an Indian study revealed that clients' education, cosmopoliteness, economic motivation, size of holding, social participation and scientific orientation positively influenced source credibility pattern of farmers. But age had no influence on the source credibility.

Sivaramkrishna (1976) observed that clients' education, annual income, material possession influenced source credibility to some extent. Degree of cosmopoliteness and mass media participation significantly influenced the source credibility pattern, but size of farm had no influence on the source credibility.

Angadi (1984) revealed that the socio-economic characteristics i. e. education, socio-political participation, caste and socio-economic status had influence on source credibility pattern of jowar farmers. By contrast, land holding and material possession had no influence on source credibility pattern of those farmers. Level of adoption also had no influence on source credibility pattern of jowar farmers.

Torres (1980) found no significant relationship between coconut farmers' age and income to their perceived credibility of radio, interpersonal communication and television. However, education was significantly related to the credibility of interpersonal communication but not to the credibility of radio and television.

Dhande (1982) observed that panchayat 'samati' members' education and organizational participation had significant influence on source credibility pattern.

Canedo (1976) found that of the five characteristics of the rice farmers' age and farming experience were not related to their perception of a credible extension agent. However, education, exposure to extension agents and exposure to other information sources were significantly related to their perception.

2.5 Conceptual Framework

The hypothesis of a research while constructed properly consists 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. Variables together are the causes and the phenomenon is effect and thus, there is cause effect relationship everywhere in the universe.

This study is concerned with the credibility of SAAO in extension service as perceived by the farmers. Thus, the credibility of SAAO in extension service as perceived by the farmers was the dependent variable and 10 selected characteristics of the farmers were considered as the independent variables. Perception of an individual may be affected through interacting forces of many independent variables. It is not possible to deal with all independent variables

in a single study. It was therefore, necessary to limit the independent variables, which include age, level of education, family size, farm size, annual income, training exposure, reading of newspaper, reading of agricultural printed materials, listening farm radio talk and watching agricultural TV programs for this study. Considering the abovementioned discussion, a conceptual framework has been developed for this study, which is diagrammatically presented in the following Figure 2.1.

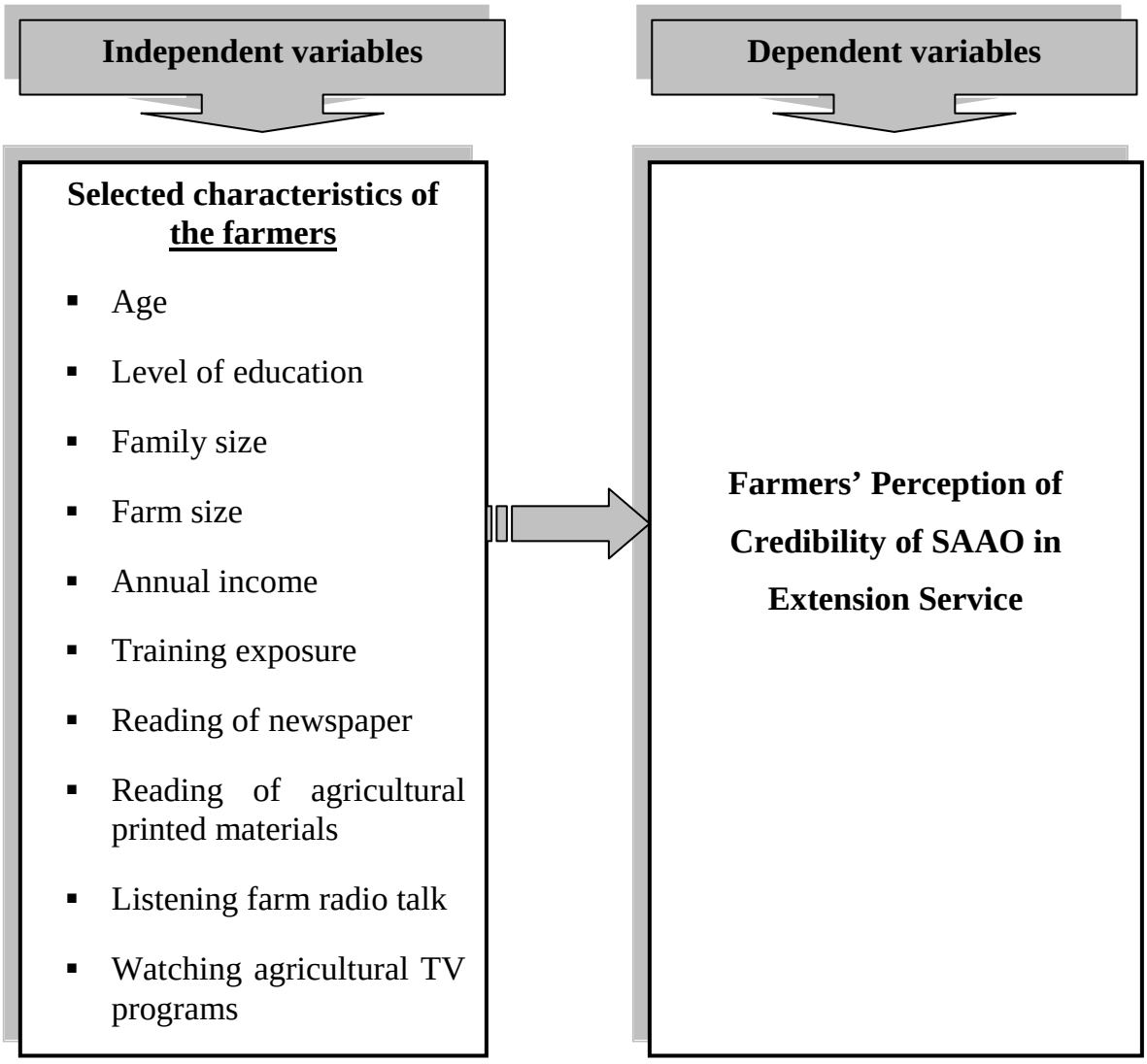

Figure 2.1 The conceptual framework of the study

CHAPTER 3

METHODOLOGY

Methodology would be enabling the researcher to collect valid information. It is impossible to conduct research work smoothly without proper methodology and it is very difficult to address the objectives with a scientific manner. It requires a very careful consideration on the part of the researcher to collect valid and reliable data and to analyze the same for meaningful conclusion. A sequential description of the methodologies followed in conducting this research work has been presented in this chapter.

3.1 Locale of the study

The study was conducted in the Bhaluka Upazilla under Mymensingh District. This Upazilla is situated 48 km south from Mymensingh Districts head quarters. Kachina, Batazor and Palgoan villages under Kachina Union among the 11 Unions of Bhaluka Upazilla was selected purposively as the locale of the study. Maps of Mymensingh District and Bhaluka Upazilla showing the study area are presented in Figures 3.1 and 3.2, respectively.

