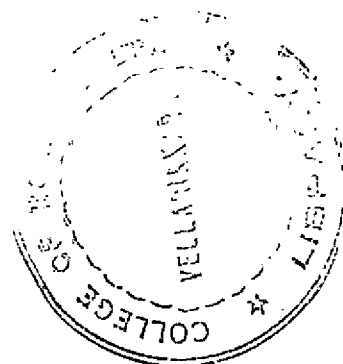


# **A STUDY ON THE FACTORS RELATED TO THE COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL**

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**THESIS**  
submitted in partial fulfilment of  
the requirement for the degree  
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Kerala Agricultural University


**DEPARTMENT OF AGRICULTURAL EXTENSION**  
**COLLEGE OF AGRICULTURE**  
Vellayani, Trivandrum.

1983

## DECLARATION

I hereby declare that this thesis entitled "A study on the factors related to the communication effectiveness of Village Level Extension Personnel" is a bonafide record of research work done by me during the course of research and that the thesis has not previously formed the basis for the award to me of any degree, diploma, associateship or other similar title of any other University or Society.

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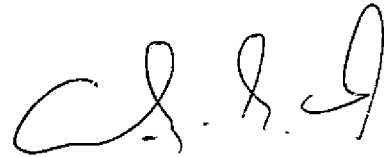
  
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Certified that this thesis, entitled  
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and that it has not previously formed the basis for  
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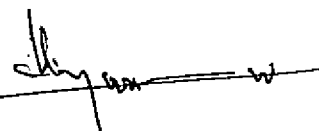


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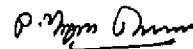
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# INTRODUCTION

## CHAPTER I

### INTRODUCTION

Like all other agrobased economies of the south block countries, Indian economy is also characterised by the problems of over population, large number of small holdings, low percapita income and very high incidence of mass poverty. In India, agricultural research was reoriented after the independance to achieve the objectives of accelerated agricultural development. This resulted, among other things, in the evolution of high productivity potential plant types characterised by a large number of high yielding varieties of crops and their related production technologies which gave birth to the "green revolution". But the rapid population increase upset the gains of technological innovations.

Even at the current levels of agricultural technology a wide gap exists between the actual and potential farm yields. This situation underlines the fact that the transmission of improved technology is as important as its production. Effective communication of the available know-how is the largest input to exploit the untapped yield potential existing in the country. Any change from the

traditional to modern ways of life should necessarily involve the communication of innovations.

Leagans (1961) defined communication as the process by which two or more persons exchange ideas, facts, feelings or impressions in such a way that each gains an understanding of the meaning, intent and use of the message.

Rao (1966) in a comparative study of two Indian villages - one progressive and other traditional - observed correlations between communication and social, economic and political development.

Rogers and Svenning (1969) postulated that communication processes are integral vital elements of modernisation and development. Rogers and Shoemaker (1971) stated that communication is essential for social change. The process of social change consists of 3 sequential steps. (1) Invention; (2) Diffusion; and (3) Consequences. Diffusion is the process by which new ideas are communicated to the members of a social system. Consequences are the changes that occur within a social system as a result of the adoption or rejection of the innovation. Change occurs when a new idea's use or rejection has an effect. So they felt that social change is an effect of communication.

Fray (1973) reported that mass media exposure, literacy and several other communication measures are correlated significantly with most indicators of socio-economic development. Dahama and Bhatnagar (1980) opined that communication can play a powerful role in nation building and development and can contribute to social change in the desired direction.

Extension system is primarily responsible for the communication of new technology to the farming community. Agricultural Extension system acts as a two way channel between agricultural research system and farmer client system. Village Level Extension Personnel are the grass root level workers involved in this two way process of communication between research and farmer. The Village Level Worker was rightly called as the king pin of extension set up.

Programme Evaluation Organization (1957) reported that the Village Level Workers (VLEWs) did not do much work and that they did not visit villagers and even they did confine their contacts to a few people whom they knew well. The Expert Committee on Assessment and Evaluation (1969) observed that most of the Village Level Workers

have tended to become demoralised and relatively ineffective for lack of appropriate training and incentives.

In a study conducted by Mangat and Sohal (1977) large majority of the cultivators said that the Village Level Workers never contacted their farms or homes as they rated the VLW in this activity as not at all useful.

However, Satapathy and Ganeswar (1974) found that Village Level Worker was the most frequently contacted source for information by farmers over Block Development Officers and Agricultural Extension Officers.

Further, Rajagopal (1972) revealed that majority of Gramsevaks (VLW) performed their educational roles such as giving correct recommendations and offering advice on the practices to be followed in the cultivation of crops.

The above studies revealed contradictory opinions regarding the effectiveness of Village Level Extension Personnel, in disseminating improved farm technology among farmers. In view of the above contradicting results, the present investigation was undertaken to study the factors related to the communication effectiveness of Village Level Extension Personnel in Kerala, with the following objectives:

- i. to measure the communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators);
- ii. to identify the factors related to the communication effectiveness of Village Level Extension Personnel; and
- iii. to identify the problems faced by Village Level Extension Personnel in their communication effectiveness.

#### Importance and Limitations of the study

As stated earlier, the transfer of new technology required for increased agricultural production is done by the Extension Agencies. Village Level Extension Personnel including Agricultural Demonstrators are identified as the agricultural extension workers at the grassroot level. Their major task is not to transmit, but to communicate new technology to farmers in a convincing manner. The success or failure of agricultural extension programmes and wide spread adoption of improved agricultural technology largely depends upon the effectiveness of the Village Level Extension Personnel in communicating the improved farm technology to the farmer. Research studies on the factors related to the communication effectiveness of Village Level Extension Personnel in Kerala are particularly lacking. Hence, a

a research study of this type will probe into the communication effectiveness of Village Level Extension Personnel. More so, with the introduction of Training and Visit system of Agricultural Extension, the effectiveness of which hinges on the effective transfer of feasible technology to the farming community by the Village Level Extension Personnel namely the Agricultural Demonstrators of the Department of Agriculture, which is the agency for the implementation of Training and Visit system (T and V system) of Agricultural Extension in Kerala.

The study was undertaken in a limited time and with limited resources. It was rather impossible to cover the entire state and hence the study was limited to the T and V areas of the State and Trivandrum district was selected as the location for the study. The number of respondents and variables for the study were also limited due to lack of time and sufficient resources. Therefore the generalisability of the study and inferences drawn are limited to the areas where the study was conducted.



# THEORETICAL ORIENTATION

## CHAPTER II

### THEORETICAL ORIENTATION

The objective of this chapter is to develop a theoretical frame work based on past research studies related to communication effectiveness. Theory is viewed as a set of related concepts which represent the basic realities. A well developed theoretical frame work is essential to form the hypotheses and to draw essential conclusions from the study.

The present chapter is divided in to the following parts:

1. Communication process,
2. Communication behaviour,
3. Communication effectiveness,
4. Factors associated with communication effectiveness; and
5. Problems faced by Village Level Extension Personnel in making communication effective.

#### 1. Communication process:

Communication is a process of transmitting ideas or thoughts or feelings from one person to another for the purpose of creating understanding in the thinking

of the person receiving communication. Loomis (1960) defined communication as the process by which information, decisions and directives are transmitted among factors and the ways in which knowledge, opinions and attitudes are formed or modified by interaction.

Agee, Ault and Emery (1979) defined communication as the act of transmitting information, ideas and attitudes from one person to another. Communication is there at the root of all human behaviour. While some authors confined to explaining and defining communication process others dealt with the identification of the various elements involved in communication process and came out with models of communication process. A model of communication, according to Singh (1973) is an attempt to represent in symbolic form the underlying relations existing among the elements that make up a particular event or a system. Two thousand years ago, Aristotle presented the first verbal model of communication. The elements included in the Aristotle's model are speaker, speech and audience.

Laswell (1948) put five questions that help to isolate the essentials of the communication process. He identified the elements of communication in the five questions of who? Says what? In which channel? To whom? and with what effect?

Shannon and Weaver (1949), two mathematicians explained communication process with five elements, such as source, transmitter, signal, receiver and destination. They included the concept of noise in the model and identified an essential proposition of semantics that meaning is in people.

Schramm (1960) explained communication process with the elements such as source, encoder, signal, decoder, destination and feed back. He also pointed out that each person in the communication process act as a source and a receiver.

Berlo (1960) postulated a model of communication called SMCR model in which a source (S) sends a message (M) through certain channels (C) to the receiving individual (R).

Likert (1961) explained communication as a complex process involving many dimensions such as (a) transmission of material from the sender to the target audience, (b) its reception and comprehension and (c) its acceptance or rejection.

Leagans (1961) identified six elements of communication process such as communicator, message, channel, treatment, audience and audience response. Leagans has

incorporated the concept of audience response as one of the ingredients of the communication process.

The McCroskey model first presented in 1968, details some of the steps involved in encoding and decoding. This model illustrates the process of feed back and states that it can go on and on. The process is circular. The model indicates that noise can be present in the source and the receiver as well as in the channel.

Appelbaum et al (1973) presented the summary model with no beginning or end. Chatterjee (1973) introduced the integrative model suited to agricultural communication situations based on communication-decision-learning approach. Tubbs and Moss (1977) presented a helical model of communication and the time component was also included in the model. Evans (1978) presented a model suited to communication in organizations with distinct stages such as message conceived, message encoded, communication medium selected, message decoded, message interpreted and feed back supplied.

## 2. Communication behaviour

The term communication behaviour was used by Sshramm (1960) while reporting the study of radio audience

by Katz and Kendall (1948). He identified the behavioural components of the effects of communication in questions like, what does a given communication do to the people? by what persons under what conditions, it is likely to be attended to? (attention or awareness), by whom it is likely to be understood? (understanding and comprehension), by whom favourably received? and to what actions or attitudes will it lead to? Newcomb et al (1965) considered that communication behaviour is manifested in sensitivity to information about the properties of the referent, the equalisation of information such that the sender and receiver have more nearly equal information about the referent and understand the information. This leads to a change in attitude structure and implicit in this are the sensitivity to information, the mental acceptance of the information, promotion of understanding of the message and appropriate action.

Mares (1966) postulated that human communication has to do with sending and receiving messages. The forms of behaviour identified by him are:

- (a) Intentional behaviour,
- (b) encoding behaviour,
- (c) transmitting behaviour,
- (d) decoding behaviour; and
- (e) interpretive behaviour.

Rogers (1966) considered communication behaviour as the degree to which an individual is willing to seek information and advice.

Channe Gowda (1977) identified the following dimensions of farmers communication behaviour:

- (a) comprehension,
- (b) recall behaviour,
- (c) information reinforcing behaviour,
- (d) credibility,
- (e) attitude,
- (f) symbolic adoption, and
- (g) information disseminating behaviour.

Murthy and Singh (1972) explained the communication behaviour of farmers in terms of awareness, comprehension, attitudinal change and adoption of the referent.

Ambastha and Singh (1975) applied the system analysis procedure to study the communication pattern of farmers. They studied individual communication pattern in terms of information input pattern, information processing pattern and information output pattern.

Sandhu and Darbharilal (1976) identified two components of communication behaviour as inward exposure and outward exposure. Inward exposure means the exposure of farmers to those information sources through which they

receive information and outward exposure means the exposure of farmers to those information sources through which they pass on information.

Pandeyaraj (1978) identified the components of communication behaviour as information input, information processing, information output and information feed back. Reddy and Singh (1979) considered that communication behaviour consists of two parts; such as receiver's communication behaviour (components of awareness, comprehension and attitude) and sender's communication behaviour (components of communication abilities and skills and channel use effectiveness).

### 3. Communication effectiveness

Effectiveness of communication is viewed as the result of interaction amongst its components i.e., communicator, message, treatment, channel, audience and audience response. Communication behaviour, which is the most fundamental of all human behaviours, exhibits different degrees of effectiveness. Communication behaviour of the communicator, in order to be effective, must establish commonness with the receivers of the message.

Hovland et al (1953) studied communication effects or responsiveness to communication as attention to the



verbal content of the communication, comprehension and acceptance. Three elements of comprehension they studied were translation, interpretation and extrapolation.

Emery and Oeser (1958) developed a communication model: exposure-adoption. They applied this model to Australian farmers and implied that exposure to information ultimately leads to adoption.

Redfield (1958) putforth following guidelines for effective communication in administrative situation: clarity, quantity, timing and timeliness, distribution, applicability, transmission, adaptability, interest and acceptance.

Schramm (1960) identified four conditions to successful communication. They are:

- (a) the message must be so designed and delivered as to gain attention at the intended destination,
- (b) the message must employ signs which refers to experience that is common to both source and destination so that the meaning comes across,
- (c) the message must arouse personality needs on the intended recipient;and
- (d) the message must suggest a way to meet those needs which are appropriate to the group situation in which the intended recipient find

himself at the time when he is moved to make the desired response.

Leagans (1961) observed that communication in order to be effective should lead to the information being accepted, understood and acted upon and not just received. He also observed that successful communication requires skillful communicator sending a useful message through proper channels, effectively treated to an appropriate audience to elicit the desired response.

Sinha et al (1976) identified the dimensions of effective communication such as clarity, consistency, adequacy, timeliness, suitability, use of channel, distribution, interest and acceptance.

Francois (1977) stated that the goal that is realised in any successful communication is shared meaning and attainment of such an objective will be facilitated, if parties to the communication effort share in or participate in the communication act.

Tubbs and Moss (1977) observed that communication is effective when the stimulus, as it was initiated and intended by the sender corresponds closely with the stimuli as it is perceived by the receiver. They represented communication effectiveness by the following equation:

P meaning = 1  
 G meaning

G stands for the person who generates the response and P for the receiver of the response, then communication is whole and complete when the response G intends and the response P perceived are identical.

Hunt (1980) stated that effective communication is important in its own right and need not be justified by relating to organisational effectiveness.

Feed back is one of the important components of effectiveness of communication. Leavitt and Mueller (1951) pointed out that accuracy of communication increased under free feed back conditions. Feffer and Suchotliff (1956) stated that communication accuracy was greater when the number of channels available for feed back from the addressee to the communicator was more. Schramm (1960) also emphasised the importance of feed back in successful communication. Chatterjee (1973) felt that feed back is one of the factors associated with change agent effectiveness. Mehrabian and Reed (1973) hypothesised that accuracy of communication is correlated with the availability of feed back to the communicator. Dahama and Bhatnagar (1980) stated that for effective communication feed back is of paramount importance. An experienced communicator is

attentive to feed back and constantly modifies his message in the light of what he observes in or hears, from the audience.

Regarding the communication effectiveness of Village Level Extension Personnel, Banis (1966) observed that they adopted only circumscribed communication methods rather than proper procedures. He observed that individual contacts, demonstrations, meetings and discussions were the only methods used by Village Level Workers and their knowledge of communication methods was very poor. The results of the study by Salvi and Dudhani (1967) showed that majority of the effective Gramsevaks had followed the essential steps in conducting result demonstration, method demonstrations and meetings while non-effective Gramsevaks had not. The above reviews on communication behaviour and communication effectiveness revealed that communication behaviour is not synonymous with communication effectiveness. It is also evident that communication effectiveness encompasses the recipients of the message. The above reviews also revealed that communication is effective when the communicator is able to transfer the meaning accurately and satisfactorily to the intended receivers of the message. Therefore a distinction between communication behaviour and communication effectiveness was made in this study and an

attempt to measure the communication effectiveness was made.

4. Factors associated with the communication effectiveness

Following factors associated with the communication effectiveness are examined here:

- A. Attitude towards farmers;
- B. Cosmopolitaness,
- C. Information seeking behaviour,
- D. Scientific Orientation,
- E. Job Satisfaction,
- F. Knowledge of Scientific Agriculture,
- G. Concept of Communication,
- H. Self Confidence,
- I. Self Concept,
- J. Job Commitment,
- K. Attitude towards T and V systems of Agricultural Extension.

A. Attitude towards farmers

Allport (1935) defined attitude as "a mental and neural state of readiness organised through experience exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related". Thurstone (1946) defined attitude "as the degree of positive or negative affect associated with

some psychological object". Newcomb (1961) defined attitude as "a state of readiness for motive arousal". Remmers et al (1967) defined attitudes, informally, as feelings for or against something. Mehrabian (1973) defined attitude as the degree of liking, positive evaluation and/or preference of one person for another.

Berlo (1960) stated that attitude of the source towards the receiver would affect the communication behaviour of the source. Khedre and Sahay (1972) found positive relationship between attitude towards villagers and role performance of Village Level Workers. Singh (1973) opined that communicator's attitude towards the recipient of the message would positively affect the communication effectiveness of the communicator. Mehrabian and Reed (1973) hypothesised that the accuracy of communication is inversely correlated with the magnitude of the positive (or negative) attitude of the communicator towards his addressee. However, Bhatia and Sandhu (1975) found no significant relationship between attitude towards villagers and job effectiveness of Village Level Workers. Reddy (1976) found positive relationship between attitude towards farmers and communication behaviour of Village Level Workers. Sinha et al (1976) observed that as favourableness of attitude towards the receiver increased, the perception of Village Level Workers

about their own effectiveness of communication also increased in the case of intensive areas of the study. Pandeyraj (1978) found positive and significant relationship between attitude of the Junior Agricultural Officers towards farmers and their communication behaviour. Pathak and Majumdar (1981) observed positive and high correlation between attitude towards receivers and communication fidelity.

Above results point out the possibility of definite relationship of attitude towards receivers with communication effectiveness. Therefore, in this study it was assumed that the extent of positive or negative affect of the Village Level Agricultural Extension personnel towards farmers would affect communication effectiveness of Village Level Agricultural Extension Personnel (Agricultural Demonstrators).

#### B. Cosmopolitaness

Cosmopolitaness is the degree to which an individual is oriented to out side world. Murthy (1972) observed positive and significant correlation between cosmopolitaness and communication behaviour of farmers. Murthy and Singh (1972) reported that the more cosmopolite an individual,

the more was the communication behaviour. Singh (1973) reported that key communicators were distinctively characterised by more cosmopolitaness compared to communicators and non-communicators.