3.2 Sample size

Farmers of Kachina, Batazor and Palgoan villages under Kachina Union constituted the population of the study. An update list of 1051 farmers from the selected village was prepared with the help of Sub-Assistant Agricultural Officer of the Union. Ten (10) percent of the population were randomly selected as the sample of the study by using random sampling method. Thus, 105 farmers

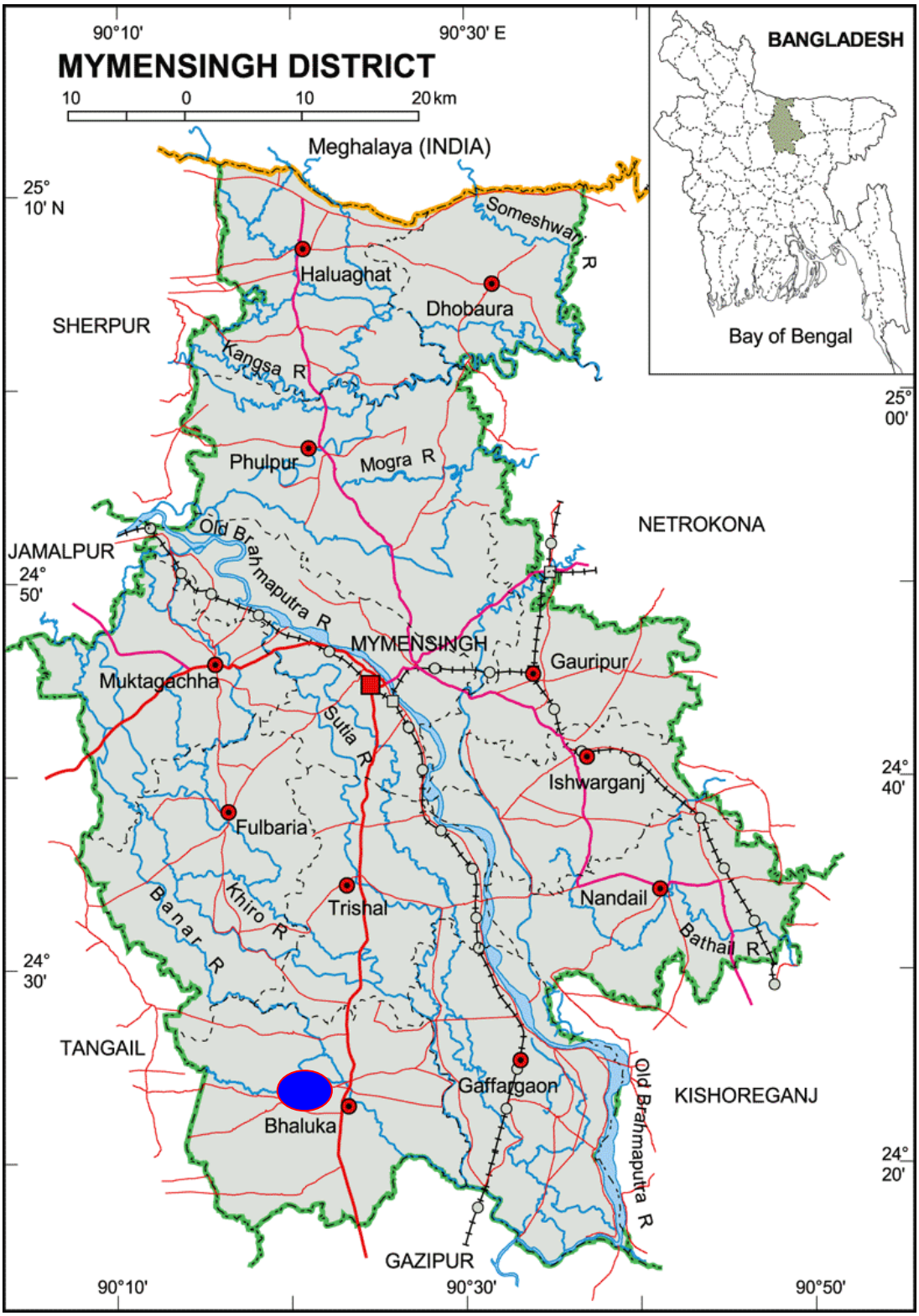

Figure 3.1 A Map of Mymensingh District Showing Bhaluka Upazilla

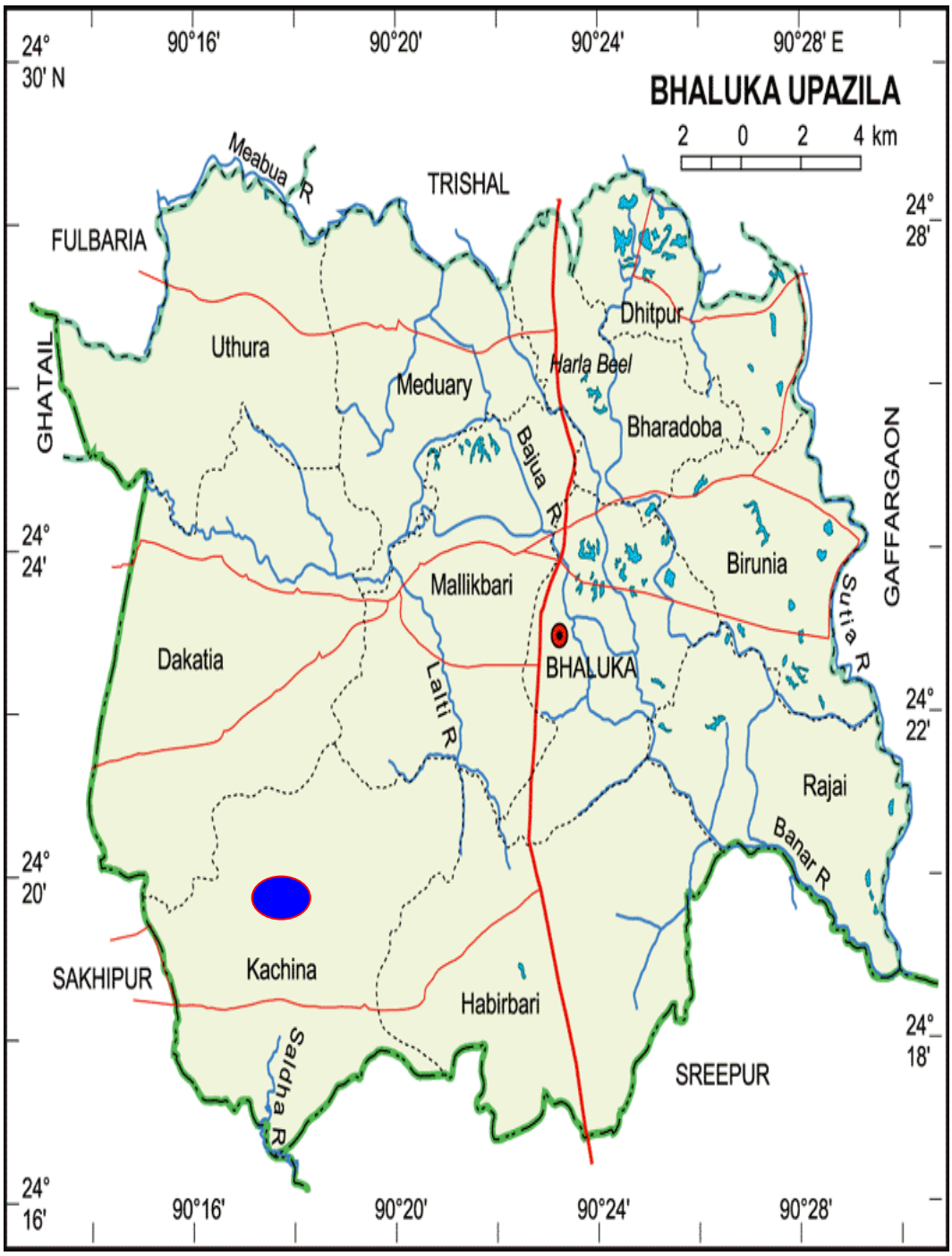

Figure 3.2 A Map of Bhaluka Upazilla Showing the Study Area Kachina Union

constituted the sample of the study. A reserve list of 20 farmers was also prepared by the same method so that the respondents of this list could be used for interview if the respondents included in the original sample were not available at the time of data collection. The distribution of the population sample and number of farmers in the reserve list are shown below-

Table 3.1 Distribution of the population, sample and number of farmers in the reserve list

Name of the of village	No. of farmers	No. of farmers included in the sample	No. of farmers in the reserve list
Kachina	343	34	6
Batazor	277	28	5
Palgoan	431	43	9
Total	1051	105	20

3.3 The Research Instrument

A well structured interview schedule (IS) was developed based on objectives of the study for collecting information. An interview schedule was constructed containing direct and simple questions in open form and closed form keeping in view the dependent and independent variables. Appropriate scales were developed to measure both independent and dependent variables.