Ambastha and Singh (1975) found positive and significant correlation between cosmopolitaness and information input and output indices of farmers. Vijayaraghavan and Subramonyam (1981) found that cosmopolitaness had significant and positive correlation with information input and output and no significant association with information processing.

Based on the above reviews, in this study it was postulated that the extent of cosmopolitaness or localiteness would affect the communication effectiveness of the communicator.

### C. Information seeking behaviour

Rogers (1966) expressed communication behaviour as the degree to which an individual is willing to seek information and advice. Bhatia and Sandhu (1975) reported that magazine reading habit of the Village Level Workers was positively and significantly related to their job performance. Ray (1975) reported that Extension Officers in West



Bengal were mostly in contact with official letters, leaflets, pamphlets, agricultural magazines and official meetings. Sanoria and Singh (1976) revealed that radio broadcast, superior extension personnel and extension publications were the most commonly used sources of information for the Village Level Workers. Reddy and Singh (1977) reported that package of practices booklet, leaflets and folders, AEOs, SMS of the department of Agriculture, magazines and newspapers and radio were the popular sources of information with Village Level Workers.

Pandeyraj (1978) found that the information seeking behaviour of Junior Agricultural Officers was positively and significantly related to their communication behaviour.

Gupta (1980) found that exhibits, posters, field-trips, transistors, flash cards, pamphlets, circular letters, charts, folders and booklets were the different sources of information for Village Level Workers in Ludhiana.

Based on the above research studies it was decided to include information seeking behaviour as a factor influencing the communication effectiveness of Village Level Extension personnel.

#### D. Scientific Orientation

Murthy (1972) reported significant correlation between value orientation and communication behaviour of farmers. Singh (1973) observed that key communicators of agricultural innovations were characterised by more scientism compared to communicators and non-communicators. Sandhu and Dharbarilal (1976) studied the communication behaviour of Punjab farmers and found out that value orientation had positive and significant correlation with communication behaviour. Vijayaraghavan and Subramonyam (1981) reported that scientific orientation has significant and positive correlation with information input and information output of farmers, but it had no significant association with information processing.

The above studies revealed positive and significant correlation between scientific orientation and communication behaviour of farmers. Therefore, scientific orientation was included in this study as an independent variable to examine its correlation with communication effectiveness of Village Level Extension personnel.

#### E. Job Satisfaction

Katzell (1964) defined job satisfaction as the verbal expression of the incumbent's evaluation of his job.

Sinha et al (1976) defined job satisfaction as a mental state of an individual in an organisation when he feels satisfaction in performing the job of his position. Anastasi (1979) explained job satisfaction essentially as the degree of correspondence between each worker's needs and their need fulfilling characteristics of the job. Job variables may interact with worker characteristics in their relation to job satisfaction.

Sarkar and Patnaik (1967) found that Village level workers placed maximum importance on such factors as opportunity for promotion and salary according to work achievement.

Subhalakshmi and Singh (1974) found that nearly two-third of the Gramsevaks were either very much satisfied or satisfied with their job, nearly 20 per cent were dissatisfied or very much dissatisfied and the remaining Gramasevaks were neutral.

Jalihal et al (1975) observed that about 74 per cent of the Gramsevaks were satisfied with the time spent by them on educational activities.

Sinha et al (1976) found that job satisfaction had significant and positive relationship with communication

effectiveness of district and block level officials only in intensive areas and in other areas there was no significant relationship.

Sanoria (1977) studied the communication efficiency of agricultural extension personnel working in the Agricultural department of Madhya Pradesh and found positive and significant relationship between job satisfaction and communication efficiency.

Rajagopal (1977) found that 50 per cent of the Gramsevaks had more job satisfaction while the remaining fifty per cent had less job satisfaction. Dhillon and Sandhu (1977) observed significant positive relationship between job satisfaction and job effectiveness of extension specialists of a farm advisory service.

Individuals vary in their level of job satisfaction. Their satisfaction or dissatisfaction resulting from the job may affect their communication effectiveness. Hence job satisfaction was included as an independent variable to test its association with communication effectiveness of Village Level Extension personnel.

#### F. Knowledge of Scientific Agriculture

English and English (1958) defined knowledge as a body of understood information possessed by an individual or by a culture. Berlo (1960) stated that amount of knowledge of subject matter possessed by the source would affect his communication behaviour. Khedre and Sahay (1972) found significant relationship between knowledge of Village Level Workers on multiple cropping and their role performance. Chakrawarthy and Singh (1974) observed that level of technical knowledge of Village level Workers was one of the indicators of their role performance. Sohi and Sandhu (1976) found out that 13.95 per cent of the Village Level Workers were having low, 44.19 per cent were having medium and 41.85 per cent of the Village Level Workers were having high level of knowledge of agricultural practices.

Pandayaraj (1978) observed no significant relationship between knowledge of Junior Agricultural Officers about high yielding varieties and their communication behaviour.

Prasad (1981) reported that 12.5 per cent of the Village level Workers were having very poor knowledge of cultivation of high yielding varieties, more than one-fourth of them were having poor knowledge and only 22.92 per cent

of the Village level Workers were in the high knowledge level category.

Pathak and Majumdar (1981) observed positive and high correlation between level of knowledge and fidelity of communication.

In the light of the above results, knowledge of scientific agriculture was selected as an independent variable based on the assumption that possession of adequate knowledge about scientific agriculture by the communicators would influence their communication effectiveness.

#### G. Concept of Communication

Berlo (1960) stated that knowledge of the source about the communication process itself would influence the communication behaviour of the source, Leagans (1961) opined that communication is limited by one's concept of communication process and the way one thinks about communication will influence its quality. Successful communication is not a single unit act but a series of unit acts which have to be combined into an integrated whole by the communicator for influencing the communicatees. This requires clear conception of communication process by the communicators.

Pandayaraj (1978) observed positive and significant relationship between concept of communication and communication behaviour of Junior Agricultural Officers.

Based on the above review, concept of communication was assumed as an important factor influencing the level of communication effectiveness of Village level Extension Personnel.

#### H. Self Confidence

Self confidence is the belief in one's own abilities. Subhalakshmi and Singh (1974) reported that effective Gramsevikas were more confident and ineffective Gramsevikas were not confident compared to effective Gramsevikas. Khare (1976) opined that confidence would play an important role in the success of a creator and/or innovator.

Pandayaraj (1978) found positive and significant relationship between self confidence and communication behaviour of Junior Agricultural Officers in Kerala.

By including self-confidence as an independent variable, an attempt was made in this study to test it's relationship with communication effectiveness of Village Level Extension Personnel.

## I. Self Concept

McAuley (1976) defined self concept as the conglomerate of perceptions one has about oneself; it may contain incorrect pictures, and its development is continual. Robbins and Jones (1976) explained self concept as those physical and social perceptions of ourselves that we have acquired through our interaction with others and that have been validated by our experiences.

Wilmot (1975) opined that no one enters a communication exchange without some sort of self concept. Self concept is reinforced during communication act.

Robbins and Jones (1976) felt that self concept or self image is one of the most important controlling factor of communication behaviour.

Mc Auley (1976) stated that self concept affects communication by acting as a self-fulfilling prophecy, message filter, and by affecting one's responses in threatening situations.

Sinha et al (1976) reported that democratism was significantly and positively related with communication effectiveness of Village Level Extension Personnel.



An individual's possession of favourable self concept as a communicator would increase his communication effectiveness. Hence in the study self concept was included as an independent variable to examine whether the possession of favourable self concepts as a communicator would affect his communication effectiveness or not.

#### J. Job Commitment

Job commitment is the degree to which an individual is committed to his job. Sanoria (1977) found positive and significant correlation between job commitment and communication efficiency of extension personnel in the agricultural department of M.P. State. Ambastha (1980) reported that farm scientists with more job commitment had more communication with various categories of farmers and extension personnel.

The above two studies reveal relationship between job commitment and communication effectiveness. In this study also, it was assumed that the degree of job commitment of an individual would affect his communication effectiveness.

K. Attitude towards T and V system: of Agricultural Extension

Dhillon and Samundri (1965) found that the VIW had only slightly favourable attitude towards the community development programme. Every third VLW possessed an unfavourable attitude towards Community Development Programme. Tripathy et al (1970) reported that only 2 per cent of the Gramsevaks were having favourable attitude towards CD programme. Majority of them were neutral (69 per cent).

No research study was found reported on the relationship between attitude towards programme and communication effectiveness of Village Level Extension Personnel. However, the above mentioned two studies revealed that VLWs were having different degree of attitude towards CD programme. This led to the assumption that Village Level Extension Personnel would possess different degree of attitude towards T and V system also. Based on this assumption it was postulated that the attitude of Village Level Extension Personnel towards T and V system would affect their communication effectiveness.

5. Problems faced by Village Level Extension Personnel in making Communication effective.

Sapkal (1960) classified the problems of Village Level Extension personnel which bothered them more in their

work into three categories; (1) Problems due to the short comings in the people; (2) Problems due to the short comings in the department; and (3) Problems due to their own short comings.

Murthy (1965) studied effectiveness of VLWs and their frustrations in performing duties. He found that insufficient and untimely supply of agricultural inputs such as seeds, fertilizers etc. is one of the main sources of frustration. They also felt lack of sufficient practical knowledge on agricultural improvements.

Banis (1966) observed that heavy work load and usually insufficient time compelled the VLWs to adopt circumscribed extension methods rather than proper methods.

Murthy (1971) found that VLWs in U.P. and A.P. experienced difficulty in getting guidance from block level subject matter specialists.

Hunt (1980) identified the problems in effective communication as (1) Problems of the hierarchy, (2) problems in written word; and (3) problems with management failures.

Fuzele (1980) reported that non-availability of godown facilities was a major problem faced by Village

Level Workers followed by non-agricultural work, late receipt of information, inadequate transport facilities, non-availability of timely instructions from supervisors etc.

Jaiswal and Das (1981) reported that area of operation of Village Level Worker is very wide and few Village Level Workers work close to the average.

Problems identified in the studies reviewed above do not seem to be applicable under the situations obtaining in Kerala. Therefore, in this study an attempt was made to identify some of the problems perceived by the Village Level Agricultural Extension Personnel as important in their communication effectiveness.

### Hypotheses

Based on the theoretical orientation the following hypotheses were formulated to test the relationship between the dependant variable and selected independant variables.

1. There would be no significant positive relationship between communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators) and their attitude towards receivers of messages, ie. farmers.

2. There would be no significant positive relationship between communication effectiveness of Village Level Extension Personnel and their extent of cosmopolitaness.
3. There would be no significant positive relationship between communication effectiveness of Village Level Extension Personnel and their information seeking behaviour.
4. There would be no significant positive relationship between communication effectiveness of Village Level Extension Personnel and their scientific orientation.
5. There would be no significant positive relationship between communication effectiveness of Village Level Extension Personnel and their level of job satisfaction.
6. There would be no significant positive relationship between communication effectiveness of Village Level Extension Personnel and their knowledge of scientific agriculture.
7. There would be no significant positive relationship between communication effectiveness of Village Level Extension Personnel and their concept of communication.
8. These would be no significant positive relationship between communication effectiveness of Village Level Extension Personnel and their level of self confidence.

9. There would be no significant and positive relationship between communication effectiveness of Village Level Extension Personnel and their possession of favourable self concept as a communicator.
10. There would be no significant and positive relationship between communication effectiveness of Village Level Extension Personnel and their extent of job commitment.
11. There would be no significant and positive relationship between communication effectiveness of Village Level Extension Personnel and their attitude towards T and V system of agricultural extension.

# METHODOLOGY

## CHAPTER III

### METHODOLOGY

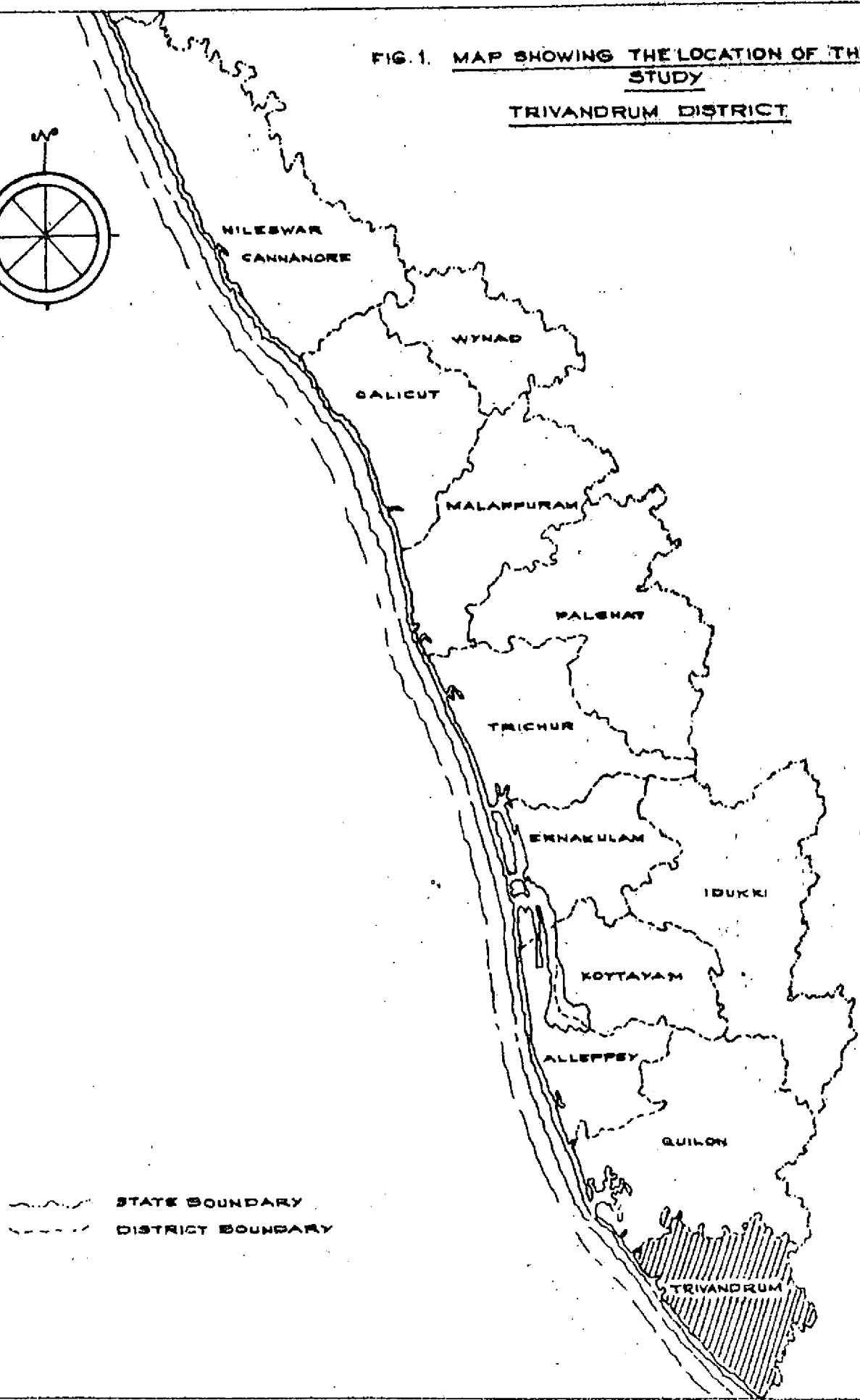
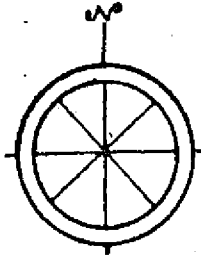
The present study was aimed at measuring the communication effectiveness of Village Level Agricultural Extension Personnel (Agricultural Demonstrators) under the Training and visit system of Agricultural Extension and at identifying the factors related to their communication effectiveness. Identification of the problems faced by Village Level Agricultural Extension Personnel in making communication effective was another objective of the study. The selection of the location for the study, procedures followed in the selection of sample, quantification methods followed in the measurement of the variables with a brief review of the various measurement techniques, procedures followed in the collection of data and statistical tools and techniques employed for the analysis of the data are presented in this chapter.

#### I. Location for the study

At the time of the study, the T and V system of Agricultural Extension was implemented in three districts (Trivandrum, Quilon and Alleppey) in the State. From



FIG. 1. MAP SHOWING THE LOCATION OF THE STUDY  
TRIVANDRUM DISTRICT



~~~~~ STATE BOUNDARY  
- - - - DISTRICT BOUNDARY

these three districts, Trivandrum district was randomly selected as the location for the study. Trivandrum district consists of three Agricultural subdivisions, viz. Attingal, Neyyattinkara and Nedumangad under the T and V system and all the three subdivisions were selected for the study.

## II. Selection of respondents

A list of the Village Level Agricultural Extension Personnel (Agricultural Demonstrators) in Trivandrum district was obtained from the Principal Agricultural Officer (who is the chief of the Agricultural Personnel in the District) Trivandrum district. From this list ten agricultural demonstrators each were randomly selected from the three subdivisions. Thus thirty Agricultural Demonstrators were selected for the study. Communication effectiveness of Agricultural Demonstrators was evaluated through the contact farmers, the primary receivers of the information from the Agricultural Demonstrators. Six contact farmers were randomly selected from among the contact farmers identified in the jurisdiction of each Agricultural Demonstrator. Thus a total of 180 contact farmers were randomly selected from 30 Agricultural Demonstrators' working units, covering the three selected subdivisions. The distribution of selected agricultural

demonstrators and contact farmers in the three subdivisions is as follows:

| Sl. No. | Name of sub-division. | Agricultural Demonstrators (Number) | Contact farmers (Number) |
|---------|-----------------------|-------------------------------------|--------------------------|
| 1.      | Neyyattinkara         | 10                                  | 60                       |
| 2.      | Nadumangad            | 10                                  | 60                       |
| 3.      | Attingal              | 10                                  | 60                       |
| Total:  |                       | 30                                  | 180                      |

### III. Variables selected for the study

A) The following dependant variable was selected for the study.

Communication effectiveness.

#### B) Independent variables

On the basis of review of literature the following variables were selected as independent variables to test the relationship with the communication effectiveness of Agricultural Demonstrators.

1. Attitude towards farmers.
2. Cosmopolitaness.
3. Information seeking behaviour.
4. Scientific orientation.

5. Job satisfaction.
6. Knowledge of scientific agriculture.
7. Concept of communication.
8. Self confidence.
9. Self concept.
10. Job commitment.
11. Attitude towards T and V system of Agricultural Extension.

IV. Operational definitions of the concepts used in the study

Village Level Extension Personnel

Village Level Extension Personnel in this study is operationally defined as the Agricultural Demonstrators of the Department of Agriculture who are the field level agricultural extension workers, working in the study area.

Contact farmers

Contact farmers are defined as those farmers who are the primary receivers of messages from the agricultural demonstrators and whom the agricultural demonstrators are meeting once in a fortnight to transfer the seasonal messages.

Communication effectiveness

In this study it is operationally defined as the effectiveness of Agricultural Demonstrators in communicating the improved technology to the farmers as evaluated

by the contact farmers on the basis of the effectiveness principles of three selected methods of communication viz., personal contact, group discussion and method demonstration.

#### Attitude towards farmers

It is operationally defined as the degree of positive or negative affect of the Agricultural Demonstrators towards the receivers of their message i.e., the farmers.

#### Cosmopolitaness

Cosmopolitaness is operationally defined as the tendency of an individual to be in contact with outside world based on the belief that all the needs of an individual cannot be satisfied within his own community.

#### Information seeking behaviour

It is operationally defined as the extent to which the Agricultural Demonstrators are seeking information from different communication sources.

#### Scientific orientation

Those aspects of actors' orientation which commits

him to the observance of certain norms, standards and criteria for selection based on scientific principles, whenever he is in a contingent situation which allow him to make choice which directly or indirectly influences his behaviour.

#### Job satisfaction

It is the Agricultural Demonstrator's expression of the degree of satisfaction or dissatisfaction he is deriving from his job.

#### Knowledge of scientific agriculture

It is operationally defined as the Agricultural Demonstrator's knowledge of the different scientific cultivation aspects such as plant protection, fertilizer application, varieties and spacing of three most important crops of the study area ie. paddy, coconut, and tapioca.

#### Concept of communication

The set of concepts possessed by an Agricultural Demonstrator about the communication process.

Self confidence

It is operationally defined as the belief of an Agricultural Demonstrator in his own abilities.

Self concept

The set of cognition and feelings that an individual has about himself as a communicator.

Job commitment

It is operationally defined as a personal decision of the Agricultural Demonstrator to engage in a line of behaviour in his working situations.

Attitude towards T and V system of Agricultural extension

It is the degree of positive or negative affect of an Agricultural Demonstrator about the T and V system of Agricultural Extension.

V. Measurement of variables(A) Measurement of communication effectiveness

Katz and Lazarsfeld (1955) operationalised communication behaviour as the respondent's listening and reading habits. Respondents were asked conventional and well known audience survey type of questions. The answers were expressed

as percentages of total number of respondents. Salvi and Dudhani (1967) prepared a list of functions to be performed by the VLWs with BDOs as judges for their job effectiveness. Patel and Leagans (1968) used an appraisal form consisting of twenty four activities to be performed by the VLWs and agricultural extension officers were selected as judges.

Singh and Sahay (1970) operationalised communication behaviour of farmers as their information seeking habits based on the use of information sources like personal-localite, personal-cosmopolite and mass media. Channe Gowda (1977) measured the communication behaviour of farmers on the following dimensions:

- (a) Comprehension;
- (b) Recall behaviour
- (c) Information reinforcing behaviour
- (d) Credibility
- (e) Attitude
- (f) Symbolic adoption; and
- (g) Information disseminating behaviour.

Singh and Murthy (1972) operationalised communication behaviour as a composite measure of awareness, comprehension, attitude and adoption. Awareness was measured as the use of technologically competent sources of information.



Comprehension was measured in terms of knowledge cum translation behaviour, interpretation behaviour and extrapolation behaviour. Singh and Prasad (1974) measured communication behaviour of the farmers as the extent to which farmers are exposed to different messages from various communication sources for the sake of adopting that message.

Ambastha and Singh (1975) system analysed the individual communication pattern of Bihar farmers, in term of information input index, information processing index and information output index. Ambastha and Singh (1976) used the above method to measure the communication pattern of farm scientists. Ambastha (1980) and Sanoria and Singh (a) (1980) also followed the same method to study the communication pattern of farm scientists. Sanoria and Singh (b) (1980) also used the system analysis technique to measure the communication pattern of extension personnel.

Sandhu and Dharbarilal (1976) operationalised communication behaviour as the degree of an individual farmers exposure to the various information sources through which the technologies are transmitted and they measured it in terms of inward exposure and outward exposure.

Sinha et al (1976) identified two approaches to measure the communication effectiveness. In the first

approach communication behaviour can be considered as a means to an end or as an input in order to produce a certain output. The degree of desirable change produced in the human behaviour will be proportional to the effectiveness of communication process. The second approach emphasise the individual's own subjective judgment (self rating) about his communication effectiveness. They assessed effectiveness of communication on the dimensions of clarity, consistancy, adequacy, timeliness, suitability, use of channel, distribution, interest and acceptance. The communication effectiveness of Village Level Extension Personnel was arrived at on the basis of their own evaluation of communication sent by them to district, block and village officials and village people.

Reddy (1976) measured communication behaviour of Village Level Workers as a composite measure of awareness, comprehension, attitude, communication skills and effective use of channels.

Sanoria (1977) measured communication efficiency of extension personnel by developing a communication efficiency index based on the following equation:

$$CE_i = \frac{EF_i}{(C_i + F_i)} \quad JC_i$$

where,

|        |   |                                   |
|--------|---|-----------------------------------|
| $CE_i$ | = | Communication efficiency index    |
| $EF_i$ | = | Communication effectiveness index |
| $C_i$  | = | Cost index                        |
| $F_i$  | = | Facility index                    |
| $JC_i$ | = | Job commitment index.             |

Reddy and Singh (1979) developed a communication behaviour index to measure the communication behaviour of village level extension workers. The index represented different components of communication behaviour viz. awareness of the selected agricultural messages through technologically competent sources, knowledge cum translation behaviour in respect of selected messages, communication abilities, communication skill qualities and channel use effectiveness.

Balasubramonyam and Knight (1977) measured communication fidelity by using the fidelity index. Balasubramonyam and Menon (1978) measured communication behaviour of research personnel in terms of activities related to acquisition, processing and dissemination of agricultural information. Somu, Menon and Kalamegham (1978) quantified the communication behaviour of opinion leaders as the extent to which opinion leaders are exposed to the messages through

different sources and channels. The component parts considered were the newspapers reading habit, radio listening, extension agency contacts habits and participation in the activities arranged by extension workers.

Pandayaraj (1978) measured the communication behaviour of Junior Agricultural Officers of Kerala in terms of information input, information processing, information output and information feed back indices. Communication behaviour index was a composite measure of all these indices. He measured information processing in terms of information encoding and information decoding.

Bhaskaran (1979) developed an inter-personal communication behaviour efficiency index. This referred to the cumulative index obtained by a respondent and indicates the effectiveness of his inter-personal communication behaviour as measured with reference to the selected sub divisions of interpersonal communication behaviour. Operationally it indicated a person's extent of effective interaction in inter-personal information exchange situations.

Communication is effective when the meaning of the message as it was initiated and intended by the communicator corresponds closely to the meaning perceived by the

receiver. An evaluation by the receiver about the communication effectiveness of the communicator will be more meaningful and useful than the self evaluation of the communicator himself. Hence in the present study it was decided to evaluate the communication effectiveness of the Village Level Extension Personnel by the receivers of their message, viz., contact farmers. The objective was to identify the extent of effectiveness of Village Level Extension Personnel in their process of communicating new technology to farmers.

As the different methods discussed above were not suited to measure communication effectiveness of Agricultural Demonstrators under the situations prevailing in the study area, a new method was developed to measure the communication effectiveness of Village Level Extension Personnel. In this study the methodology followed in evaluating the communication effectiveness of Agricultural Demonstrators was as follows:

After discussions with extension personnel in the area and relevant review of literature three methods of communication widely adopted by the Agricultural Demonstrators in communicating to the farmers were selected. The methods thus selected were, individual contact, group discussion and method demonstration. Based on the review of

literature and discussions with extension experts, the important effectiveness characteristics of these three methods of communication were identified. Some of the items reflecting the extent of feed back received to the Agricultural Demonstrators from the farmers were also selected. This consisted of 85 items. After careful editing 64 items were selected and given to 20 Judges (Extension experts of Kerala Agricultural University) for obtaining specific judgements on each of the item listed to judge whether the item was relevant to measure the variable under study or not. Based on the agreement of the Judges 48 items were selected for inclusion in the final scale.

The items were pretested with ten non-sample contact farmers. Three items were deleted due to their ambiguity and redundance. The final scale consisted of 45 items.

The items selected were suited for reflecting the effectiveness principles of three methods of communication viz. personal contact, group discussion and method demonstration. The effectiveness principles such as speaking in simple and understandable language, illustrating points with examples, using local language, listening.

patiently to questions, following a sequence in speech giving timely and seasonal information, writing down problems to be submitted to the higher officers, use of audio-visual aids, summarising at the end of the talk, engaging in friendly talk before going to the subject matter proper, following up of the earlier problems, introducing the information in an attention getting manner, presenting the subject in an interesting manner, stressing of important points, giving complete information on the subject matter, distribution of printed materials, conducting of method demonstration whenever necessary were included to measure the effectiveness under personal contact. The principles such as initiating and giving an interesting start to the discussion, supplying adequate information for the discussion, guiding the discussion along the points of discussion, sharing of common experience, giving equal chances to all farmers in group discussion, clarifying vague statements, giving occasional summaries, concluding the discussion within time, summarising at the end of the discussion, use of teaching aids, conducting of method demonstration during group discussion, if necessary and collecting of problems, were selected to evaluate the effectiveness of group discussion. The essential steps and principles in conducting a method demonstration were included to measure the effectiveness of method demonstration.

The frequency of collecting feed back information during personal contact and group discussion were also measured.

The standardised scale was then administered to the farmer respondents. They were asked to indicate how frequently the Agricultural Demonstrators in their area was following the above stated effectiveness principles of the three methods of communication while communicating to them. The rating was done on a three point continuum ranging from 'always' to never'. The scoring followed was as follows: A score of 2 was given to an answer of 'always', 1 'to 'some times' and 0 to 'never'. The total score on all 45 items were added upto get the communication effectiveness score for each Agricultural Demonstrator as evaluated by a single farmer. The maximum possible score that could be obtained by an Agricultural Demonstrator who was always following all these 45 items was 90. Each Agricultural Demonstrator was evaluated by 6 contact farmers of their working area. Thus the sum of communication effectiveness scores obtained from the ratings of 6 contact farmers represented the communication effectiveness score of an Agricultural Demonstrator. The maximum possible score that could be obtained by an Agricultural Demonstrator from the ratings of 6 contact farmers was 540 (90 x 6). The mean and standard deviation of the distribution of



Agricultural Demonstrators according to their communication effectiveness were taken to classify them according to communication effectiveness. They were classified in to low, medium and high levels of communication effectiveness.

|     |        |   |                                                                 |   |                   |
|-----|--------|---|-----------------------------------------------------------------|---|-------------------|
| (1) | Low    | - | (Mean - Standard deviation and below)                           | = | 298.09 and below. |
| (2) | Medium | - | (Between mean - standard deviation and mean+standard deviation) | = | 298.09-384.45     |
| (3) | High   | - | (Mean + standard deviation and above)                           | = | 384.45 and above. |

#### B) Attitude towards farmers

There are different techniques to measure the attitude of an individual. Edwards (1957) demonstrated the usefulness of attitude scales for measuring the attitude. The methods usually employed for measuring attitude are the Likert method, Thurstone techniques, Scalogram analysis etc.

Sinha et al (1976) measured the attitude towards receivers by asking the respondents at various levels to rate the competence of the different categories of receivers of their message.

In this study, attitude towards farmers was measured by using a Likert type scale developed by Pandyaraj (1978)

to measure the attitude of Junior Agricultural Officers towards farmers. The scale was used with suitable modifications for the respondents (Agricultural Demonstrators). The items specified for the Junior Agricultural Officers were modified for the respondents of this study. The scale consisted of six statements and the response was rated on a five point continuum ranging from strongly agree to strongly disagree. The scores assigned for positive statements were as follows:

|                   |   |   |
|-------------------|---|---|
| Strongly agree    | - | 5 |
| Agree             | - | 4 |
| Undecided         | - | 3 |
| Disagree          | - | 2 |
| Strongly disagree | - | 1 |

In the case of negative statements scoring was reversed. The attitude score for each individual was obtained by adding up the scores corresponding to respective response pattern. Based on the mean score, the respondents were categorised into two according to their attitude towards receivers.

|                                                              |   |       |
|--------------------------------------------------------------|---|-------|
| Low attitude towards receivers<br>(below mean score)         | < | 23.00 |
| High attitude towards receivers<br>(at and above mean score) | ≥ | 23.00 |

c) Cosmopolitaness

Extent of cosmopolitaness was measured by modifying the method followed by Bhaskaran (1979). This variable was measured by him taking into consideration the frequency of visits to nearest city/town in a month purpose of visits, and membership in organisations outside the village. In addition to this the frequency of attending meetings was also considered in this study. The scoring pattern followed was as follows:

- (a) Frequency of visit to the nearest city or town during a month.

| Sl. No. | Frequency of visit   | Score assigned |
|---------|----------------------|----------------|
| 1       | Twice or more a week | 4              |
| 2       | Once a week          | 3              |
| 3       | Once a fortnight     | 2              |
| 4       | Once a month         | 1              |
| 5       | Never                | 0              |

- (b) Purpose of visit.

| Sl. No. | Purpose of visit | Score assigned |
|---------|------------------|----------------|
| 1       | Personal         | 2              |
| 2       | Job related      | 1              |

(c) Membership/holding office in any organisation outside the village.

| Sl. No. | Membership/Office bearer | Score assigned |
|---------|--------------------------|----------------|
| 1       | Office bearer            | 2              |
| 2       | Member                   | 1              |
| 3       | Non member               | 0              |

(d) Frequency of attending meetings.

| Sl. No. | Frequency of attending meetings | Score assigned |
|---------|---------------------------------|----------------|
| 1       | Always                          | 2              |
| 2       | Sometimes                       | 1              |
| 3       | Never                           | 0              |

The total score of cosmopolitaness for each individual was found out by adding the scores obtained by each individual on the above four dimensions of cosmopolitaness.

Based on the mean score, the respondents were categorized into high and low groups according to their cosmopolitaness.

Low cosmopolitaness (below mean) -  $< 5.46$

High cosmopolitaness (at and above mean) -  $\geq 5.46$