The questionnaire was pre-tested with ten farmers in actual situation before finalized it for collection of data. Necessary corrections, additions, alternations, rearrangements and adjustments were made in the interview schedule based on pretest experience. The questionnaire was then multiplied by printing in its final form. A copy of the interview schedule is presented into Appendix I.

3.4 Data Collection Procedure

The researcher himself collected the data from the sample respondents through personal contact. Whenever any respondent faced difficulty in understanding questions, more attention was taken to explain the same with a view to enabling the farmers to answer properly. No serious problem was faced by the investigator during data collection but obtained cooperation from the respondents. Data collection was started in 01 July, 2009 and completed in 10 August, 2009.

3.5 Measurement of variables

The variable is a characteristic, which can assume varying, or different values in successive individual cases. A research work usually contains at least two important variables viz. independent and dependent variables. An independent variable is that factor which is manipulated by the researcher in his attempt to ascertain its relationship to an observed phenomenon. A dependent variable is that factor which appears, disappears or varies as the researcher introduces, removes or varies the independent variable (Townsend, 1953). In the scientific research, the selection and measurement of variable constitute a significant task. In this conception, the researcher reviewed literature to widen this understanding about the natures and scopes of the variables relevant to this research. At last he had selected 10 independent variables and one dependent variable. The independent variables were: age, level of education, family size, farm size, annual income, training exposure, reading of newspaper, reading of agricultural printed materials, listen farm radio talk and watching agricultural TV programs. The dependent variable of this study was the farmers' perception of about credibility of SAAO in extension service. The methods and procedures in measuring these variables are presented below:

3.6 Measurement of independent variables

The 10 characteristics of the respondents farmers mentioned above constitute the independent variables of this study. The following procedures were followed for measuring the independent variables.

3.6.1 Age

Age of a respondent farmer was measured by the period of time from their birth to the time of interview and it was measured in terms of complete years on the basis of their response. A score of one (1) was assigned for each year age.

3.6.2 Level of education

Level of education was measured in terms of grades (class) passed by respondent farmers. If a respondent received education outside the school, their education was assessed in terms of year of schooling, i.e. one (1) score was given for one year of schooling. For example, if the respondent passed the final examination of class V, their education score was taken as 5. If the respondent had education out side school and the level of education was equivalent to that of class V of the school than his education score was taken as 5. Each illiterate person was given a score of zero. The respondent who did not know how to read or write but able to sign only was given a score of “0.5”.

3.6.3 Family size

The family size of a respondent was measured in terms of actual number of members in his/her family including himself/herself, spouse, children, brothers, sisters, parents and other person who jointly live and ate together during interviewing.

3.6.4 Farm size

Farm size of respondent farmers referred to the total area of land on which his/her family carried out farming operation, the area being in terms of full benefit his family. It was measured in hectares for each respondent using the following formula;

$$FS = F_1 + F_2 + {}^1/_2 (F_3 + F_4) + F_5$$

Where,

FS = Farm size

F_1 = Homestead area with pond

F_2 = Own land under own cultivation

F_3 = Land given to others on share cropping in

F_4 = Land taken from others on share cropping out

F_5 = Land taken from others on mortgage/ lease

3.6.5 Annual income

The term annual income refers to the annual gross income of a respondent himself and the members of his/her family from different sources. It was expressed in taka. In measuring this variable, total earning in taka of an individual respondent was converted into score. A score of one was given for every one thousand taka.

The method of ascertaining income form agriculture involved three phases. Firstly, the yield of all crops in the preceding year was noted and converted into taka. Secondly, income attained from livestock and fisheries sector. Thirdly, non-agricultural sources of income included earning form service, business and other sources.

3.6.6 Training exposure

Training exposure was measured by the total number of days a respondent attended in various training courses during his life. If farmer received total training for 10 days his/her training exposure score would be 10.

3.6.7 Reading habit of newspaper

Reading habit of newspaper of the respondent farmers was measured on the basis of the extent of reading different newspaper. Score was computed by adding all type of extent of reading.

Following scores were assigned for measuring reading newspaper:

Nature of reading habit	Scores assigned
Not at all reading	0
Occasionally reading	1
Often reading	2
Regularly reading	3

The possible reading habit of newspaper score ranged from 0-18. If a respondent read all of the mentioned newspaper (Appendix I) on regular basis then the scores for this respondent could be 18 and 0 means no habit of reading newspapers.

3.6.8 Reading habit of agricultural printed materials

Reading habit of agricultural printed materials of respondent farmers was measured on the basis of the extent of reading different agricultural printed materials. Score was computed by adding all type of extent of reading agricultural printed materials.

Following scores were assigned for measuring reading agricultural printed materials:

Nature of reading habit	Scores assigned
Not at all rading	0
Yearly reading	1
Monthly reading	2
Fortnightly reading	3
Weekly reading	4

The possible score for reading agricultural printed materials ranged from 0-16. If a respondent read all of the mentioned printed agricultural materials (Appendix I) on weekly basis then the scores for this respondent were 16 and 0 means no reading of agricultural printed materials.

3.6.9 Listening habit of farm radio talk

Listening habit of farm radio talk of the respondent farmers was measured on the basis of the extent of listening farm radio talk. Score was computed by adding all type of extent of listening farm radio talk. Following scores were assigned for measuring listening farm radio talk:

Nature of listening	Scores assigned
Not at all listening	0
Monthly listening	1
Fortnightly listening	2
Weekly listening	3
Daily listening	4

The possible listening farm radio talk score seems ranged from 0-16. If a respondent listen all of the mentioned farm radio talk from specific sources (Appendix I) on daily basis then the scores for this respondent was 16 and 0 means no reading of agricultural printed materials.

3.6.10 Watching habit of agricultural TV programs

Watching habit of agricultural TV program of the respondent farmers was measured on the basis of the extent of watching agricultural TV programs. Score was computed by adding all

type of extent of watching agricultural TV programs. Following scores were assigned for measuring watching agricultural TV programs:

Nature of watching	Scores assigned
Not at all watching	0
Monthly watching	1
Fortnightly watching	2
Weekly watching	3
Daily watching	4

The score for watching agricultural TV program ranged from 0-12. If a respondent watch agricultural TV program from all of the mentioned sources (Appendix I) on daily basis then the scores for this respondent was 12 and 0 means no reading of agricultural printed materials.

3.7 Measurement of dependent variable

Farmers' perception regarding the credibility of SAAO in extension service was the dependent variable of this study. Credibility of SAAO as perceived by the farmers means the degree to which each of the farmers perceived the credibility of SAAO in extension service. The procedure for measuring the dependent variable was as follows:

In this study, credibility of SAAO in extension service as perceived by the farmers was measured with the basis of 11 statements. Degree of the statement were measured assigning the score of 4, 3, 2, 1 was given for extent of every positive response.

Credibility of SAAO in extension service as perceived by the farmers was determined by summing up the weights for their responses to all the 11 statements. Thus credibility scores of the farmers could range from 0 to 44, where zero (0) indicating no credibility and 44 indicate high credibility.

3.8 Hypothesis of the study

As defined by Goode and Hatt (1952) “A hypothesis is a proposition which can be put to a test to determine it’s validity. It may seem contrary to, or in accord with common sense. It may prove to be correct or incorrect. In any event, however, it leads to an empirical test”.

The following hypothesis is formulated to explore the relationship between the dependent and independent variables. The major research hypothesis for the study is: “there is a relationship between the perception of credibility of SAAO in extension service and their selected characteristics including age, level of education, family size, farm size, annual income, training exposure, reading of newspaper, reading of agricultural printed materials, listen farm radio talk and watching agricultural TV programs”.

The research hypothesis was converted into null form for the purpose of statistical testing. The major null hypothesis states that “There is no relationship between the perception of credibility of SAAO in extension service and their selected characteristics”. Ten null hypotheses were formulated dealing with each of the selected characteristics. The investigator himself collected data on the basis of objectives to test the hypothesis.