D) Information seeking behaviour

Pandayaraj (1978) measured the information seeking behaviour of Junior Agricultural Officers by preparing a list of all the information sources and asking the respondents to indicate their preferences to all sources. This method was modified and used in this study. The list of information sources was given to the respondents and they were asked to indicate how frequently they were seeking information from these sources. The response was rated on 3 point continuum ranging from 'always' to 'never'. A score of 2 was given to a response of 'always', 1 to a response of 'sometimes' and '0' to a response of 'never'. Information seeking behaviour score for each individual was arrived at by adding up the score corresponding to each response. Based on the mean value the respondents were classified in to two groups according to their information seeking behaviour.

|                                                           |              |
|-----------------------------------------------------------|--------------|
| Low information seeking behaviour<br>(below mean)         | $<$ 16.45    |
| High information seeking behaviour<br>(at and above mean) | $\geq$ 16.45 |

E) Scientific orientation

The scale developed by Supe (1969) was followed in this study to measure the extent of scientific orientation

of the respondents. The scale consisted of six items. The response was rated on a five point continuum. The scoring was done as follows in respect of positive items.

|                   |   |   |
|-------------------|---|---|
| Strongly agree    | - | 5 |
| Agree             | - | 4 |
| Neutral           | - | 3 |
| Disagree          | - | 2 |
| Strongly disagree | - | 1 |

The scoring pattern was reversed in the case of negative items.

Scientific orientation score for each individual was found out by adding up the score corresponding to each response pattern. Based on the mean, the respondents were classified in to the following two groups:

|                                                    |   |       |
|----------------------------------------------------|---|-------|
| Low scientific orientation<br>(below mean)         | < | 25.23 |
| High scientific orientation<br>(at and above mean) | ≥ | 25.23 |

#### F) Job satisfaction

Muthayya and Gnanakannan (1973) measured the job satisfaction of developmental personnel by items covering three aspects viz. personal aspects including feelings of inadequacy, security, non-acceptance etc., the interpersonnel

aspects covering the interaction with superior people and non-officials and the job aspects including pay, work opportunities, expectation etc. Rathore (1974) developed a job satisfaction scale to measure the level of job satisfaction of extension personnel. Sinha et al (1976) measured job satisfaction in terms of over all attitude of the respondent towards his job by asking direct questions such as whether he liked or disliked his job.

In the present study the scale developed by Rathore (1974) was modified and used to measure the job satisfaction of Agricultural Demonstrators. Ten items reflecting different aspects of job were selected. The items were in the form of questions and the answers were rated on a five point continuum ranging from very much satisfied to very much dissatisfied. The scores assigned were as follows:

|                        |   |   |
|------------------------|---|---|
| Very much satisfied    | - | 5 |
| Satisfied              | - | 4 |
| Undecided              | - | 3 |
| Dissatisfied           | - | 2 |
| Very much dissatisfied | - | 1 |

The job satisfaction score for each respondent was computed by summing up the score corresponding to each answer. The following two classes of respondents were

identified according to their job satisfaction based on the mean score.

|                          |           |
|--------------------------|-----------|
| Low (below mean)         | - < 29.73 |
| High (at and above mean) | - ≥ 29.73 |

G) Knowledge of scientific agriculture

Shankariah and Singh (1967) measured knowledge of the respondents about improved methods of vegetable cultivation based on a teacher made test. Sinha et al (1968) adopted the method of self appraisal to assess the knowledge level of Agricultural Extension Officers. Singh and Prasad (1974) measured knowledge by working out knowledge quotient, calculated as follows:

$$KQ = \frac{\text{Obtained knowledge score}}{\text{Actual total score}} \times 100$$

Pandayaraj (1978) used a simple knowledge test to measure the level of knowledge of Junior Agricultural Officer in Kerala with regard to high yielding varieties of rice. Sivaramakrishnan (1981) used a simple knowledge test to measure the knowledge of the respondents. The method followed in this study to measure the knowledge of Village Level Extension Personnel about Scientific Agriculture was as follows:



After discussions with experts, a simple knowledge test was prepared covering the three most important crops i.e. Paddy, coconut and tapioca, grown in the study area. The questions covered the different aspects of plant protection, fertilizer application, varieties and spacing. A score of 1 was given to each correct answer and 0 to wrong answer. The total knowledge score was arrived at by adding up the score obtained in respect of each answer. The respondents were categorized in to two groups according to their knowledge of scientific agriculture based on the mean score.

|                          |         |
|--------------------------|---------|
| Low (below mean)         | < 17.13 |
| High (at and above mean) | ≥ 17.13 |

#### H) Concept of communication

This independent variable was measured by using the scale developed by Pandyaraj (1978) with suitable modifications. The scale consisted of 8 items explaining different aspects of the communication process, its importance etc. The response was rated on a five point continuum ranging from strongly agree to strongly disagree. The scores assigned were as follows:

|                   |   |   |
|-------------------|---|---|
| Strongly agree    | - | 5 |
| Agree             | - | 4 |
| Undecided         | - | 3 |
| Disagree          | - | 2 |
| Strongly disagree | - | 1 |

Concept of communication score for each individual was found out by summing up scores corresponding to each response. The respondents were categorised in to two groups according to their concept of communication based on the mean score.

|                          |   |    |
|--------------------------|---|----|
| Low (below mean)         | < | 32 |
| High (at and above mean) | ≥ | 32 |

#### I) Self confidence

In this study this variable was measured by a scale developed by Pandyaraj (1978) for measuring the level of self confidence of Junior Agricultural Officers in Kerala. A list of 8 items explaining initiative and ability to achieve goals were included in the scale. These items were rated on a five point continuum ranging from strongly agree to strongly disagree. The scoring method followed was as follows for positive items.

|                   |   |   |
|-------------------|---|---|
| Strongly agree    | - | 5 |
| Agree             | - | 4 |
| Undecided         | - | 3 |
| Disagree          | - | 2 |
| Strongly disagree | - | 1 |

The scoring pattern was reversed in the case of negative items. Self confidence score for each individual was calculated by adding up the score corresponding to each response. Based on the mean score of self confidence the respondents were categorised in to two groups.

|                                             |   |    |
|---------------------------------------------|---|----|
| Low self confidence<br>(below mean)         | < | 30 |
| High self confidence<br>(at and above mean) | ≥ | 30 |

#### J) Self concept

Sarma (1974) used the personality word list technique to measure the aspects of self concept by measuring seperately what he thinks he is at present and what he thinks to be in future. Deo (1984) developed personality word list for measuring aspects of self concept. The items were rated on a five point continuum ranging from "very much like this" to "not at all like this". The method followed

in this study to measure this independent variable was as follows:

Based on the review of literature and discussions with extension experts, 24 items reflecting the different aspects of self concept that would affect the effectiveness of communication was identified. These items were carefully edited and 16 items were finally selected and given to 20 judges for rating the relevancy of the items to measure the particular variable. Based on the agreement of the judges, 8 items were finally selected and included in the final scale. These items were rated on a five point continuum ranging from 'strongly agree' to 'strongly disagree'. The following pattern of scoring was adopted.

|                   |   |   |
|-------------------|---|---|
| Strongly agree    | - | 5 |
| Agree             | - | 4 |
| Undecided         | - | 3 |
| Disagree          | - | 2 |
| Strongly disagree | - | 1 |

The self concept score for each respondent was found out by adding up the score corresponding to each response.

Based on the mean value of self concept scores the respondents were classified into two.

|                          |   |    |
|--------------------------|---|----|
| Low (below mean)         | < | 31 |
| High (at and above mean) | ≥ | 31 |

K) Job commitment

Sanoria (1977) measured job commitment in terms of the percentage of time devoted by an extension worker for extension work. In this study, job commitment was measured by considering different aspects such as sense of responsibility in carrying out the job activities, interest in meeting farmers, commitment in extension work, utilisation of time for extension work, visiting farmers of interior places, interest in giving timely information, extent of working among the non-contact farmers and use of extension methods among non-contact farmers. The method followed in quantifying this variable was as follows:

A list of 17 items covering different aspects of job commitment of the Agricultural Demonstrators was prepared after discussion with extension personnel in the area, and extension experts. These items were edited and given to 20 judges for obtaining the relevancy of the items in measuring job commitment. Based on the agreement

of the judges 8 items were selected. These items were rated on a five point continuum ranging from 'strongly agree' to 'strongly disagree'. The scores assigned were as follows for positive items.

|                   |   |   |
|-------------------|---|---|
| Strongly agree    | - | 5 |
| Agree             | - | 4 |
| Undecided         | - | 3 |
| Disagree          | - | 2 |
| Strongly disagree | - | 1 |

The scoring was reversed in the case of negative items. The job commitment score for each individual was found out by summing up the scores corresponding to each response.

The Agricultural Demonstrators were classified in to two groups based on the mean score of job commitment as follows:

|                                            |   |    |
|--------------------------------------------|---|----|
| Low job commitment<br>(below mean)         | < | 31 |
| High job commitment<br>(at and above mean) | ≥ | 31 |

L) Attitude towards T and V system of Agricultural extension

Samad (1979) developed a Likert type scale to measure the attitude of farmers and Agricultural Officers

towards Package Programme. He tested the unidimensionality of the scale by following the scalogram analysis. A scale suited to measure the attitude of Agricultural Demonstrators towards T and V system was needed and in this study a scale was developed to measure the attitude of agricultural demonstrators towards T and V system by adopting the following procedures.

Based on the review of literature, discussions with experts, Agricultural Demonstrators and researcher's own personal experience, 28 items reflecting varying degrees of positive and negative affect towards T and V systems were prepared. These items were then edited by following the criteria suggested by Edwards (1957) for editing attitude statements. ~~Seven~~ <sup>Eight</sup> items were selected after editing and given to 20 judges for rating the relevancy of the item to measure the attitude towards T and V system. After the judge's rating, 8 items were selected to include in the final scale. This consisted of 4 positive and 4 negative statements. Statements which were not agreed by a minimum of 25 per cent of the judges were not included in the final scale.

These selected statements were tested for unidimensionality by adopting the Good enough technique described by Edwards (1957). The items were presented to 30

respondents and they were asked to indicate the degree of favourableness or unfavourableness towards the issue. The response was categorized in to three groups such as 'Agree', 'Neutral' and 'Disagree'. A score of two was given to 'Agree', one to 'Neutral', and 0 to 'disagree'. The score matrix was prepared the predicted response pattern was found out from the Barchart and the total errors were calculated. The coefficient of reproducibility was found out by the formula given below:

$$\text{Coefficient of Reproducibility(CR)} = 1 - \frac{\text{Total number of errors}}{\text{Total number of responses}}$$

The coefficient of reproducibility in this case was found to be 0.863. Edwards (1957) pointed out that the statements are scalable and follow a unidimensional scale if CR is 0.9 or higher. The calculated CR in this case was nearly equal to 0.90. According to Edwards (1957) when a set of statements are said to constitute unidimensionality the difference between CR and Minimal Marginal reproductability should not exceed 0.20. The difference in this case was found to be 0.04. Hence it was concluded that the selected 8 statements followed a unidimensional scale.



The standardised scale was administered to the respondents and response was measured on a five point continuum. The following scoring pattern was followed in respect of positive items.

|                   |   |   |
|-------------------|---|---|
| Strongly Agree    | - | 5 |
| Agree             | - | 4 |
| Undecided         | - | 3 |
| Disagree          | - | 2 |
| Strongly disagree | - | 1 |

The scoring was reversed in the case of negative items.

Based on the mean value of attitude towards T and V systems, the respondents were classified in to two groups:

|                                                          |   |      |
|----------------------------------------------------------|---|------|
| Low attitude towards T and V system (below mean)         | < | 31.6 |
| High attitude towards T and V system (at and above mean) | ≥ | 31.6 |

VI. Problems faced by Village Level Extension Personnel in making their communication effective.

Based on the review of relevant literature, discussions with Agricultural Demonstrators and Extension experts a list of 10 problems likely to affect the

communication effectiveness of Agricultural Demonstrators were identified. These problems were rated on a 3 point continuum ranging from 'most important' to 'least important'. A score of 3 was given to a rating of 'Most important', 2 to a rating of 'important' and 1 to a rating of 'least important'. The score given to each problem was added up separately. The problem which obtained the maximum score was given the first rank followed by other problems in the order of their total score indicating the importance of each problem in making the communication of Village Level Extension Personnel effective.

#### VII. Collection of data

An interview schedule containing the data collection devices developed and/or selected and suitable questions for obtaining the required data was prepared. Separate schedules were prepared for collecting data from farmers and from Agricultural Demonstrators. The interview schedules were pretested with 10 non-sample Agricultural Demonstrators and 10 non-sample contact farmers, and necessary modifications were made to avoid ambiguity and redundancy, in the questions. The data were collected through personal interview method by using the final interview schedule. The researcher developed rapport with the respondents before the interview.

### VIII. Statistical measures used

The following statistical measures were used in the analysis of the data.

#### I. Correlation

(a) Correlation coefficient is a measure of the association between two or more variables. Correlation coefficient was worked out to test the association between communication effectiveness and different independent variables. Intercorrelation analysis was worked out to find the correlation between different independent variables.

(b) Test of significance: The observed value of correlation coefficient was compared with the tabulated value for (n-2) degree of freedom. If the observed value is more than the tabulated one, the correlation coefficient is said to be significant. In this case t value was worked out to test the null hypothesis using the following formula:

$$t = r \frac{n-2}{1-r^2}$$

Where,

r = correlation coefficient, and  
n = total number of observations.

## 2. Path Analysis

Singh (1975) opined that path analysis is a useful tool in an attempt to bridge the gap between social science theory construction and statistical analysis. Path analysis was worked out to test the direct and indirect effects of various independent variables on communication effectiveness the dependant variable. It was also useful in knowing the extent of influence of the independant variables on communication effectiveness. Based on the results of path analysis, it is possible to represent the whole system of variables in the form of a diagram known as path diagram. The advantage of the path diagram is that a set of simultaneous equations can be written directly from the diagram and a solution of these equation provides information on the direct and indirect contribution of these independant variables to the communication effectiveness.

# RESULTS

## CHAPTER IV

### RESULTS

Results of the study are presented in the following sequence.

1. Communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).
2. Relationship of the Social and Psychological characteristics of the respondents with communication effectiveness and score range of the respondents on different independent variables.
3. Inter-correlations between independent variables.
4. Path analysis.
5. Problems identified by the Village Level Extension Personnel (Agricultural Demonstrators) in their communication effectiveness.
6. Suggestions of Agricultural Demonstrators for improving their communication effectiveness.

I. COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL  
EXTENSION PERSONNEL

Data on the communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators) are presented in Table 1.

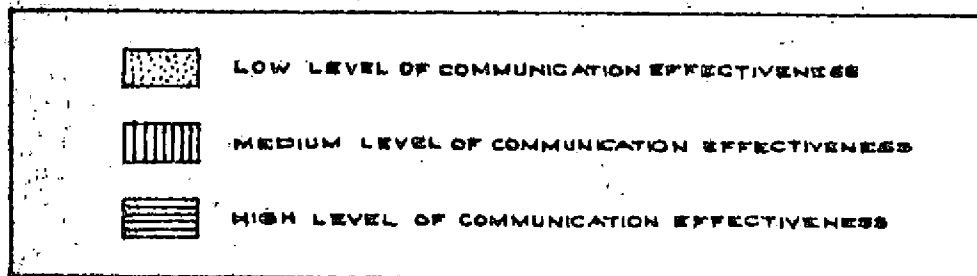
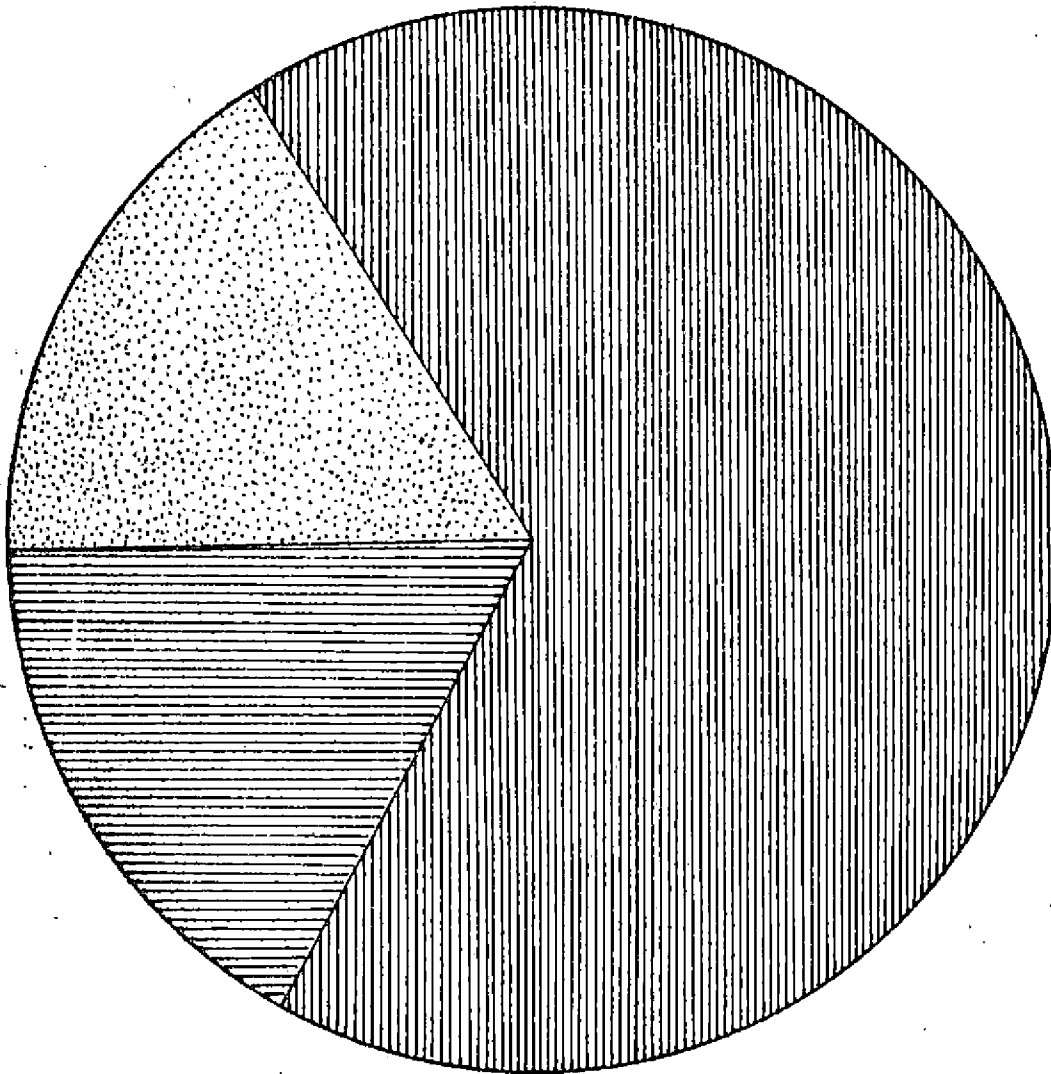
Table 1. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR COMMUNICATION EFFECTIVENESS

| Sl. No. | Communication effectiveness | Score range       | Frequency | Percentage. |
|---------|-----------------------------|-------------------|-----------|-------------|
| 1       | Low                         | 298.09 and below  | 5         | 16.67       |
| 2       | Medium                      | 298.09-384.45     | 20        | 66.66       |
| 3       | High                        | 384.45 and above. | 5         | 16.67       |
| Total   |                             |                   | 30        | 100.00      |

Mean = 341.27      Standard deviation = 43.18

Data presented in Table 1 show that 16.67 per cent of the Agricultural Demonstrators belonged to low level of communication effectiveness. Majority of the Agricultural Demonstrators (66.66 per cent) had medium level of communication effectiveness. The rest (16.67 per cent) of the

**FIG. 2. COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION  
PERSONNEL**





respondents belonged to high level of communication effectiveness. It was also observed that 53.33 per cent of the respondents were below the mean value of communication effectiveness and only 46.67 per cent were above the mean value.

2. SOCIAL AND PSYCHOLOGICAL CHARACTERISTICS AND COMMUNICATION EFFECTIVENESS

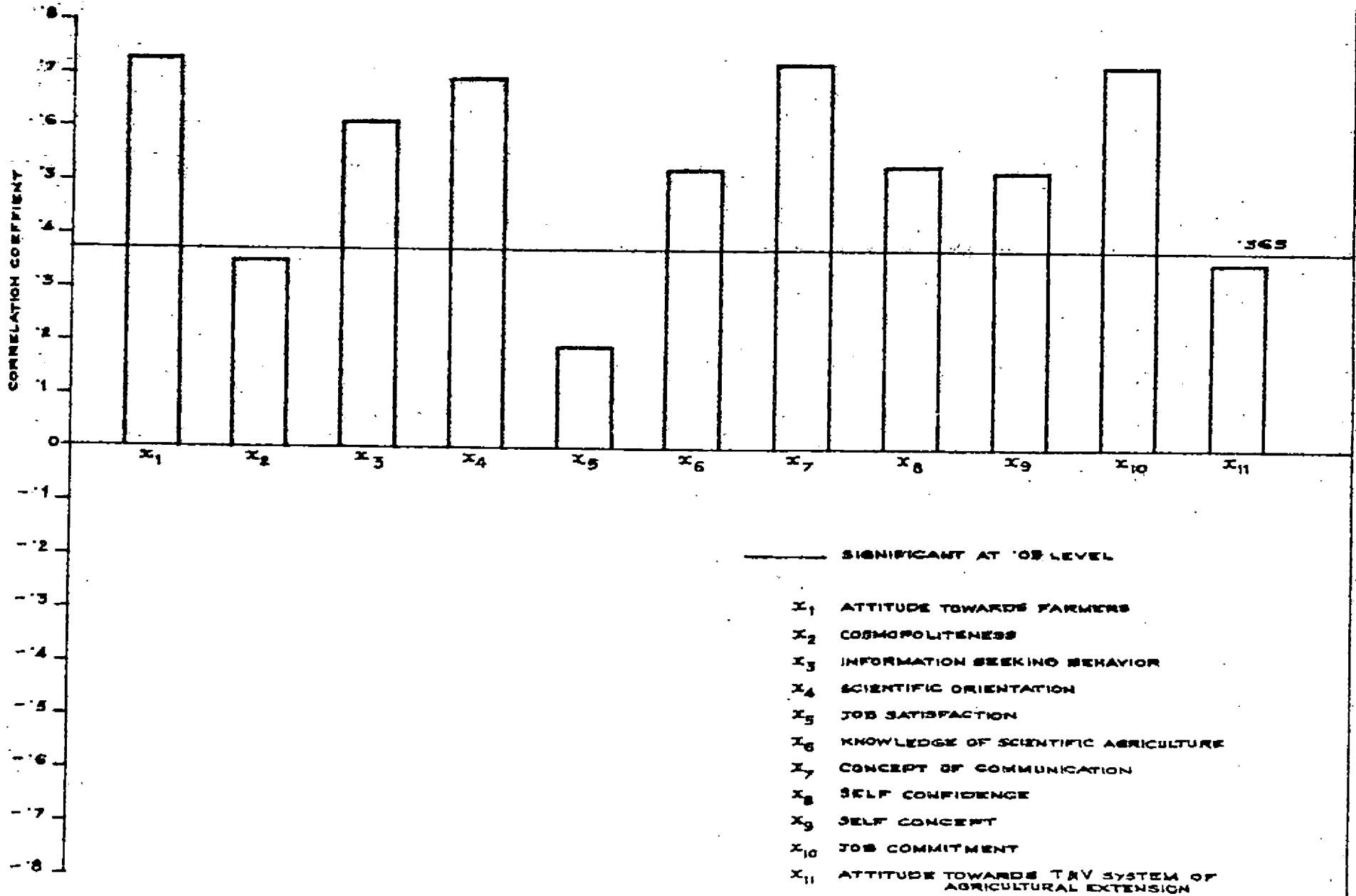
Correlations between different independent variables and communication effectiveness are presented in Table 2.

Table 2. CORRELATIONS BETWEEN COMMUNICATION EFFECTIVENESS AND SOCIAL AND PSYCHOLOGICAL CHARACTERISTICS

| Sl. No. | Variable                             | r value   | t value    |
|---------|--------------------------------------|-----------|------------|
| 1       | Attitude towards farmers             | 0.72615   | 5.578808*  |
| 2       | Cosmopolitaness                      | 0.3460998 | 1.95203    |
| 3       | Information seeking behaviour        | 0.6091858 | 4.064815*  |
| 4       | Scientific orientation               | 0.6870513 | 5.0034258* |
| 5       | Job satisfaction                     | 0.19137   | 1.0317028  |
| 6       | Knowledge of scientific agriculture. | 0.521153  | 3.231168*  |
| 7       | Concept of communication             | 0.7218294 | 5.51880*   |
| 8       | Self confidence                      | 0.527883  | 3.2887*    |
| 9       | Self concept                         | 0.521131  | 3.2309825* |
| 10      | Job commitment                       | 0.71994   | 5.48900*   |
| 11      | Attitude towards T and V system      | 0.3553356 | 2.01153    |

\* Significant at 0.05 level.

FIG. 5. CORRELATION BETWEEN COMMUNICATION EFFECTIVENESS AND THE INDEPENDANT VARIABLES.



Data presented in Table 2 reveal that out of the eleven social and psychological characteristics studied eight were positively and significantly correlated with communication effectiveness. The positively significant characteristics were attitude towards farmers, information seeking behaviour, scientific orientation, knowledge of scientific agriculture, concept of communication, self confidence, self concept and job commitment. Three variables, viz. cosmopolitaness, job satisfaction and attitude towards T and V system were not significantly correlated with communication effectiveness.