3.9 Data processing

For data processing and analysis the following steps followed:

3.9.1 Compilation of data

After completion of field survey all the interview schedule were compiled, tabulated and analyzed according to the objectives of the study. In this process all the responses in the interview schedule were given numerical coded values. The responses to the question in the interview schedule were transferred to a master sheet to facilitate tabulation. Tabulation was done on the basis of categories developed by the investigator himself.

3.9.2 Categorization of respondents

For describing the various independent and dependent variables the respondents were classified into various categories. In developing categories the researcher was guided by the nature of data and general consideration prevailing on the social system. The procedures have been discussed while describing the variable in the sub-sequent sections of next chapter.

3.10 Data analysis

Data collected from the respondents were complied, coded, tabulated and analyzed in accordance with the objectives of the study. Various statistical measures such as frequency counts, percentage distribution, average, and standard deviation were used in describing data. SPSS (version 11.5) computer program were used for analyzing the data. The categories and tables were used in describing data. The categories and tables were also used in presenting data for better understanding.

For determining the association of the selected characteristics of the farmers with their perception of credibility of SAAO in extension service Pearson Product Moment Correlation was used. Five percent (0.05) level of probability was used as the basis for rejecting null hypothesis. In order to find out the relationship between the dependent and independent variables correlation co-efficient was done.

CHAPTER 4

RESULTS AND DISCUSSION

The findings that were recorded in accordance with the objectives of the study were presented in this chapter. The chapter contains study findings and possible interpretation of the recorded information. The chapter has three (3) sections. The first section deals with the characteristics of the respondent farmers. The second section deals with the creditability of SAAO in extension services as perceived by the farmers. The third section deals with the relationship between individual characteristics of the respondents with the creditability of SAAO in extension services as perceived by the farmers.

4.1 Characteristics of the respondents

Different interrelated characteristics of the respondents that influence the creditability of SAAO in extension services as perceived by the farmers were presented under the following headings. It was therefore, hypothesized that the characteristics of the respondents under the study would have an effect on the creditability of SAAO in extension services as perceived by the farmers. However, the most important features of ten selected characteristics of the respondent farmers such as age, level of education, family size, farm size, annual income, training exposure, reading of newspaper, reading of agricultural printed materials, listening farm radio talk and watching agricultural TV programs are presented and discussed below:

4.1.1 Age

The age of the respondent farmers ranged from 21 to 61 years with the mean and standard deviation were 40.16 and 10.11 respectively. Considering the observed age the respondents were classified into three categories namely ‘young’, ‘middle’ and ‘old’. The distribution of the respondent farmers on the basis of their age is presented in Table 4.1.

Table 4.1 Distribution of the respondents according to their age

Categories of respondents according to their age	Respondents’		Mean	Standard deviation
	Number	Percent		
Young aged (upto 35)	44	41.90	40.16	10.11
Middle aged (36-50)	46	43.81		
Old aged (above 50)	15	14.29		
Total	105	100		

Table 4.1 indicates that the middle aged group of respondents constituted the highest proportion (43.81 percent) followed by young aged (41.90 percent). On the other hand, the lowest (14.29 percent) proportion constituted old aged category. Data also indicates that the young and middle aged respondents constitute an overwhelming majority (85.71 percent) of the respondents. The young and middle aged respondents generally tend to be involved with different types of innovations than the oldest group. In fact, respondents who carry ability to take risk and think about the improved or modern agriculture they usually contact with SAAO for better utilization of modern technology for achieving maximum production as well as highest benefit. In this study, it was observed that young and middle aged people prefer to contact with SAAO.

4.1.2 Level of Education

The education of the respondents ranged from 0 to 14 with the mean and standard deviation of 6.45 and 4.19, respectively. Based on their education, the respondents were classified into five categories such as ‘illiterate’ (0), ‘can sign only’ (0.5), ‘primary education’ (1 to 5),

'secondary education' (6 to 10), and above secondary (above 10). The distribution of the respondents according to their education is presented in Table 4.2.

Table 4.2 Distribution of the respondents according to their level of education

Categories of respondents according to their level of education	Respondents'		Mean	Standard deviation
	Number	Percent		
Illiterate (0)	11	10.48	6.45	4.19
Can sign only (0.05)	9	8.57		
Primary education (1-5)	25	23.81		
Secondary education (6-10)	42	40.00		
Above secondary (above 10)	18	17.14		
Total	105	100		

Table 4.2 shows that (40.0 percent) of the respondents had secondary level of education followed by 23.81 percent and 17.14 percent primary and above secondary level education, respectively. Only 8.57 percent of the respondents could sign only and 10.48 percent were illiterate. Among the respondents, about 63.81 percent of the respondents were primary to secondary level educated. So, it is expected that educated person would have a positive perception towards creditability of SAAO in extension services.

4.1.3 Family Size

Family size of the respondents ranged from 2 to 9 with the mean and standard deviation of 4.83 and 1.67, respectively. According to family size the respondents were classified into three categories viz. 'small family', 'medium family' and 'large family'. The distribution of the respondents according to their family size is presented in Table 4.3.

Table 4.3 Distribution of the respondents according to their family size

Categories of respondents according to their family size	Respondents'		Mean	Standard deviation
	Number	Percent		

Small family (upto 4)	48	45.71	4.83	1.67
Medium family (5-7)	46	43.81		
Large family (above 7)	11	10.48		
Total	105	100		

Data in Table 4.3 indicate that the small family constitute the highest proportion (45.71 percent) followed by the medium family (43.81 percent). Only 10.48 percent respondents had large family size. Such finding is quite normal as per the situation of Bangladesh. Table 4.3 also showed that average family size of the respondents was lower than that of national average of 5.4 (BBS, 2008).

4.1.4 Farm Size

The farm size of the respondents ranged from 0.13 hectare to 3.45 hectare with a mean and standard deviation of 0.85 and 0.77, respectively. Based on their farm size, the respondents were classified into four categories by following the categorization made by DAE (1999). These categories were marginal farm holder (upto 0.2 ha), small farm holder (0.201 to 1.0 ha) and medium farm holder (1.01 to 3.0 ha) and large farm holder (above 3.0 ha). The distribution of the respondents according to farm size categories is presented in Table 4.4.

Table 4.4 Distribution of the respondents according to their farm size

Categories of respondents according to their farm size	Respondents'		Mean	Standard deviation
	Number	Percent		
Marginal and small (upto 1.0 ha)	74	70.47	0.85	0.77
Medium (1.01 to 3.0 ha)	25	23.81		
Large (above 3.0 ha)	6	5.71		
Total	105	100.0		

Table 4.4 indicates that small farm size holder constituted the large proportion (64.76%) of the respondents. Only 23.81 percent of the respondents had medium farm size and 5.7

percent had marginal and also large farm size. From the findings it was observed that 70.47 percent of the respondents were under the group of marginal and medium farm size holder. Only 29.52 percent respondents were medium and large size group.

4.1.5 Annual Income

Annual income of the respondents ranged from 42 to 225 thousand taka with the mean and standard deviation of 96.71 and 39.63, respectively. Considering the annual income, the respondent farmers were classified into three categories namely low, medium and high annual income group. The distribution of the respondent farmers according to their annual income is presented in Table 4.5.

Table 4.5 Distribution of the respondents according to their annual income

Categories of respondents according to their annual income	Respondents'		Mean	Standard deviation
	Number	Percent		
Low income (upto 61)	68	64.76	96.71	39.63
Medium income (62-122)	26	24.76		
High income (above 122)	11	10.48		
Total	105	100.0		

Data in Table 4.5 revealed that the respondents having low annual income constitute the highest proportion (64.76 percent) of the respondents followed having medium annual income (24.76 percent) and low annual income (10.48 percent). Finding again revealed that 89.52% of the respondent farmers had low to medium annual income.

4.1.6 Training Exposure

The score of training exposure of the respondents ranged from 0 to 6, with an average of 2.13 and standard deviation of 1.95. Based on their training exposure, the respondents were classified into the three categories i.e., no training, low training and medium training exposure. The distribution is shown in the Table 4.6

Table 4.6 Distribution of the respondents according to their training exposure

Categories of respondents according to their training exposure	Respondents'		Mean	Standard deviation
	Number	Percent		
No training (0)	41	39.05	2.13	1.95
Low training (upto 4)	54	51.43		
Medium training (above 4)	10	9.52		
Total	105	100		

Overwhelming majority (90.48 percent) of the respondents had no to low training exposure and only 9.52 percent had medium level training. Nobody had high training under the study area. The respondents training exposure indicate that the respondents of the study area needs to training.

4.1.7 Reading Newspaper

Reading newspaper score of the respondents ranged from 0 to 15 with the mean and standard deviation of 5.17 and 4.89, respectively against the possible ranged from 0-21. According to reading newspaper score, the respondents were classified into four categories viz. no, occasionally, often and regular reader of newspaper. On the basis of their observed scores the distribution is presented in Table 4.7.

Table 4.7 Distribution of the respondents according to reading of newspaper

Categories of respondents according to their reading newspaper	Respondents'		Mean	Standard deviation
	Number	Percent		
No newspaper reading (0)	38	36.19	5.17	4.89
Occasionally read (upto 5)	18	17.14		
Often read (6-10)	26	24.76		
Regular read (above 10)	23	21.91		
Total	105	100		

Data in Table 4.7 indicate that no reading newspaper constituted the highest proportion (36.19 percent) of the respondents followed by often (24.91 percent) and regular reader (21.91 percent). Only 17.14 percent of the respondents had fallen into occasionally reader. More reading newspaper could influence for the perception of activities of the SAAOs as well as creditability of them.

4.1.8 Reading of Agricultural Printed Materials

Reading of agricultural printed materials score of the respondents ranged from 0 to 14 against the possible range from 0-16. The mean and standard deviation of reading agricultural printed materials score was 4.93 and 4.36 respectively. On the basis of the reading of agricultural printed materials, the respondents were classified into four categories namely, no

reading, yearly reading, monthly reading and fortnightly reading. The distribution of the respondents according to the reading of agricultural printed materials is given in Table 4.8.

Table 4.8 Distribution of the respondents according to reading of agricultural printed materials

Categories of respondents according to their reading of agricultural printed materials	Respondents'		Mean	Standard deviation
	Number	Percent		
No reading (0)	29	27.62	4.93	4.36
Yearly reading (up to 5)	33	31.43		
Monthly reading (6-10)	24	22.86		
Fortnightly reading (above 10)	19	18.09		
Total	105	100		

Data in the Table 4.8 reveals that the highest (31.43 percent) of the respondents derived low reading agricultural printed materials followed by 27.62 percent no reading group and 22.86 percent of medium reading group of agricultural printed materials. Among the respondents about 72.38% used to read agricultural printed materials. The maximum reading habit of agricultural printed materials increased the perception level of farmers towards the credibility of SAAOs in extension services.

4.1.9 Listening Farm Radio Talk

Listening farm radio talk score of the respondents ranged from 0 to 14 against the possible range from 0-16 with a mean and standard deviation of 7.09 and 3.04, respectively. Based on listen farm radio talk, the respondents were classified into four categories. These categories were no, low, medium and high listen group. The distribution of the respondents is presented in Table 4.9.

Table 4.9 Distribution of the respondents according to listen farm radio talk

Categories of respondents according to	Respondents'	Mean	Standard

their listening farm radio talk	Number	Percent		deviation
No (0)	2	1.91	7.09	3.04
Low (upto 5)	31	29.52		
Medium (6-10)	54	51.43		
High (above 10)	18	17.14		
Total	105	100.0		

Findings from the Table 4.9 revealed that more than three-forth (80.95 percent) of the respondents listen farm radio talk compared to 17.14% and 1.91% high and no listen of farm radio talk group, respectively. Among the respondents 103 founds to listening farm radio talk.

4.1.10 Watching Agricultural TV Programs

Watching agricultural TV programs score of the respondent ranged from 2 to 12 with a mean and standard deviation of 6.89 and 2.41, respectively against the possible score range of 0-12. According to watching agricultural TV programs the respondents were classified into three categories viz. Low, medium and high watching agricultural TV programs. The distribution of the farmers according to watching agricultural TV program is presented in Table 4.10.

Table 4.10 Distribution of the respondents according to watching agricultural TV programs

Categories of respondents according to their watching agricultural TV programs	Respondents'		Mean	Standard deviation
	Number	Percent		
Low (upto 5)	38	36.19	6.89	2.41
Medium (6-10)	59	56.19		
High (above 10)	8	7.62		
Total	105	100		

Data in Table 4.10 indicates that majority (56.19 percent) of the respondents were the medium watching group compared to 36.19 percent low watching group and 7.62 percent high watching agricultural TV programs group.

4.2 Creditability of SAAO in Extension Services

The observed score of the creditability of SAAO in extension services as perceived by the farmers were ranged from 8 to 37 against the possible range from 0 to 44 with the average being 22.32 and standard deviation 7.92. The credibility was measured on the basis of 11 statements viz i. How SAAO sees your problem? ii. How SAAO behaves with you? iii. How does SAAO rush to the farmer's field to see the damage of crop? iv. How useful suggestions are given by the SAAO to cope with calamities? v. How effectively SAAO understands your field problem? vi. How efficiently SAAO can identify your agricultural problem? vii. How much benefit you got after application of SAAO advice regarding input use? viii. How SAAO efficient in planning of various extension works? ix. Can SAAO carries out extension works in the light of extension planning? x. How sufficient is SAAOs knowledge to solve the field problem? xi. How timely SAAO solve problem? On the basis of score of credibility of SAAO perceived by the the farmers the respondents were classified into three categories as low, medium and high creditability group. Distribution of the respondents based on the creditability of SAAO in extension services as perceived by the farmers is shown in Table 4.11.

Table 4.11 Distribution of the respondents according to their perception of creditability of SAAO

Categories of respondents according to credibility of SAAO	Respondents'		Mean	Standard deviation
	Number	Percent		
Low creditability (upto 15)	23	21.90	22.32	7.92
Medium creditability (16-30)	62	59.05		

High creditability (above 30)	20	19.05		
Total	105	100		

Data in the table 4.11 revealed that about two-third (59.05 percent) of the respondents perceived that the SAAO had medium level of credibility compared to 21.90 percent and 19.05 percent respectively had low and high level of creditability of SAAO in extension services. It means that an overwhelming majority (80.95 percent) of the respondents had low to medium level of creditability of SAAO in extension services.

4.3 Relationship of the selected characteristics of respondents with the farmers' perception of creditability of SAAO in extension services

Pearson Product Moment Correlation co-efficient was computed to find out the extent of relationship between the dependent variable and independent variables (Table 4.12). To reject the null hypothesis 0.05 and 0.01 level of significance was used.

Table 4.12. Results of Pearson's product moment correlation showing the relationship between the selected characteristics of the respondents and the farmers' perception of creditability of SAAO in extension services

Dependent variable	Independent variable	Value of co-efficient of correlation
Farmers' Perception of Credibility of SAAO in Extension Service	Age	-0.047 NS
	Level of education	0.262**
	Family size	-0.084 NS
	Farm size	0.039 NS
	Annual income	0.214*
	Training exposure	0.009 NS
	Reading of newspaper	0.126 NS
	Reading of agricultural printed materials	0.268**
	Listen farm radio talk	-0.022 NS
	Watching agricultural TV programs	0.186NS

NS: Not significant;

*: Correlation is significant at the 0.05 level;

**: Correlation is significant at the 0.01 level;

4.3.1 Relationship between age and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between age of the respondent farmers and the creditability of SAAO in extension services as perceived by them is presented in Table 4.12. The coefficient of correlation between the concerned variables was found to be -0.047. The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables 'r' (-0.047) was found to be smaller than the tabulated value of 'r' (0.196) with 103 degrees of freedom at 0.05 level of probability.*
- *The null hypothesis could not be rejected.*
- *The relationship between the concerned variables was statistically non significant at 0.05 level of probability.*
- *The relationship showed a negative trend between the concerned variables.*

Based on the above findings it was concluded that age of the respondents had non significant negative relationships with the creditability of SAAO in extension services as perceived by the farmers. This represent that age of the respondents was not an important factor regarding the creditability of SAAO in extension services.