A. ATTITUDE OF VILLAGE LEVEL EXTENSION PERSONNEL TOWARDS FARMERS AND THEIR COMMUNICATION EFFECTIVENESS.

The distribution of respondents according to their attitude towards farmers is presented in Table 3.

It could be observed from Table 3 that 33.33 per cent of the respondents had scores below the mean value 23, while 66.67 per cent of the respondents had scores at and above the mean. However majority of the respondents had scores above 23.

Table 3. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR ATTITUDE TOWARDS FARMERS

| Attitude scores. | Frequency |           |         | Total frequency. | Percentage. | Cumulative frequency. | Cumulative percentage. |
|------------------|-----------|-----------|---------|------------------|-------------|-----------------------|------------------------|
|                  | Low CE*   | Medium CE | High CE |                  |             |                       |                        |
| 15-16            | 1         | 2         | 0       | 3                | 10          | 3                     | 10                     |
| 17-18            | 1         | 0         | 0       | 1                | 3.33        | 4                     | 13.33                  |
| 19-20            | 2         | 0         | 0       | 2                | 6.67        | 6                     | 20.00                  |
| 21-22            | 1         | 3         | 0       | 4                | 13.33       | 10                    | 33.33                  |
| 23-24            | 0         | 11        | 0       | 11               | 36.67       | 21                    | 70.00                  |
| 25-26            | 0         | 3         | 1       | 4                | 13.33       | 25                    | 83.33                  |
| 27-28            | 0         | 1         | 2       | 3                | 10.00       | 28                    | 93.33                  |
| 29-30            | 0         | 0         | 2       | 2                | 6.67        | 30                    | 100.00                 |
| Total            | 5         | 20        | 5       | 30               | 100         |                       |                        |

\*CE - Communication Effectiveness.

Mean - 23.0. Standard deviation - 3.76.

### Correlation

The computed correlation coefficient was 0.72615 which was significant (Table 2). Hence the null hypothesis was rejected. It was concluded that attitude towards farmers was positively and significantly correlated with

communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).

B. COSMOPOLITENESS AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL.

The distribution of respondents on cosmopolitanism scores is shown in Table 4.

Table 4. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR COSMOPOLITENESS

| Cosmo-<br>polite-<br>ness<br>scores. | Frequency of<br>respondents |              |            | Total<br>freque-<br>ncy. | Percen-<br>tage. | Cumula-<br>tive<br>frequen-<br>cy. | Cumula-<br>tive<br>percen-<br>tage. |
|--------------------------------------|-----------------------------|--------------|------------|--------------------------|------------------|------------------------------------|-------------------------------------|
|                                      | Low<br>CE                   | Medium<br>CE | High<br>CE |                          |                  |                                    |                                     |
| 2-3                                  | 2                           | 4            | 1          | 7                        | 23.33            | 7                                  | 23.33                               |
| 4-5                                  | 2                           | 7            | 0          | 9                        | 30.00            | 16                                 | 53.33                               |
| 6-7                                  | 1                           | 5            | 1          | 7                        | 23.33            | 23                                 | 76.66                               |
| 8-9                                  | 0                           | 4            | 2          | 6                        | 20.00            | 29                                 | 96.66                               |
| 10-11                                | 0                           | 0            | 1          | 1                        | 3.34             | 30                                 | 100.00                              |
| Total                                | 5                           | 20           | 5          | 30                       | 100              |                                    |                                     |

Mean - 5.47. Standard deviation - 2.42

The above data revealed that 53.33 per cent of the respondents had cosmopolitanism scores below the mean (5.47). As much as 46.67 per cent of the respondents had

cosmopolitanness scores above the mean. It could be observed that majority of the respondents were below the mean value.

### Correlation

The worked out correlation coefficient of 0.346099 was not significant. So the null hypothesis was accepted. It could be inferred that cosmopolitanness was not significantly correlated with communication effectiveness of Village Level Extension Personnel.

### C. INFORMATION SEEKING BEHAVIOUR AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

The data pertaining to the information seeking behaviour of Village Level Extension Personnel (Agricultural Demonstrators) are presented in Table 5.

It is evident from Table 5 that agricultural trainings were the most important source from when the Agricultural Demonstrators were seeking farm information followed by newspaper, agricultural guides/diaries, farm broadcast, superior officers, agricultural books, extension journals, agricultural exhibitions, discussion with colleagues, scientific journals and agricultural seminars (in that order). The Agricultural Demonstrators were seeking information least from personnel of research stations and

Table 5. INFORMATION SEEKING BEHAVIOUR OF THE RESPONDENTS

| Sl. No. | Information sources            | Response pattern<br>in percentage. |                |       | Total score | Rank |
|---------|--------------------------------|------------------------------------|----------------|-------|-------------|------|
|         |                                | Always                             | Some-<br>times | Never |             |      |
| 1       | Agricultural trainings.        | 90.00                              | 10.00          | 0.00  | 56          | 1    |
| 2       | Newspaper                      | 86.67                              | 10.00          | 3.33  | 55          | 2    |
| 3       | Agricultural guide/diaries     | 83.33                              | 16.67          | 0.00  | 54          | 3    |
| 4       | Farm broadcast                 | 76.67                              | 20.00          | 3.33  | 52          | 4    |
| 5       | Superior Officers              | 56.67                              | 43.33          | --    | 47          | 5    |
| 6       | Agricultural books             | 50.00                              | 40.00          | 10.00 | 42          | 6    |
| 7       | Extension journals             | 36.67                              | 50.00          | 13.33 | 36          | 7    |
| 8       | Agricultural exhibitions       | 26.67                              | 66.67          | 6.66  | 36          | 7    |
| 9       | Discussion with colleagues     | 26.67                              | 60.00          | 13.33 | 34          | 8    |
| 10      | Scientific journals            | 23.33                              | 63.34          | 13.33 | 33          | 9    |
| 11      | Agricultural seminars          | 23.33                              | 63.34          | 13.33 | 33          | 9    |
| 12      | Personnel of research stations | 3.33                               | 46.67          | 50.00 | 16          | 10   |
| 13      | Agricultural workshops         | -                                  | 13.33          | 86.67 | 4           | 11   |

agricultural workshops. As much as 90 per cent of the respondents rated agricultural trainings as the most favoured source of information related to farm practices. The distribution of respondents according to their information seeking behaviour is furnished in Table 6.

Table 6. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR INFORMATION SEEKING BEHAVIOUR.

| Information seeking behaviour scores. | Frequency of respondents |           |          | Total frequency. | Percentage. | Cumulative frequency. | Cumulative percentage. |
|---------------------------------------|--------------------------|-----------|----------|------------------|-------------|-----------------------|------------------------|
|                                       | Low CE                   | Medium CE | High CE  |                  |             |                       |                        |
| 11-12                                 | 1                        | 1         | 0        | 2                | 6.67        | 2                     | 6.67                   |
| 13-14                                 | 2                        | 3         | 0        | 5                | 16.67       | 7                     | 23.34                  |
| 15-16                                 | 1                        | 5         | 0        | 6                | 20.00       | 13                    | 43.34                  |
| 17-18                                 | 1                        | 10        | 1        | 12               | 40.00       | 25                    | 83.34                  |
| 19-20                                 | 0                        | 1         | 3        | 4                | 13.33       | 29                    | 96.67                  |
| 21-22                                 | 0                        | 0         | 1        | 1                | 3.33        | 30                    | 100.00                 |
| <b>Total</b>                          | <b>5</b>                 | <b>20</b> | <b>5</b> | <b>30</b>        | <b>100</b>  |                       |                        |

Mean = 16.5      Standard deviation = 2.46

It could be observed from the above data that 43.34 per cent of the respondents were below the mean value (16.5). Majority of the respondents (56.66 per cent) were above the mean value on their information seeking behaviour scores.



### Correlation

The correlation coefficient was computed as 0.6091858 (Table 2) which was significant. Hence the null hypothesis was rejected. This led to the conclusion that information seeking behaviour of Village Level Extension Personnel (Agricultural Demonstrators) was positively and significantly associated with their communication effectiveness.

### D. SCIENTIFIC ORIENTATION AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

The data related to the distribution of the respondents on their scientific orientation scores are presented in Table 7.

Table 7. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR SCIENTIFIC ORIENTATION.

| Scientific orientation scores. | Frequency of respondents |           |          | Total frequency. | Percentage. | Cumulative frequency. | Cumulative percentage. |
|--------------------------------|--------------------------|-----------|----------|------------------|-------------|-----------------------|------------------------|
|                                | Low CE                   | Medium CE | High CE  |                  |             |                       |                        |
| 18-21                          | 0                        | 1         | 0        | 1                | 3.33        | 1                     | 3.33                   |
| 22-25                          | 5                        | 14        | 0        | 19               | 63.34       | 20                    | 66.67                  |
| 26-29                          | 0                        | 5         | 5        | 10               | 33.33       | 30                    | 100.00                 |
| <b>Total</b>                   | <b>5</b>                 | <b>20</b> | <b>5</b> | <b>30</b>        | <b>100</b>  |                       |                        |

Mean = 25.23      Standard deviation = 2.25

The above data reveal that majority of the respondents (66.67) were below the mean value (25.23) on their scientific orientation scores. As much as 33.33 per cent of the respondents were above the mean value. 63.34 per cent of the respondent were having a score range of 22-25 on this measure.

### Correlation

The calculated correlation coefficient of 0.6870513 (Table 2) was significant and hence the null hypothesis was rejected. It was inferred that scientific orientation had positive and significant correlation with communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).

### E. JOB SATISFACTION AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

The data pertaining to the distribution of respondents according to their job satisfaction are presented in Table 8.

Table 8. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR JOB SATISFACTION.

| Job satisfaction scores. | Frequency of respondents |           |         | Total frequency. | Percentage. | Cumulative frequency. | Cumulative percentage. |
|--------------------------|--------------------------|-----------|---------|------------------|-------------|-----------------------|------------------------|
|                          | Low CE                   | Medium CE | High CE |                  |             |                       |                        |
| 16-19                    | 0                        | 5         | 0       | 5                | 16.67       | 5                     | 16.67                  |
| 20-24                    | 0                        | 2         | 0       | 2                | 6.67        | 7                     | 23.34                  |
| 25-29                    | 0                        | 5         | 1       | 6                | 20.00       | 13                    | 43.34                  |
| 30-34                    | 4                        | 2         | 1       | 7                | 23.33       | 20                    | 66.67                  |
| 35-39                    | 1                        | 4         | 1       | 6                | 20.00       | 26                    | 86.67                  |
| 40-44                    | 0                        | 2         | 2       | 4                | 13.33       | 30                    | 100.00                 |
| <b>Total:</b>            | 5                        | 20        | 5       | 30               | 100         |                       |                        |

Mean = 29.73                      Standard deviation = 8.266

It is evident from Table 8 that 43.34 per cent of the respondents had a score below the mean value (29.73). Majority of the respondents were above the mean value on their job satisfaction scores. The data regarding the satisfaction and dis-satisfaction of Agricultural Demonstrators on different aspects of the job satisfaction are furnished in Table 9.

Table 9. JOB SATISFACTION OF VILLAGE LEVEL EXTENSION PERSONNEL (AGRICULTURAL DEMONSTRATORS)

| Sl. No. | Items                                                              | Dis-satis-fied. | Percen-tage. | Satis-fied. | Percen-tage. | Neu-tral | Per-cent-age. |
|---------|--------------------------------------------------------------------|-----------------|--------------|-------------|--------------|----------|---------------|
| 1.      | Authority to do the job.                                           | 12              | 40           | 16          | 53.33        | 2        | 6.67          |
| 2.      | Present position compared to similar position elsewhere.           | 25              | 83.33        | 4           | 13.34        | 1        | 3.33          |
| 3.      | Progress in achieving goals.                                       | 17              | 56.67        | 11          | 36.66        | 2        | 6.67          |
| 4.      | Recognition given to the work.                                     | 4               | 13.33        | 25          | 83.33        | 1        | 3.33          |
| 5.      | Supervisors                                                        | 6               | 20           | 23          | 76.67        | 1        | 3.33          |
| 6.      | Professional and clerical staff.                                   | 7               | 23.33        | 22          | 73.34        | 1        | 3.33          |
| 7.      | Present salary                                                     | 19              | 63.33        | 11          | 36.67        | 0        | 0             |
| 8.      | Present position and career expectations.                          | 13              | 43.33        | 14          | 46.67        | 3        | 10.00         |
| 9.      | Satisfaction from the job compared to the time and energy devoted. | 14              | 46.67        | 16          | 83.33        | 0        | 0             |
| 10.     | Present position and expectations at the time of joining duty.     | 17              | 56.67        | 12          | 40.00        | 1        | 3.33          |

Data presented in Table 9 reveal that majority of the respondents were dissatisfied with their present position compared to their counterparts in other organizations, progress in achieving goals, present salary and present position and expectations at the time of joining duty. Majority of the respondents were satisfied with the authority given to do the work, recognition given to the work, their supervisors, professional and clerical staff and satisfaction derived from the job compared to the time and energy devoted. 46.67 per cent of the respondents were satisfied with their present position and career expectations while 43.33 per cent were dissatisfied. The respondents rated their greatest dissatisfaction (83.33 per cent) on their present position compared to similar positions elsewhere.

#### Correlation

The computed correlation coefficient of 0.19137 (Table 2) was not significant. So the null hypothesis was accepted. It was concluded that there was no significant relationship between job satisfaction and communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).

F. KNOWLEDGE OF SCIENTIFIC AGRICULTURE AND COMMUNICATION  
EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL.

The distribution of Village Level Extension Personnel (Agricultural Demonstrators) according to their knowledge of scientific agriculture is presented in Table 10.

Table 10. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR KNOWLEDGE OF SCIENTIFIC AGRICULTURE

| Know-<br>ledge<br>scores. | Frequency of<br>respondents |              |            | Total<br>freq-<br>uency | Per-<br>cent-<br>age. | Cumula-<br>tive<br>freque-<br>ncy. | Cumula-<br>tive<br>percen-<br>tage. |
|---------------------------|-----------------------------|--------------|------------|-------------------------|-----------------------|------------------------------------|-------------------------------------|
|                           | Low<br>CE                   | Medium<br>CE | High<br>CE |                         |                       |                                    |                                     |
| 10-11                     | 2                           | 0            | 0          | 2                       | 6.67                  | 2                                  | 6.67                                |
| 12-13                     | 0                           | 0            | 0          | 0                       | 0                     | 2                                  | 6.67                                |
| 14-15                     | 0                           | 1            | 0          | 1                       | 3.33                  | 3                                  | 10.00                               |
| 16-17                     | 2                           | 9            | 0          | 11                      | 36.67                 | 14                                 | 46.67                               |
| 18-19                     | 1                           | 10           | 5          | 16                      | 53.33                 | 30                                 | 100.00                              |
| Total                     | 5                           | 10           | 5          | 30                      | 100                   |                                    |                                     |

Mean = 17.13

Standard deviation = 2.10

The data presented in Table 10 show that 46.67 per cent of the respondents had knowledge scores below the mean (17.13). Majority of the respondents (53.33 percent)

obtained a score of 18-19 on this measure. It could be observed that majority of the respondents were high in their knowledge of scientific agriculture.

### Correlation

The calculated correlation coefficient was 0.521153 (Table 2) which was significant at 0.05 level. Hence the null hypothesis was rejected. It was inferred that the respondents' knowledge of scientific agriculture was positively and significantly related to their communication effectiveness.

### G. CONCEPT OF COMMUNICATION AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

Data related to the distribution of respondents according to their concept of communication are presented in Table 11.

Table 11. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR CONCEPT OF COMMUNICATION

| Concept of communication score. | Frequency of respondents |           |         | Total frequency. | Percentage. | Cumulative frequency. | Cumulative percentage. |
|---------------------------------|--------------------------|-----------|---------|------------------|-------------|-----------------------|------------------------|
|                                 | Low CE                   | Medium CE | High CE |                  |             |                       |                        |