4.3.2 Relationship between level of education and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between level of education of the respondents and the creditability of SAAO in extension services as perceived by the farmers is presented in Table 4.12. The coefficient of correlation between the concerned variables was found to be 0.262.

The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables "r" (0.262) was found to be greater than the tabulated value of 'r' (0.256) with 103 degrees of freedom at 0.01 level of probability.*
- *The null hypothesis was rejected.*
- *The relationship between the concerned variables was statistically significant at 0.01 level of probability.*
- *The relationship showed a positive trend between the concerned variables.*

Based on the above findings it was concluded that level of education of the respondents had significant positive relationships with the creditability of SAAO in extension services as perceived by the farmers. This represent that level of education of the respondents was an important factor regarding creditability of SAAO in extension services as perceived by the farmers and with the increases of level of education the perception of the respondents increased. It is quite logical that educated persons had the ability to understand the roles and responsibility of the specific persons.

4.3.3 Relationship between family size and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between family size of the respondent farmers and the creditability of SAAO in extension services as perceived by them is presented in Table 4.12. The coefficient of correlation between the concerned variables was found to be -0.084. The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables "r" (-0.084) was found to be smaller than the tabulated value of 'r' (0.196) with 103 degrees of freedom at 0.05 level of probability.*
- *The null hypothesis could not be rejected.*
- *The relationship between the concerned variables was statistically non significant at 0.05 level of probability.*
- *The relationship showed a negative trend between the concerned variables.*

Based on the above findings it was concluded that family size of the respondents had non significant negative relationships with the creditability of SAAO in extension services as perceived by the farmers. This represent that family size of the respondents was not an important factor regarding the creditability of SAAO in extension services. Family size does not influence the creditability of SAAO in extension services as perceived by the farmers.

4.3.4 Relationship between farm size and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between farm size of the respondents and the creditability of SAAO in extension services as perceived by the farmers is presented in Table 4.12. The coefficient of correlation between the concerned variables was found to be 0.039. The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables "r" (0.039) was found to be smaller than the tabulated value of 'r' (0.196) with 103 degrees of freedom at 0.05 level of probability.*
- *The null hypothesis could not be rejected.*

- *The relationship between the concerned variables was statistically non significant at 0.05 level of probability.*
- *The relationship showed a positive trend between the concerned variables.*

Based on the above findings it was concluded that farm size of the respondents had non significant positive relationships with the creditability of SAAO in extension services as perceived by the farmers. This represent that farm size of the respondents was an important factor regarding the creditability of SAAO in extension services as perceived by the farmers.

4.3.5 Relationship between annual income and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between annual income of the respondent farmers and the creditability of SAAO in extension services as perceived by them is presented in Table 4.12. The coefficient of correlation between the concerned variables was found to be 0.214. The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables "r" (0.214) was found to be greater than the tabulated value of 'r' (0.196) with 103 degrees of freedom at 0.05 level of probability.*
- *The null hypothesis was rejected.*
- *The relationship between the concerned variables was statistically significant at 0.05 level of probability.*
- *The relationship showed a positive trend between the concerned variables.*

Based on the above findings it was concluded that annual income of the respondents had significant positive relationships with the creditability of SAAO in extension services as perceived by the farmers. This represent that annual income of the respondents was an

important factor regarding the creditability of SAAO in extension services as perceived by the farmers and with the increases of annual income creditability of SAAO in extension services also increases.

4.3.6 Relationship between training exposure and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between training exposure of the respondents and the creditability of SAAO in extension services as perceived by the farmers is presented in Table 4.12. The coefficient of correlation between the concerned variables was found to be 0.009. The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables "r" (0.009) was found to be smaller than the tabulated value of 'r' (0.196) with 103 degrees of freedom at 0.05 level of probability.*
- *The null hypothesis could not be rejected.*
- *The relationship between the concerned variables was statistically non significant at 0.05 level of probability.*
- *The relationship showed a positive trend between the concerned variables.*

Based on the above findings it was concluded that training exposure of the respondents had non significant positive relationships with the creditability of SAAO in extension services as perceived by the farmers. This represent that training exposure of the respondents was an important factor regarding the creditability of SAAO in extension services as perceived by the farmers and with the increases of training exposure the creditability of SAAO in extension services also increases.

4.3.7 Relationship between reading of newspaper and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between reading of newspaper of the respondents and the creditability of SAAO in extension services as perceived by the farmers is presented in Table 4.12. The coefficient of correlation between the concerned variables was found to be 0.126. The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables "r" (0.126) was found to be smaller than the tabulated value of 'r' (0.196) with 103 degrees of freedom at 0.05 level of probability.*
- *The null hypothesis could not be rejected.*
- *The relationship between the concerned variables was statistically non significant at 0.05 level of probability.*
- *The relationship showed a positive trend between the concerned variables.*

Based on the above findings it was concluded that reading of newspaper of the respondents had non significant positive relationships with the creditability of SAAO in extension services as perceived by the farmers. This represent that reading of newspaper of the respondents was not an important factor regarding the creditability of SAAO in extension services as perceived by the farmers. But reading of newspaper of the respondents influenced the creditability of SAAO in extension services.

4.3.8 Relationship between reading of agricultural printed materials and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between reading of agricultural printed materials of the respondents and the creditability of SAAO in extension services as perceived by the farmers is presented in Table 4.12. The coefficient of correlation between the concerned variables

was found to be 0.268. The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables "r" (0.268) was found to be greater than the tabulated value of 'r' (0.256) with 103 degrees of freedom at 0.01 level of probability.*
- *The null hypothesis was rejected.*
- *The relationship between the concerned variables was statistically significant at 0.01 level of probability.*
- *The relationship showed a positive trend between the concerned variables.*

Based on the above findings it was concluded that reading of agricultural printed materials of the respondents had significant positive relationships with the creditability of SAAO in extension services as perceived by the farmers. This represent that reading of agricultural printed materials was an important factor regarding the creditability of SAAO in extension services. Reading of agricultural printed materials by the respondents influenced them to perceive creditability of SAAO in extension services as perceived by the farmers.

4.3.9 Relationship between listen farm radio talk and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between listen farm radio talk of the respondents and the creditability of SAAO in extension services as perceived by the farmers is presented in Table 4.12. The coefficient of correlation between the concerned variables was found to be -0.022. The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables "r" (-0.022) was found to be smaller than the tabulated value of 'r' (0.196) with 103 degrees of freedom at 0.05 level of probability.*
- *The null hypothesis could not be rejected.*
- *The relationship between the concerned variables was statistically non-significant at 0.05 level of probability.*
- *The relationship showed a negative trend between the concerned variables.*

Based on the above findings it was concluded that listen farm radio talk had non significant negative relationships with the creditability of SAAO in extension services as perceived by the farmers. This represent that listen farm radio talk was not an important factor regarding the creditability of SAAO in extension services. Listen farm radio talk does not influence the creditability of SAAO in extension services as perceived by the farmers.