| 26-28                           | 3                        | 4         | 0       | 7                | 23.33       | 7                     | 23.33                  |
| 29-31                           | 2                        | 4         | 0       | 6                | 20.00       | 13                    | 43.33                  |
| 32-34                           | 0                        | 7         | 2       | 9                | 30.00       | 22                    | 73.33                  |
| 35-37                           | 0                        | 4         | 2       | 6                | 20.00       | 28                    | 93.33                  |
| 38-40                           | 0                        | 1         | 1       | 2                | 6.67        | 30                    | 100.00                 |
| Total:                          | 5                        | 20        | 5       | 30               | 100.00      |                       |                        |

Mean = 32.0

Standard deviation = 3.32

It could be observed from Table 11 that majority of the respondents (56.67 per cent) had concept of communication scores equivalent to or above the mean value (32). Over 43 per cent of the respondents obtained a score below the mean. It is evident from the above data that majority of the respondents were high on their concept of communication scores.

#### Correlation

The correlation coefficient in this regard worked out to 0.7218294 (Table 2) which was significant. Therefore, the null hypothesis was rejected. It was concluded that concept of communication was positively and significantly correlated with the communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).

#### H. SELF CONFIDENCE AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

Data pertaining to the distribution of respondents according to their self confidence scores are furnished in Table 12.

Data in Table 12 show that 50 per cent of the respondents had self confidence scores above the mean (30),



Table 12. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR SELF CONFIDENCE SCORES.

| Self confidence scores. | Frequency of respondents |           |          | Total frequency | Total percentage. | Cumulative frequency. | Cumulative percentage. |
|-------------------------|--------------------------|-----------|----------|-----------------|-------------------|-----------------------|------------------------|
|                         | Low CE                   | Medium CE | High CE  |                 |                   |                       |                        |
| 19-21                   | 0                        | 1         | 0        | 1               | 3.33              | 1                     | 3.33                   |
| 22-24                   | 0                        | 2         | 0        | 2               | 6.67              | 3                     | 10.00                  |
| 25-27                   | 3                        | 2         | 0        | 5               | 16.67             | 8                     | 26.67                  |
| 28-30                   | 2                        | 4         | 1        | 7               | 23.33             | 15                    | 50.00                  |
| 31-33                   | 0                        | 8         | 0        | 8               | 26.67             | 23                    | 76.67                  |
| 34-36                   | 0                        | 3         | 3        | 6               | 20.00             | 29                    | 96.67                  |
| 37-39                   | 0                        | 0         | 1        | 1               | 3.33              | 30                    | 100.00                 |
| <b>Total</b>            | <b>5</b>                 | <b>20</b> | <b>5</b> | <b>30</b>       | <b>100</b>        |                       |                        |

Mean = 30.0

Standard deviation = 4.22

while 50 per cent had a score range equivalent to and below mean. It was observed that 3.33 per cent of the respondents had self confidence score equivalent to the mean.

### Correlation

The correlation coefficient was calculated as 0.527883 (Table 2) which was significant. Hence the null

hypothesis was rejected and the conclusion drawn was that there was positive and significant correlation between self confidence and communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).

I. SELF CONCEPT AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

Distribution of the respondent according to their self concept is given in Table 13.

Table 13. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR SELF CONCEPT.

| Self concept scores | Frequency of respondents |           |         | Total frequency | Percentage. | Cumulative frequency | Cumulative percentage. |
|---------------------|--------------------------|-----------|---------|-----------------|-------------|----------------------|------------------------|
|                     | Low CE                   | Medium CE | High CE |                 |             |                      |                        |
| 15-18               | 0                        | 1         | 0       | 1               | 3.33        | 1                    | 3.33                   |
| 19-23               | 0                        | 1         | 0       | 1               | 3.33        | 2                    | 6.66                   |
| 24-27               | 2                        | 2         | 0       | 4               | 13.34       | 6                    | 20.00                  |
| 28-31               | 3                        | 7         | 0       | 10              | 33.34       | 16                   | 53.34                  |
| 32-35               | 0                        | 5         | 2       | 7               | 23.33       | 23                   | 76.67                  |
| 36-40               | 0                        | 4         | 3       | 7               | 23.33       | 30                   | 100.00                 |
| Total               | 5                        | 20        | 5       | 30              | 100         |                      |                        |

Mean = 81

Standard deviation = 4.96

A perusal of the above data reveal that 53.34 per cent of the respondents were below the mean value of self concept scores (31). It was observed that as much as 46.66 per cent of the respondents were above the mean value and 3.33 per cent of the respondents were at the mean value.

### Correlation

The computed correlation coefficient of 0.521131 was significant (Table 2) and hence the null hypothesis was rejected. It was inferred that self concept had positive and significant correlation with communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).

### J. JOB COMMITMENT AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

Data regarding the distribution of respondents according to their job commitment are presented in Table 14.

Table 14. DISTRIBUTION OF RESPONDENTS ACCORDING TO JOB COMMITMENT

| Job Commitment score. | Frequency of respondents |           |         | Total frequency | Percentage. | Cumulative frequency | Cumulative percentage. |
|-----------------------|--------------------------|-----------|---------|-----------------|-------------|----------------------|------------------------|
|                       | Low CE                   | Medium CE | High CE |                 |             |                      |                        |
| 25-27                 | 2                        | 1         | 0       | 3               | 10.00       | 3                    | 10.00                  |
| 28-30                 | 2                        | 10        | 0       | 12              | 40.00       | 15                   | 50.00                  |
| 31-33                 | 1                        | 6         | 1       | 8               | 26.67       | 23                   | 76.67                  |
| 34-36                 | 0                        | 3         | 2       | 5               | 16.66       | 28                   | 93.33                  |
| 37-39                 | 0                        | 0         | 2       | 2               | 6.67        | 30                   | 100.00                 |
| Total                 | 5                        | 20        | 5       | 30              | 100.        |                      |                        |

Mean = 31

Standard deviation = 3.35

It is evident from Table 14 that 50 per cent of the respondents had job commitment scores below the mean value (31) and 50 per cent had job commitment scores at and above the mean value.

### Correlation

The correlation coefficient worked out to 0.71994 and was found significant. So the null hypothesis was rejected. It was concluded that there was positive and significant correlation between job commitment and communication effectiveness of Village Level Extension Personnel

(Agricultural Demonstrators).

K. ATTITUDE TOWARDS T and V SYSTEM AND COMMUNICATION  
EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

The data related to the distribution of respondents according to their attitude towards T and V system are presented in Table 15.

Table 15. DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR ATTITUDE TOWARDS T and V SYSTEM.

| Job<br>Commit-<br>ment<br>score. | Frequency of<br>respondents |              |            | Total<br>fre-<br>quency | Percen-<br>tage | Cumula-<br>tive<br>fre-<br>quency | Cumula-<br>tive<br>percen-<br>tage. |
|----------------------------------|-----------------------------|--------------|------------|-------------------------|-----------------|-----------------------------------|-------------------------------------|
|                                  | Low<br>CE                   | Medium<br>CE | High<br>CE |                         |                 |                                   |                                     |
| 20-23                            | 1                           | 0            | 0          | 1                       | 3.33            | 1                                 | 3.33                                |
| 24-27                            | 0                           | 2            | 1          | 3                       | 10.00           | 4                                 | 13.33                               |
| 28-31                            | 2                           | 5            | 1          | 8                       | 26.67           | 12                                | 40.00                               |
| 32-35                            | 2                           | 10           | 3          | 15                      | 50.00           | 27                                | 90.00                               |
| 36-39                            | 0                           | 3            | 0          | 3                       | 10.00           | 30                                | 100.00                              |
| Total                            | 5                           | 20           | 5          | 30                      | 100             |                                   |                                     |

Mean = 31.6                      Standard deviation = 3.83

Table 15 reveals that 60 per cent of the respondents had attitude scores above the mean value (31.6). As much as

40 per cent of the respondents had scores below the mean value. Majority of the Agricultural Demonstrators had attitude scores above the mean.

### Correlation

The calculated correlation coefficient of 0.3553356 was not significant. Hence the null hypothesis was accepted leading to the conclusion that there was no significant relationship between attitude towards T and V system and communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).

### 3. INTERCORRELATIONS OF INDEPENDANT VARIABLES

Intercorrelations of independant variables were computed to test the interrelationships between these variable. Table 16 shows the correlation values.

It is evident from Table 16 that attitude of the respondents towards farmers was positively and significantly correlated with information seeking behaviour, scientific orientation, concept of communication, self confidence, self concept and job commitment. Information seeking behaviour had positive and significant correlations

Table 16. INTERCORRELATION OF INDEPENDANT VARIABLES

|                 | X <sub>1</sub> | X <sub>2</sub> | X <sub>3</sub> | X <sub>4</sub> | X <sub>5</sub> | X <sub>6</sub> | X <sub>7</sub> | X <sub>8</sub> | X <sub>9</sub> | X <sub>10</sub> | X <sub>11</sub> |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| X <sub>1</sub>  | 1              | .2696          | .38*           | .4508*         | .3063          | .3175          | .4665*         | .3885*         | .3647*         | .5105*          | .2892           |
| X <sub>2</sub>  |                | 1              | .2466          | .1149          | .00622         | .3145          | .3009          | .3561          | .2789          | .2145           | -.00554         |
| X <sub>3</sub>  |                |                | 1              | .2986          | .1885          | .4305*         | .2509          | .4047*         | .4110*         | .8969*          | .2862           |
| X <sub>4</sub>  |                |                |                | 1              | .3570          | .3029          | .6646*         | .3834*         | .4567*         | .6676*          | .2198           |
| X <sub>5</sub>  |                |                |                |                | 1              | .0307          | .02946         | .0411          | .1773          | .2356           | .0839           |
| X <sub>6</sub>  |                |                |                |                |                | 1              | .4894*         | .4270*         | .3102          | .5183*          | .4145*          |
| X <sub>7</sub>  |                |                |                |                |                |                | 1              | .5780*         | .4593*         | .7316*          | .4538*          |
| X <sub>8</sub>  |                |                |                |                |                |                |                | 1              | .7324*         | .7792*          | .2287           |
| X <sub>9</sub>  |                |                |                |                |                |                |                |                | 1              | .5606*          | .1083           |
| X <sub>10</sub> |                |                |                |                |                |                |                |                |                | 1               | .4151*          |
| X <sub>11</sub> |                |                |                |                |                |                |                |                |                |                 | 1               |

X<sub>1</sub> = Attitude towards farmers

X<sub>2</sub> = Cosmopoliteness

X<sub>3</sub> = Information seeking behaviour

X<sub>4</sub> = Scientific orientation

X<sub>5</sub> = Job satisfaction

X<sub>6</sub> = Knowledge of scientific  
Agriculture.

X<sub>7</sub> = Concept of communication

X<sub>8</sub> = Self confidence

X<sub>9</sub> = Self concept

X<sub>10</sub> = Job commitment

X<sub>11</sub> = Attitude towards T&V system

\*Significant at .05 level.

with knowledge of scientific agriculture, self confidence, self concept and job commitment. Scientific orientation was positively and significantly related with concept of communication, self confidence, self concept and job commitment. Knowledge of scientific agriculture was positively and significantly correlated with self confidence, concept of communication, job commitment and attitude towards T and V system. Concept of communication had positive and significant correlations with self confidence, self concept, job commitment and attitude towards T and V system. Self confidence had positive and significant correlations with self concept and job commitment. Self concept and job commitment were positively and significantly correlated with job commitment and attitude towards T and V system respectively.

#### 4. RESULTS OF PATHANALYSIS

Pathanalysis was worked out to know the direct and indirect effects of the various factors on communication effectiveness and the extent of influence of these factors on communication effectiveness. The following variables selected in this study were included for path analysis.

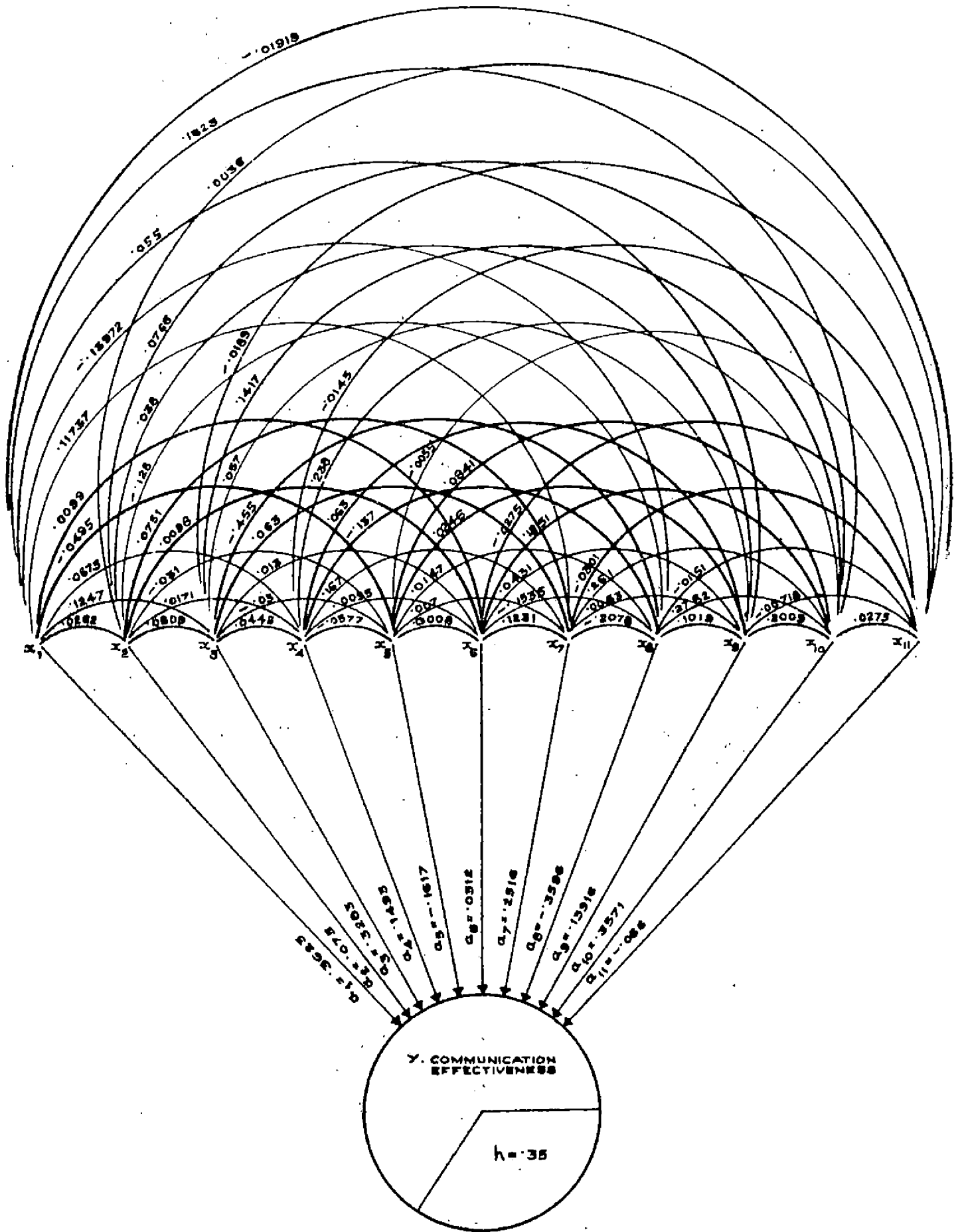


|                 |   |                                                            |
|-----------------|---|------------------------------------------------------------|
| Y               | = | Communication effectiveness.                               |
| X <sub>1</sub>  | = | Attitude towards farmers.                                  |
| X <sub>2</sub>  | = | Cosmopolitaness.                                           |
| X <sub>3</sub>  | = | Information seeking behaviour.                             |
| X <sub>4</sub>  | = | Scientific orientation.                                    |
| X <sub>5</sub>  | = | Job satisfaction.                                          |
| X <sub>6</sub>  | = | Knowledge of Scientific agriculture.                       |
| X <sub>7</sub>  | = | Concept of communication.                                  |
| X <sub>8</sub>  | = | Self confidence.                                           |
| X <sub>9</sub>  | = | Self concept                                               |
| X <sub>10</sub> | = | Job commitment                                             |
| X <sub>11</sub> | = | Attitude towards T and V system of agricultural extension. |

The data pertaining to the results of path analysis are presented in Table 17.

A perusal of Table 17 indicates that attitude towards farmers had maximum direct effect on the communication effectiveness followed by job commitment, information seeking behaviour, concept of communication, scientific orientation, self concept cosmopolitaness and knowledge of scientific agriculture. The direct effects of self

FIG. 4. PATH ANALYSIS STUDY IN COMMUNICATION EFFECTIVENESS.



confidence, job satisfaction and attitude towards T and V system were negative indicating that indirect effects might be the reason for the correlation of these factors with communication effectiveness.

The direct effect of attitude towards farmers on communication effectiveness was intensified by its indirect effects via job commitment, information seeking behaviour, concept of communication, scientific orientation, self concept and cosmopolitaness but slightly reduced by indirect negative effects via self confidence, job satisfaction and attitude towards T and V system.

The direct effect of job commitment on communication effectiveness was intensified by its indirect positive effects through attitude towards farmers, concept of communication, information seeking behaviour, scientific orientation, self concept, cosmopolitaness and knowledge of scientific agriculture, but diminished little by negative indirect effects through self confidence and job satisfaction.

The direct effect of information seeking behaviour on communication effectiveness was increased by its indirect effects through job commitment, attitude towards farmers, concept of communication, self concept, scientific

orientation, cosmopolitanness and knowledge of scientific agriculture but reduced by its negative indirect effects through self confidence, job satisfaction and attitude towards T and V system.

The direct effects of concept of communication on communication effectiveness was intensified by its positive in direct effects through job commitment, attitude towards farmers, scientific orientation, information seeking behaviour, cosmopolitanness, knowledge of scientific agriculture and self concept. The indirect negative effects were via self confidence, attitude towards T and V system and job satisfaction. The h value in the case was found to be 0.3538.

5. PROBLEMS FACED BY VILLAGE LEVEL EXTENSION PERSONNEL IN THEIR COMMUNICATION EFFECTIVENESS AS PERCEIVED BY THEM

Problems perceived by the Village Level Extension Personnel (Agricultural Demonstrators) as important in their communication effectiveness are presented in Table 18.

The data presented in Table 18 reveals that the most important problem perceived by the Agricultural Demonstrators was the lack of office facilities to meet the farmers, out side the scheduled regular visits. As much as 96.67 per cent of the respondents identified this as the most important problem. Ninety per cent of the respondents

Table 18. PROBLEMS FACED BY VILLAGE LEVEL EXTENSION PERSONNEL IN THEIR COMMUNICATION EFFECTIVENESS.

| Sl. No. | Problems                                                           | Response pattern in percentage. |           |                  | Total score | Rank |
|---------|--------------------------------------------------------------------|---------------------------------|-----------|------------------|-------------|------|
|         |                                                                    | Most important                  | Important | Least important. |             |      |
| 1.      | Lack of office facilities                                          | 96.67                           | -         | 3.33             | 87          | 1    |
| 2.      | Lack of facilities to supply inputs.                               | 90.00                           | 3.33      | 6.67             | 85          | 2    |
| 3.      | Lack of transport facilities                                       | 70.00                           | 13.33     | 16.67            | 76          | 3    |
| 4.      | Lack of communication facilities.                                  | 63.34                           | 23.33     | 13.33            | 75          | 4    |
| 5.      | Large and unwieldy area of operation.                              | 60.00                           | 23.33     | 16.67            | 73          | 5    |
| 6.      | Lack of housing facilities in the working unit.                    | 63.34                           | 13.33     | 23.33            | 72          | 6    |