4.3.10 Relationship between watching agricultural TV programs and the creditability of SAAO in extension services as perceived by the farmers

The coefficient of correlation between watching agricultural TV programs of the respondents and the creditability of SAAO in extension services as perceived by the farmers is presented in Table 4.12. The coefficient of correlation between the concerned variables was found to be 0.186. The following observations were made on the basis of the value of correlation coefficient between the two concerned variables:

- *The calculated value between the concerned variables "r" (0.186) was found to be smaller than the tabulated value of 'r' (0.196) with 103 degrees of freedom at 0.05 level of probability.*
- *The null hypothesis could not be rejected.*

- *The relationship between the concerned variables was statistically non significant at 0.05 level of probability.*
- *The relationship showed a positive trend between the concerned variables.*

Based on the above findings it was concluded that watching agricultural TV programs of the respondents had non significant positive relationships with the creditability of SAAO in extension services as perceived by the farmers. This represents that with the increases of watching agricultural TV programs the creditability of SAAO in extension services also increases.

CHAPTER 5

SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Major Findings

The study was conducted in the Bhaluka Upazilla under Mymensingh District. Kachina Union out of 11 Union of Bhaluka Upazilla selected purposively as the locale of the study. Farmers of Farmers of Kachina, Batazor and Palgoan village under Kachina Union constituted the population of the study. There were list of 1051 farmers from the selected village was prepared with the help of Sub-Assistant Agricultural Officer of these localities that are the population of the study. Ten (10) percent of the populations were randomly selected as the sample of the study by using random sampling method. Thus, 105 farmers constituted the sample of the study. The researcher himself collected data from the respondents through personal contact. The independent variables were: age, level of education, family size, farm size, annual income, training exposure, reading of newspaper, reading of agricultural printed materials, listening farm radio talk and watching agricultural TV programs. The dependent variable of this study was the credibility of SAAO in extension

service as perceived by the farmers. Data collected from the respondents were complied, coded, tabulated and analyzed in accordance with the objectives of the study. Various statistical measures such as frequency and percentage distribution, mean and standard deviation were used in describing data. Co-efficient of correlation test was used to explore the relationship between the concerned dependent and independent variables. The summary of the major findings of the study are summarized below:

5.1.1 Selected characteristics of the respondents

Age: Among the respondents the middle aged group respondents constitute the highest proportion (43.81 percent) followed by young aged (41.90 percent). On the other hand, the lowest (14.29 percent) proportion was made by the old aged category.

Level of Education: About 40.0 percent of the respondents had secondary level of education followed by 23.81 percent and 17.14 percent primary education and above secondary level education, respectively.

Family Size: The small family constitute the highest proportion (45.71 percent) followed by the medium family (43.81 percent). Only 10.48 percent respondents had large family size.

Farm size: Small farm size holder constituted the large proportion (64.76 percent) of the respondents. Only 23.81 percent of the respondents had medium farm size and 5.7 percent had marginal and also large farm size.

Annual income: The respondents having low annual income constitute the highest (64.76 percent) of the respondents followed having medium annual income (24.76 percent) and low annual income constitute the lowest proportion (10.48 percent).

Training exposure: Overwhelming majority (90.48 percent) of the respondents had no to low training exposure group and only 9.52 percent had medium level training. Nobody had high training group under the study area.

Reading newspaper: No reading newspaper constitutes the highest (36.19 percent) of the respondents followed by medium (24.91 percent) and high (21.91 percent). Only 17.14 percent had low reading newspaper group

Reading of agricultural printed materials: The highest (31.43 percent) of the respondents derived low reading agricultural printed materials followed by 27.62 percent no reading group and 22.86 percent of medium reading group of agricultural printed materials.

Listening farm radio talk: More than three-forth (80.95 percent) of the respondents listen farm radio talk compared to 17.14% and 1.91% high and no listen of farm radio talk group, respectively

Watching agricultural TV programs: The majority (56.19 percent) of the respondents were the medium watching group compared to 36.19 percent low watching group and 7.62 percent high watching agricultural TV programs group.

Creditability of SAAO in Extension Services

The highest (59.05 percent) of the respondents belongs to the medium group of creditability compared to 21.90 percent low and 19.05 percent high of the creditability of SAAO in extension services as perceived by the farmers.

Hypothesis testing

Level of education, annual income and reading of agricultural printed materials had significant positive relationship with the credibility of SAAO in extension service as perceived by the farmers. Farm size, training exposure, reading of newspaper, watching

agricultural TV programs had non-significant positive relationship with the credibility of SAAO in extension service as perceived by the farmers but age, family size and listening farm radio talk had non-significant negative relationships.

5.2 Conclusions

1. The findings indicate that about 80 percent respondent farmers belonged to the group of low to medium credibility group and rest of the respondents farmers belongs to the group of high credibility group. This fact leads to the conclusion that it is necessary to increase the credibility of the SAAO in extension service as perceived by the farmers.

2. Age had non significant negative relationships with the credibility of SAAO in extension service as perceived by the farmers. Among the respondents 85.71 percent under the group of young to middle aged. These facts lead to the conclusion that respondent age could not affect the credibility of the SAAO in extension service as perceived by the farmers.

3. Education level had significant positive relationships with the credibility of SAAO in extension service as perceived by the farmers. Among the respondents about 63.81 percent belongs the group of primary to secondary level education. These facts lead to the conclusion that higher education level of the respondent could increase the credibility of the SAAO in extension service as perceived by the farmers.

4. Family size had negative non significant relationship with the credibility of SAAO in extension service as perceived by the farmers. Again, an overwhelming majority (90 percent) of the respondents were small to medium size family. These facts lead to the

conclusion that family size of the respondent could not increase the credibility of the SAAO in extension service as perceived by the farmers.

5. Farm size of the farmers had positive non-significant relationship with the credibility of SAAO in extension service as perceived by the farmers. Again, an overwhelming majority (65 percent) of the respondents were small farmers. These facts lead to the conclusion that respondent farm size could not affect the credibility of the SAAO in extension service as perceived by the farmers

6. Annual family income of the respondents' farmers had positive significant relationship with the credibility of SAAO in extension service as perceived by the farmers. Majority (90 percent) of the respondent's farmers had low to medium annual family income. These facts lead to the conclusion that respondent annual incomes increase the credibility of the SAAO in extension service as perceived by the farmers. Higher annual income leads to higher credibility.

7. Training exposure had positive non-significant relationship with the credibility of SAAO in extension service as perceived by the farmers. Again, an overwhelming the majority about 90 percent of the respondents were no to low training exposure group. These facts lead to the conclusion that respondent training exposure could not affect the credibility of the SAAO in extension service as perceived by the farmers.

8. Reading of newspaper of the farmer's had positive non-significant relationship with the credibility of SAAO in extension service as perceived by the farmers. Among the respondents about 36.76 percent of the respondents had no habit of reading newspaper. These facts lead to the conclusion that respondent reading of newspaper could not increase the credibility of the SAAO in extension service as perceived by the farmers.

9. Reading of agricultural printed materials of the farmer's had positive significant relationship with the credibility of SAAO in extension service as perceived by the farmers. About 80 percent of the respondents had no to medium reading of agricultural printed materials. These facts lead to the conclusion that respondent reading of agricultural printed materials increase the credibility of the SAAO in extension service as perceived by the farmers.

10. Listening farm radio talk of the farmers had negative non-significant relationship with the credibility of SAAO in extension service as perceived by the farmers. Again, an overwhelming majority (80 percent) of the respondents had low to medium listen of farm radio talk. These facts lead to the conclusion that listening farm radio talk could not increase the credibility of the SAAO in extension service as perceived by the farmers.

11. Watching agricultural TV programs had positive non-significant relationship with the credibility of SAAO in extension service as perceived by the farmers. Again, an overwhelming above 90 percent of the respondents had low to medium watching agricultural TV programs. These facts lead to the conclusion that watching agricultural TV program of the respondent could not affect the credibility of the SAAO in extension service as perceived by the farmers.

5.3 Recommendations

5.3.1 Recommendations for policy implications

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

1. Reasons behind the low and medium credibility of SAAO in extension service as perceived by the farmers need to be identified and necessary attempt should be made to identify the possible reason overcoming this situation through DAE with increasing supervision mechanism thorough line ministry.

2. As higher level of education help to perceive clearly of the credibility of SAAO in extension service. Therefore, it may be recommended that non-formal adult education programs should be organized by Bureau of Non-formal Education (BNFE) for the farmers to increase their level of education.

3. Annual income of the respondents help to perceive clearly of the credibility of SAAO in extension service. Therefore, it may be recommended that concerned authorities like DAE and NGOs could take various types of income generating programs for the farmers.

4. Reading of agricultural printed materials had positive relationship with the credibility of SAAO in extension service as perceived by the farmers. Therefore, it may be recommended that it is necessary to increase the availability of printing materials and increasing reading habit.

5.3.2 Recommendations for further study

On the basis of scope and limitations of the present study and observation made by the researcher, the following recommendations are made for future study.

1. Other factors might have influence the credibility of SAAO in extension service as perceived by the farmers, which needs to be identified by further study.

2. The study was conducted in three villages at Kachina Union under Bhaluka Upazilla of Mymensingh District. Similar studies are required to be conducted in other sites of the country where similar socio-economic and physical conditions exist to compare the findings.

3. The study investigated the direct and indirect effects of some variables. Future studies should be conducted to explore the direct and indirect effects of all the variables under investigation.

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APPENDIX

Appendix I. Interview Schedule

DEPARTMENT OF AGRICULTURAL EXTENSION AND INFORMATION SYSTEM
SHER-E-BANGLA AGRICULTURAL UNIVERSITY
DHAKA 1207

An interview schedule for a research study entitle

"Credibility of SAAO in Extension Service as Perceived by the Farmers"

Sample No..... Date :

Respondent Name : Village :

Union : Upazila :

[Please provide the following information. Your information will be kept confidential and will be used for research purpose only]

1. Age

How old are you today? ..... Years

2. Education

What is the level of your education?

a) Illiterate b. Can sign only c. Have passed class.....

d. Did not read in School/Madrasha but can read and write and level of education is equivalent to class.....

3. Family size

How many members are there in your family?

Male..... Female..... Total.....

4. Farm size [Please state your farm size]

S1. No.	Types of land	Land area	
		Local Unit	Hectares
F_1	Homestead area with pond		
F_2	Own land under own cultivation		
F_3	Land given to others on share cropping in		
F_4	Land taken to others on share cropping out		
F_5	Land taken from others on mortgage		
Total: $F_1+F_2+1/2(F_3+F_4)+F_5$			

5. Annual income [Please state the income of your family during last year]

	S1. No.	Source of income	Total price (taka)
i. Agricultural income	1.	Field crops	
		a) Rice	
		b) Jute	
		c) Wheat	
		d) Pulse	
		e) Others	
	2.	Vegetables	
	3.	Fruits	
ii. Income from livestock and fisheries	1.	Livestock	
	2.	Fisheries	
iii. Non-agricultural source	1.	Service	
	2.	Business	
	3.	Others	
Total (i + ii + iii)			

6. Training exposure [Did you receive any kind of agricultural training in the last five years?]

Yes...../ No..... (If yes, please furnish the following information)

SL.	Title of training course	Duration	Training offering organization
1			
2			
3			
4			
Total			

7. Do you read newspaper?

Yes...../ No..... (If yes, please furnish the following information)

SL.	Name of the newspaper	Source (Office, self, neighbor)	Extent of reading		
			Regularly (3)	Often (2)	Occasionally (1)
1.	The daily Prothom Alo				
2.	The daily Janakantho				
3.	The daily Jugantor				
4.	The daily Amather Somoy				
5.	The daily Iffefaque				
6.	The daily Inquilabe				
7.	The daily Diganta				

8. Do you read agricultural printed material?

Yes...../ No..... (If yes, please furnish the following information)

SL.	Name of the agricultural printed materials	Extent of reading			
		Weekly (4)	Fortnightly (3)	Monthly (2)	Yearly (1)
1.	Krishi Biplob				
2.	Krishi Khata (Monthly)				
3.	Bhumi (Magazine)				
4.	Leaflet/poster				

9. Do you listen farm radio talk?

Yes...../ No..... (If yes, please furnish the following information)

SL.	Source of radio information	Extent of listening			
		Daily (4)	Weekly (3)	Fortnightly (2)	Monthly (1)
1.	Self				
2.	Friends				
3.	Relatives				
4.	Tea stall				

10. Do you watch agricultural TV programs?

Yes...../ No..... (If yes, please furnish the following information)

SL.	Source of television information	Extent of watching			
		Daily (4)	Weekly (3)	Fortnightly (2)	Monthly (1)
1.	Self				
2.	Friends				
3.	Relatives				

11. Creditability of SAAO among the farmers

a. How SAAO sees your problem?

Degree of Problem Observe			
Very seriously (4)	Seriously (3)	To some extent (2)	Not seriously (1)

b. How SAAO behaves with you?

Degree of relational behavior			
As a relative (4)	As a friend (3)	As progressive farmer (2)	As a ordinary client (1)

c. How does SAAO rush to the farmer's field to see the damage of crop?

Degree of Immediacy			
Immediately (4)	Hurriedly (3)	Lazily (2)	Poorly (1)

d. How useful suggestions are given by the SAAO to cope with calamities?

Degree of Usefulness of Suggestion			
High useful (4)	Useful (3)	Low useful (2)	Very low useful (1)

e. How effectively SAAO understands your field problem?

Degree of Effective Understanding			
Very effectively (4)	Medium effectively (3)	Low effectively (2)	Very low effectively (1)

f. How efficiently SAAO can identify your agriculture problem?

Degree of Efficiency of Identification of Agricultural Problem			
High (4)	Medium (3)	Low (2)	Very low (1)

g. How much benefit you get after application of SAAO advice regarding input use?

Degree of Benefits Obtained			
High (4)	Medium (3)	Low (2)	Very low (1)

h. How SAAO efficient in planning of various extension works?

Degree of Planning Efficiency			
Highly (4)	Moderately (3)	Low (2)	Very low (1)

i. Can SAAO carries out extension works in the light of extension planning use?

Degree of Planning Use			
Very well (4)	Well (3)	Moderately well (2)	Not so well (1)

j. How sufficient is SAAOs knowledge to solve the field problem?

Degree of Knowledge Sufficiency			
Highly sufficient (4)	Sufficiently (3)	Moderately sufficient (2)	Poorly (1)

k. How timely SAAO solve problem?

Degree of Timely Solve Problem			
Very timely (4)	Timely (3)	Lately (2)	Very lately (1)

Thanks for your co-operation

Signature of the interviewer with Date

Appendix II. Correlation Matrix

Parameters	A	B	C	D	E	F	G	H	I	J
A	1.00									
B	0.035	1.00								
C	0.029	-0.072	1.00							
D	-0.002	-0.094	-0.030	1.00						
E	-0.035	-0.096	0.004	0.399**	1.00					
F	-0.049	0.027	0.019	0.428**	0.394**	1.00				
G	0.004	0.167*	0.173*	0.242**	-0.153	-0.132	1.00			
H	0.017	0.121	-0.112	-0.007	0.076	0.346**	0.036	1.00		
I	-0.153	-0.132	0.035	0.117	0.173*	0.242**	-0.145	0.140	1.00	
J	0.173*	0.242**	-0.145	0.140	0.173*	-0.153	-0.132	0.017	0.121	1.00
K	-0.047	0.262**	-0.084	0.039	0.214*	0.009	0.126	0.268**	-0.022	0.186

**: Significant at 0.01 level of probability;

**: Significant at 0.01 level of probability

A: Age

B: Level of Education

C: Family Size

D: Farm Size

E: Annual Income

F: Training Exposure

G: Reading Newspaper

H: Reading of Agricultural Printed Materials

I: Listening Farm Radio Talk

J: Watching Agricultural TV Program

K: Creditability of SAAO in Extension Services as Perceived by the Farmers