| 7.      | Heavy work load.                                                   | 56.67                           | 20.00     | 23.33            | 70          | 7    |
| 8.      | Lack of training in communication.                                 | 46.67                           | 10.00     | 43.33            | 61          | 8    |
| 9.      | Total dependance on superior officers for information.             | 30.00                           | 16.67     | 53.33            | 53          | 9    |
| 10.     | Lack of timely instructions and information from superior officers | 10.00                           | 10.00     | 80.00            | 38          | 10   |

felt that lack of facilities to supply seed, fertilizers and other inputs was the most important problem that stood in the way of effective communication. Other most important problems were lack of transport facilities followed by lack of communication facilities, large and unwieldy area of operation, lack of housing facilities in the working unit, heavy workload and lack of training in communication, in that order. Majority of the respondents did not consider the lack of timely instructions and information from the superior officers and total dependance on superior officers for information as most important problems adversely affecting their communication effectiveness.

6. SUGGESTIONS MADE BY VILLAGE LEVEL EXTENSION PERSONNEL FOR MAKING THEIR COMMUNICATION EFFECTIVE

The respondents had put forward many suggestions for improving their communication effectiveness. The most important suggestions given by them are presented in Table 19.

Table 19. SUGGESTIONS PUT FORWARD BY VILLAGE LEVEL EXTENSION PERSONNEL FOR MAKING THEIR COMMUNICATION EFFECTIVE

| Sl. No. | Suggestions                                             | Number of respondents | Percentage of respondents |
|---------|---------------------------------------------------------|-----------------------|---------------------------|
| 1.      | Strengthening of present input supply facilities        | 20                    | 66.67                     |
| 2.      | Providing financial aid and other incentive to farmers. | 9                     | 30.00                     |
| 3.      | Providing office facilities                             | 8                     | 26.67                     |
| 4.      | Reducing the area of operation.                         | 4                     | 13.33                     |
| 5.      | Distributing printed materials                          | 4                     | 13.33                     |
| 6.      | Starting additional demonstration plots.                | 3                     | 10.00                     |

As much as 66.67 per cent of the respondents suggested that the present input supply facilities should be improved to increase their communication effectiveness. Thirty per cent of the respondents suggested that farmers should be provided with some kind of financial aid and other incentives. Other important suggestions were to reduce the area of operation followed by distribution of printed materials and starting additional demonstration plots.

## DISCUSSION



## CHAPTER V

### DISCUSSION

Results of the study are interpreted and discussed in this chapter in the following sequence.

- (1) Communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators)
- (2) Factors related to the communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).
- (3) Inter correlation between the Social and Psychological characteristics of the Village Level Extension Personnel. (Agricultural Demonstrators).
- (4) Results of Path analysis.
- (5) Problems faced by Village Level Extension Personnel (Agricultural Demonstrators) in making their communication effective.
- (6) Suggestions made by to Village Level Extension Personnel (Agricultural Demonstrators) for making their communication effective.

1. COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL.

Communication effectiveness of Village Level Extension Personnel in this study was measured by the ratings of the farmers about the communication effectiveness of Agricultural Demonstrators on the effective dimensions of the three important methods of communication viz, personal contact, group discussion and method demonstration. Those agricultural demonstrators who followed more frequently the important effectiveness characteristics of these three methods of communication secured relatively higher scores on their communication effectiveness. A perusal of Table I reveals that as much as 16.67 percent of the Agricultural Demonstrators were low, 66.66 percent were medium and 16.67 percent were high in their communication effectiveness. Majority of the respondents belonged to the medium level of communication effectiveness according to the ratings of the farmers.

It is obvious from the results that those Agricultural Demonstrators who were classified as highly effective in their communication secured higher scores on the effectiveness principles of the three selected communication methods viz, personal contact, group discussion and method demonstration. Those Agricultural Demonstrators

who were classified as medium or low in their communication effectiveness secured only relatively lower scores on the effectiveness principles of three methods of communication. Compared to the medium and low effective communicators, the highly effective Agricultural Demonstrators followed more frequently the effectiveness characteristics of personal contact such as speaking in simple and understandable language, illustrating points with examples, using local language, listening patiently to questions, following correct sequence in speech, giving timely information, clarifying doubts, writing down problems to be submitted to the higher officers, summarising at the end of the talk etc. The low effective Agricultural Demonstrators were not careful enough to follow all these characteristics to make their communication effective. The highly effective Agricultural Demonstrators were ready to demonstrate important aspects, wherever necessary.

But, it was observed that both highly effective and low effective communicators performed very poorly in effectiveness characteristics such as use of audio-visual aids and distribution of pamphlets and other printed materials during the personal contact. The Agricultural Demonstrators in the study area very rarely supplemented their

spoken word with printed materials or audio-visual aids during personal contact.

As in the case of personal contact, in the case of group discussion also the highly effective communicators followed the effectiveness principles of group discussion more frequently than medium and low effective communicators. The principles such as initiating and giving an interesting start to the discussion, supplying adequate information for the discussion, guiding the discussion along the points of discussion, giving equal chances to all members in group discussion, clarifying vague statements, giving occasional summaries and other principles were more effectively and frequently followed by highly effective communicators compared to low effective communicators. Here also, the use of audio-visual aids and distribution of pamphlets and other printed materials during discussion was very poor in the case of both highly effective and low effective communicators.

The highly effective communicators followed the essential steps in conducting a method demonstration while it was observed that the less effective communicators did not follow all the essential steps in conducting a method demonstration. This observation is in line with the finding of Salvi and Dudhani (1967) who found that majority of

the effective "Gramsevaks" had followed the essential steps in conducting a method demonstration, while in effective "Gramsevaks" had not followed these steps.

All the Agricultural Demonstrators (high, medium and low) collected feed back information such as the cultivation problems of the individual farmers, problems of the locality etc., and gave solutions during their regular visits. A glance at Table 11 reveals that the highly effective communicators obtained higher scores on concept of communication compared to the medium and low effective communicators. The highly effective communicators had clear conception about the communication process and hence they were able to follow the effectiveness principles of the selected three methods of communication. As Francois (1977) stated, the goal that is realised in any successful communication is shared meaning. Those communicators who followed the effectiveness principles were able to transfer the meaning of the message accurately to the receivers and they were rated as highly effective by the recipients of the message. In the light of the above discussion it can be concluded that clear understanding of the concepts of communication and faithful implementation of communication principles are prerequisites for effective communication.

2. FACTORS RELATED TO THE COMMUNICATION EFFECTIVENESS  
OF VILLAGE LEVEL EXTENSION PERSONNEL

Out of the 11 independent variables studied, eight were found to have positive and significant correlations with communication effectiveness of Agricultural Demonstrators.

These variables were:

- A) Attitude towards receivers.
- B) Information seeking behaviour
- C) Scientific orientation
- D) Knowledge of Scientific Agriculture.
- E) Concept of communication
- F) Self confidence
- G) Self concept
- H) Job commitment.

Three other variables such as cosmopolitaness, job satisfaction and attitude towards programme did not exhibit significant relationship with communication effectiveness.

A. ATTITUDE TOWARDS FARMERS AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL.

The results obtained in the study point out positive and significant relationship between attitude towards farmers and communication effectiveness of Agricultural Demonstrators. This finding is in line with the observations of Berlo (1960), Khedre and Sahay (1972), Singh (1973) Mehrabian and Reed (1973), Reddy (1976), Sinha et al (1976) Pandyaraj (1978) and Majumdar (1981). But the finding is contradictory to the results obtained by Bhatia and Sandhu (1975) who found no significant relationship between attitude towards villagers and effectiveness of Village Level Workers.

An examination of the data presented in Table 3 brings to focuss that majority of the Agricultural Demonstrators had high attitude scores. As Secord and Backman (1973) pointed out positive affect towards others is likely to be associated with high amount of communication. They pointed out that friends communicate more with each other. Agricultural Demonstrators who had more positive affect towards farmers might be interested in their well being. Such persons might be easily creating rapport with their receivers. They might be undertaking a number of activities for the up lift of their clientele. Thus

favourable attitude would result in higher levels of communication. As the degree of favourableness of Agricultural Demonstrator's attitude towards farmers increased, their effectiveness of communication also increased.

The above findings and explanation justify the rejection of the null hypothesis that there would be no significant relationship between attitude towards farmers and communication effectiveness of Agricultural Demonstrators.

B. COSMOPOLITENESS AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

In this study cosmopolitaness did not emerge as a factor having significant association with communication effectiveness of Agricultural Demonstrators. This finding does not agree with the results obtained by previous workers such as Murthy (1972), Singh (1973), Murthy and Singh (1973), Singh and Ambastha (1975), Vijayaraghavan and Subramonyam (1981) who found significant correlation between cosmopolitaness and communication behaviour of farmers.

A critical observation of the data presented in Table 4 reveals that there was not much variation in the distribution of Agricultural Demonstrators according to



their cosmopolitanness. Eventhough there was variation in their communication effectiveness, corresponding variation was not obtained in their cosmopolitanness scores. This might be one reason for not obtaining significant relationship between cosmopolitanness and communication effectiveness.

The results cited previously in this regard were mainly concerned with the relationship between cosmopolitanness and communication behaviour of farmers. In this study also the relationship between cosmopolitanness and communication effectiveness was measured. It is quite natural to believe that a farmer's contact with external world would increase his contact with various communication sources and this would in turn influence his communication behaviour. But there is no reason to believe that an Agricultural Demonstrator's contact with outside world increases his contact with various communication sources as he was getting most of the information from agricultural trainings, news paper, guides and radio farm broadcast. In this study cosmopolitanness was measured on the four dimensions of frequency of visit to the nearest town, purpose of visit, membership in organizations outside the village and frequency of attending meetings. A perusal of Table 5 focuss that the Agricultural Demonstrators were getting most of their information from agricultural trainings, news papers, agricultural guides and radio farm

broad cast, Hence it is obvious that an Agricultural Demonstrator's communication sources contact is not influenced by his cosmopolitaness behaviour.

Moreover, in the T and V system of agricultural extension, the Agricultural Demonstrator has to follow a fixed schedule for regular visits and his chances of getting contact with out side world is very much limited.

In the light of the above discussion, the null hypothesis stating that there would be no significant relationship between cosmopolitaness and communication effectiveness of Village Level Extension Personnel was accepted.

C. INFORMATION SEEKING BEHAVIOUR AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL.

A close examination of Table 5 reveals the important information sources used by the Agricultural Demonstrators. It is evident that agricultural trainings of the Subject Matter Specialists were the most important source from where the Agricultural Demonstrator was seeking most of the information, followed by News paper, agricultural guides and radio farm broad cast. These four information sources were the most important sources available to an Agricultural Demonstrator in the study

area. Agricultural trainings conducted by Subject Matter Specialists of the Agricultural Department were the most important information source available to an Agricultural Demonstrator under T and V system. During these trainings messages to be communicated to the farmers in the succeeding fortnight are discussed. Agricultural columns of news papers, Agricultural guides and radio farm broadcasts were the other sources from where the Agricultural Demonstrators were most frequently seeking information regarding farm practices.

The results obtained in this study revealed positive and significant relationship between information seeking behaviour and communication effectiveness of Agricultural Extension Personnel (Agricultural Demonstrators). This observation is in conformity with the findings of Bhatia and Sandhu (1975) and Pandyaraj (1978).

An examination of Table 6 demonstrates that majority of the Village Level Extension Personnel (Agricultural Demonstrators) were having information seeking behaviour scores above the mean value. It can be argued that successful communication needs complete and comprehensive information which requires frequent contact with various information sources. In this study, positive and significant correlation was obtained between information seeking

behaviour and knowledge of scientific agriculture. Hence the contacts with various communication sources of a person would increase his knowledge which in turn would affect his communication effectiveness.

Thus it is obvious that Agricultural Demonstrators with high level of information seeking behaviour would have a proportionately higher level of communication effectiveness.

These explanations substantiate the rejection of null hypothesis that there would be no significant positive relationship between information seeking behaviour and communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators.)

D. SCIENTIFIC ORIENTATION AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

Results obtained in this study revealed positive and significant relationship between scientific orientation and communication effectiveness of Agricultural Demonstrators. It would be inferred that as scientific orientation of an individual increases, his effectiveness of communication also increases.

The studies reported by Murthy (1972), Singh (1973), Sandhu and Dharbarilal (1976) and Vijayaraghavan and Subramonyam (1981) support the above finding. A Village Level Agricultural Demonstrator has to communicate messages which are mostly scientific innovations. Effective communication of these innovations requires a favourable orientation of the individual towards scientific aspects. It is difficult for a tradition bound person to communicate scientific information as he is committed himself to traditional norms and standards. Hence, the more scientific an Agricultural Demonstrator is, the more will be his communication effectiveness.

In the light of the above discussion the null hypothesis set for the study that there would be no significant relationship between scientific orientation and communication effectiveness of Village Level Extension Personnel is rejected.

E. JOB SATISFACTION AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

Job satisfaction was another variable in this study, which did not exhibit significant positive relationship with communication effectiveness. This finding is contradictory to the results obtained by Sinha et al (1976),

Sanoria (1977) and Dhillon and Sandhu (1977). However, Sinha et al (1976) found significant relationship between Job satisfaction and communication effectiveness of block and district level officials only in intensive areas of the study and in other areas they found no significant relationship.

The original assumption was that as the job satisfaction of the Village Level Extension Personnel increased, there would be corresponding increase in their communication effectiveness also. The finding of the study did not agree with this assumption. Under the T and V system, each Agricultural Demonstrator has to strictly adhere to the fixed schedule for regular farm visits. They have to meet the farmers regularly irrespective of their job satisfaction. Because they are meeting each contact farmer once in a fortnight, they have to undertake communication activities regularly, other-wise it will affect their further visits and relationship with the farmer. Hence irrespective of their job satisfaction, the Agricultural Demonstrators have to communicate with the contact farmers. This might be the reason why a significant relationship between job satisfaction and communication effectiveness was not obtained.

Further, a close examination of Table 8 reveals that all the Agricultural Demonstrators with low communication effectiveness and 80 percent of the highly effective communicators obtained job satisfaction scores above the mean value. Almost all respondents had high job satisfaction scores irrespective of their level of communication effectiveness. This might be another reason for not obtaining a significant relationship between job satisfaction and communication effectiveness.

In view of the above explanation, the null hypothesis that there would be no significant association between job satisfaction and communication effectiveness was accepted.

F. KNOWLEDGE OF SCIENTIFIC AGRICULTURE AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

In this study, knowledge of scientific agriculture showed significant positive correlation with communication effectiveness of Agricultural Demonstrators. This result is in conformity with the opinion of Berlo (1960) and the findings of Khedre and Sahay (1972), Chakravarthy and Singh (1974) and Pathak and Majumdar (1981). But the finding is contradictory to the results obtained by Pandeyaraj (1978).

It is true that an Agricultural Demonstrator's level of technical knowledge would influence his communication effectiveness as he is communicating message regarding scientific agricultural practices. Berlo (1960) pointed out that one cannot communicate what one does not know. A glance at Table 10 indicates that majority of the Agricultural Demonstrators had high knowledge of scientific agriculture. Thus it is only natural that as the level of knowledge of scientific Agriculture increased, the communication effectiveness of Village Level Extension Personnel also increased.

Based on the above discussion, it was concluded that there was positive and significant relationship between knowledge of scientific agriculture and communication effectiveness of Village Level Extension Personnel. (Agricultural Demonstrators).

G. CONCEPT OF COMMUNICATION AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL.

The results obtained in the present study reveal positive and significant relationship between concept of communication and communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators). This finding is in line with the view points of Berlo (1960) and Leagans (1961). Leagans opined that communication



is limited by one's concept of communication process and the way one thinks about communication will influence its quality. Successful communication requires clear concept of the communication process. A person with clear concept of the communication process knows the various elements involved in the communication process and various principles to be followed while communicating a message to the receivers for influencing their behaviour. This knowledge about the communication process influences communication effectiveness. A perusal of Table 11 reveals that all the highly effective communicators had concept of communication scores above the mean value. This is in conformity with the findings of Pandyaraj (1978).

In the light of the above discussion the null hypothesis stating that there would be no significant relationship between concept of communication and communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators) was rejected.

4. SELF CONFIDENCE AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

Results of the present study revealed positive and significant relationship between self confidents and communication effectiveness of Village Level Agricultural

Demonstrators. This finding is in line with the results obtained by Subbhalakshmi and Singh (1974) Khare (1976) and Pandyaraj (1978).

One should have confidence in one's own abilities for the effective execution of job responsibilities. Self confidence would play an important part in making the communication more effective. As evident from Table 12, as the level of self confidence increased a person's effectiveness of communication also increases.

In view of the above facts, it was concluded that there was positive and significant relationship between self confidence and communication effectiveness.

I. SELF CONCEPT AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

The independent variable self concept also exhibited significant positive relationship with communication effectiveness of Village Level Agricultural Demonstrators. This finding agrees with the opinions of Robbins and Jones (1976) and Mc Atley (1976). Possession of favourable self concept of an individual as a communicator would increase his communication effectiveness. As Robbins and Jones (1976) felt, self concept is one of the most important controlling

factors of communication behaviour. If the individual does not have favourable self concepts, filtering of the message occurs and this would in turn affect the communication effectiveness of the communicator. A perusal of Table 13 reveals that highly effective communicators had comparatively higher self concept compared to low effective communicators.

Based on the above explanations, the null hypothesis that there would be no significant relationship between self concept and communication effectiveness of Village Level Extension Personnel was rejected.

J. JOB COMMITMENT AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL

In this study, positive and significant relationship was obtained between job commitment and communication effectiveness of Village Level Extension Personnel. This result is in line with the findings of Sanoria (1979) and Ambastha (1980). It is reasonable to believe that a person who is committed in his job may more efficiently discharge his duties and responsibilities. Data in Table 14 reveal that highly effective communicators had high job commitment compared to low effective communicators. As the job commitment of an Agricultural Demonstrator increased there was corresponding increase in communication effectiveness also.

K. ATTITUDE TOWARDS T AND V SYSTEM OF AGRICULTURAL EXTENSION AND COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL.

Yet another independent variable which did not show significant relationship with communication effectiveness in this study was attitude towards T and V system of Agricultural Extension. As this particular aspect had not been included in any of the previously reported studies it is difficult either to support or contradict this finding in the light of results of similar studies.

Fishbein (1973) stated that an individual's attitude towards an object would be related with specific behaviour only if his attitude towards the object is correlated with his attitude towards performing that specific behaviour. It might not be the attitude towards T and V system, but the attitude towards communication act that might have influenced the communication effectiveness. The results obtained in this study exhibited significant positive relationship between concept of communication and communication effectiveness. Hence it might be the concept of communication and not the attitude towards T and V system that influenced the communication effectiveness of Village Level Extension Personnel.

A close examination of the data presented in Table 15 reveals that there was not much difference in the distribution of both high and low effective communicators according to their attitude towards T and V system. This might be one reason for not obtaining significant relationship between attitude towards T and V system of Agricultural Extension and communication effectiveness of Village Level Extension Personnel.

3. INTER-CORRELATION BETWEEN SOCIAL AND PSYCHOLOGICAL CHARACTERISTICS OF THE RESPONDENTS AND THEIR COMMUNICATION EFFECTIVENESS.

Attitude towards farmers

This variable was significantly correlated with information seeking behaviour, scientific orientation, concept of communication, self confidence, self concept and job commitment. An Agricultural Demonstrator who had favourable attitude towards farmers would be more committed to his job, more scientifically oriented and he would seek more information from different information sources. Such a person would possess more self confidence also.

Information seeking behaviour

This independent variable was significantly correlated with knowledge of scientific agriculture, self confidence, self concept and job commitment. A communicator who seek more information from various sources would

have more knowledge, more self confidence and favourable self concepts and he will be more committed to his job.

#### Scientific orientation

Scientific orientation was positively and significantly related to concept of communication, self concept, self confidence and job commitment. A scientifically oriented person will have clear concept about communication process and he will have favourable self concept, more self confidence and more commitment in his job.

#### Knowledge of Scientific Agriculture

This variable was significantly correlated with concept of communication self confidence, Job commitment and attitude towards T and V system of Agricultural Extension. A person with higher levels of knowledge of scientific agriculture will have more self confidence, clear concept about communication process, favourable attitude towards T and V system and better job commitment.

#### Concept of communication

Concept of communication had positive and significant correlation with self confidence, self concept, job commitment and attitude towards T and V system. An Agricultural Demonstrator who had clear concept of the communication

process had more self confidence, favourable attitude towards T and V system, favourable self concepts as communicator, and more commitment to his job.

#### Self confidence

This variable had significant and positive correlation with self concept, job commitment, concept of communication, knowledge of scientific agriculture, scientific orientation, information seeking behaviour and attitude towards farmers. A person with high levels of self confidence will have favourable self concepts and higher job commitment.

#### Self concept

Self concept was significantly correlated with all the variables except cosmopolitaness, job satisfaction, knowledge of scientific agriculture and attitude towards T and V system.

#### Job commitment

Job commitment had significant positive correlations with all the variables except cosmopolitaness and job satisfaction.

#### Attitude towards T and V system of agricultural extension

This variable had significant correlation with job commitment, concept of communication and knowledge of

scientific agriculture. Persons with higher job commitment, concept of communication and knowledge of scientific agriculture had more favourable attitude towards T and V system of agricultural extension.

#### 4. RESULTS OF PATH ANALYSIS

A perusal of Table 17 brings out that attitude towards farmers had maximum direct effect on the communication effectiveness. The other variables which had high direct effects on communication effectiveness were job commitment, information seeking behaviour and concept of communication. The results indicate that these four variables should be considered while defining and explaining communication effectiveness of Village Level Extension Personnel. The  $R^2$  value was .353821. The total effects caused by factors other than those selected for the study was .3538.

#### 5. PROBLEMS FACED BY VILLAGE LEVEL EXTENSION PERSONNEL IN MAKING THEIR COMMUNICATION EFFECTIVE

The data presented in Table 18 bring to focus that lack of office facilities was the most important problem faced by Village Level Agricultural Demonstrators in making their communication effective. Each respondent has given



more than one problem. Hence the frequencies and percentages are not mutually exclusive. Under the T and V system of Agricultural Extension, no office facility is given to the field level workers. Because of this, they would not meet farmers outside the fixed regular farm visits. Outside this regular visits farmers have to wait till the next visit for clarifying their doubts and getting the information from Agricultural Demonstrators. This creates certain problems in the communication of Village Level Extension Personnel.

Other most important problems identified by them were: Lack of facilities to supply input, lack of transport facilities, lack of communication facilities, large and unwieldy area of operation, lack of housing facilities in the working unit and heavy work load.

T and V system emphasises the timely transfer of improved technology to the farmers. In the present system as implemented in the three districts, there was no adequate facilities to make timely supply of the required inputs to farmers. At present, input supply is carried out through the circle offices which cover usually an area of more than 5 panchayaths. More over the farmers are facing difficulty in getting the correct inputs recommended by the

Agricultural Demonstrators. Most often these problems reduce the communication of an Agricultural Demonstrator to mere advice. Majority of the Agricultural Demonstrators are staying outside their working units. Lack of transportation facilities limit the number and time of their visits in a day. Large and unwieldy area of operation also limits the quantity and effectiveness of their communication. Facilities available for communicating to the farmers are also very limited. All these problems tend to reduce the effectiveness of the communication of Village Level Extension Personnel.

Three other problems, namely lack of training in communication, total dependance on superior officers for information, lack of timely instructions and information from superior officers were of not much consequence to the Village Level Extension Personnel in making their communication effective.

6. SUGGESTIONS MADE BY VILLAGE LEVEL EXTENSION PERSONNEL FOR IMPROVING THEIR COMMUNICATION EFFECTIVENESS

Majority of the respondents suggested that the present input supply facilities should be strengthened. Present linkages of the input supply agencies with extension agency is very weak and the Agricultural Demonstrators

are finding it difficult to advice the farmers about the right and acessable agencies from where they can get the recommended inputs. The Agricultural Demonstrators opined that if the farmers were able to get the recommended inputs at the right time, their communication would be more effective.

As much as 30 per cent of the respondents felt that the farmers are reluctant to adopt the practices communicated through T and V system because it involve heavy financial commitments from the part of the farmers. Hence provision of some kind of incentives to the farmers will make their communication more effective. Other important suggestions were to provide office facilities, to reduce the area of operation, to distribute printed materials to the farmers and to start additional demonstration plots. At present there is no facilities to supplement the spoken word with printed materials or audio-visual aids. Each Agricultural Demonstrator has to work in an area of two Panchayaths which is too large for an individual. Hence the distribution of printed materials and reducing the area of operation will also improve their communication effectiveness.

# SUMMARY

## CHAPTER VI

### SUMMARY

Effective communication of available technology is the most essential step to meet the requirements of increased agricultural production in the country. Village Level Extension Personnel are the key functionary involved in the transmission of the improved agricultural technology to the farming community. Communication effectiveness of Village Level Extension Personnel is determined by a number of factors which may vary from place to place and community to community. In Kerala, no study has been conducted so far on the factors related to the communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators). Hence, this study was undertaken with the following objectives:

1. to measure the communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators),
2. to identify the factors related to the communication effectiveness of Village Level Extension Personnel, and
3. to identify the problems faced by Village Level Extension Personnel in their communication effectiveness.

Trivandrum district was randomly selected as the location for the study. All the three subdivisions viz,

Attingal, Neyyattinkara and Nedumangad in the District under the T&V system were selected for the study. Ten Agricultural Demonstrators each were randomly selected from the three sub-divisions constituting a total of 30 Agricultural Demonstrators. A total of 180 contact farmers were randomly selected from 30 Agricultural Demonstrator's working units at a proportion of 6 contact farmers to evaluate one Agricultural Demonstrator.

Communication effectiveness was the dependant variable in this study. Eleven independant variables viz, attitude towards farmers, cosmopolitaness, information seeking behaviour, scientific orientation, job satisfaction, knowledge of scientific agriculture, concept of communication, self concept, job commitment and attitude towards T&V system were selected to find out their relationship with communication effectiveness.

The data were collected by interviewing the respondents individually with the help of a structured and pretested schedule developed by the investigator for the present study. The data were subjected to various statistical analysis such as correlation analysis, inter-correlation analysis and path analysis. The salient findings of the study are summarised below:-

1. The study revealed that majority of the Village Level Extension Personnel (Agricultural Demonstrators) belonged to the medium level of communication effectiveness. As much as 16.67 percent of the Agricultural Demonstrators were low, 66.66 percent were medium and 16.67 percent were high in their communication effectiveness.
2. Out of the eleven independent variables studied, eight variables viz., attitude towards farmers, information seeking behaviour, scientific orientation, knowledge of scientific agriculture, concept of communication, self-confidence, self concept and job commitment were positively and significantly related with the communication effectiveness of Agricultural Demonstrators. Three other variables viz., cosmopolitaness, jobsatisfaction and attitude towards T and V system were not significantly correlated with communication effectiveness.
3. Agricultural Demonstrators were seeking farm information mostly from agricultural trainings followed by News paper, agricultural guides/diaries, farm broad cast, superior officers, Agricultural books, extension journals, agricultural exhibitions, discussion with colleagues, scientific journals and agricultural seminars in that order. They were seeking information least from personnel of research stations and agricultural workshops.

4. Significant positive intercorrelations were obtained between most of the independent variables.
5. Results of path analysis indicated that four independent variables, namely attitude towards farmers, job commitment, information seeking behaviour and concept of communication had maximum direct effects on communication effectiveness.
6. The problems viz, lack of office facilities, lack of facilities to supply inputs, lack of transport facilities, large and unwieldy area of operation, lack of housing facilities in the working unit and heavy workload were the most important problems identified by the Agricultural Demonstrators in making their communication effective.
7. Strengthening of the present input supply system, provision of incentives and financial aids to farmers, providing office facilities, reducing the area of operation, distributing printed materials and starting additional demonstration plots were the most important suggestions put forward by Agricultural Demonstrators in making their communication effective.

The findings of the study are useful in knowing the various factors which contribute to the communication effectiveness of Agricultural Demonstrators working as field level extension workers. The relationship established in the study between communication effectiveness, the dependant



variable and the various independent variables would serve as a guideline for defining and understanding communication effectiveness. This will help the extension programme planners to develop suitable approach for improving the communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators).

Since this study was undertaken with a limited scope, a comprehensive study covering more geographical area and more independent variables would be of more applicability. A research study covering the training requirements of Agricultural Demonstrators in communication should be carried out since majority of them belonged to the medium level of communication effectiveness. Research studies on the communication behaviour of Agricultural Demonstrators should also be carried out.

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# APPENDICES



| Respondent<br>No. | Statement |   |   |   |   |   |   |   | Scores | e |
|-------------------|-----------|---|---|---|---|---|---|---|--------|---|
|                   | 1         | 2 | 3 | 4 | 5 | 6 | 7 | 8 |        |   |
| 23                | 2         | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 16     | 0 |
| 24                | 2         | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 15     | 2 |
| 25                | 2         | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 16     | 0 |
| 26                | 2         | 2 | 2 | 2 | 0 | 1 | 0 | 2 | 11     | 4 |
| 27                | 2         | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 15     | 2 |
| 28                | 2         | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 15     | 2 |
| 29                | 2         | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 15     | 2 |
| 30                | 2         | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 16     | 0 |

P

Σe=33

|          |     |     |     |     |     |     |     |     |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|
| Agree    | .63 | .96 | .93 | .93 | .8  | .73 | .73 | .88 |
| Neutral  | .23 | .04 | .07 | .07 | .13 | .17 | .03 | .06 |
| Disagree | .14 | 0   | 0   | 0   | .07 | .01 | .24 | .06 |

APPENDIX II

Communication effectiveness of Village Level Extension  
Personnel. (For farmer respondents)

Interview Schedule

Respondent Number:

1. Name of the farmer:
2. Address:
3. Do you know Mr. . . . . . Agricultural  
Demonstrator of your area? Yes/No
4. What is the frequency for his visit to your home?  
Once in a week/Once in a fortnight/Once in a month/  
Never.
5. The Agricultural Demonstrator of your area contact you  
once in a fortnight to communicate timely informations  
on agricultural practices. Below are given few state-  
ments. Please indicate how frequently the Agricultural  
Demonstrator of your area follows these principles,  
during his personal contact.

Always      Sometimes      Never

1. Engages in friendly talk before going to the subject matter proper.
2. Follows up the problems posed earlier.
3. Introduces information in an attention getting manner.
4. Uses simple and understandable language.
5. Illustrate points with examples.
6. Stresses important points.
7. Gives complete information on the subject.
8. Uses appropriate aids to make the points clear.
9. Follows a sequence in talk.
10. Presents subject in an interesting manner.
11. Uses local terms while speaking
12. Times the message so that it gives maximum value to the farmers.
13. Listens patiently to questions.
14. Summarises at the end of the talk.

Always      Sometimes      Never

15. Collects problems to be clarified at higher levels.
16. Uses method demonstration where ever necessary.
17. Distributes printed information materials at the end.

7. Please indicate how frequently the Agricultural Demonstrator in your area follows the following principles while conducting a group discussion.

Always      Sometimes      Never

1. Initiates the discussion and gives an interesting start.
2. Supplies adequate information for discussion.
3. Guides the discussion along the points of discussion.
4. Gives equal chances to all farmers in group discussion.
5. Clarifies vague statements.
6. Gives occassional summaries.
7. Shares his own experiences and experiences of others during discussion.
8. Concludes discussion with in time.
9. Summaries at the end of the discussion.
10. Uses teaching aids to explain the new technology.

Always

Sometimes

Never

11. Uses method demonstration wherever necessary.
12. Collects problems to be submitted at higher levels.

7. Please indicate how frequency the Agricultural Demonstrator of your area keeps the following principles while conducting a method demonstration.

Always

Sometimes

Never

1. Arranges the equipments and other materials ready before the start of the demonstration.
2. Starts the demonstration in an attention getting manner.
3. Gives understandable and correct explanations of the terms.
4. Follows a logical sequence of steps.
5. Uses neat and visible models, charts etc., if needed.
6. Re-emphasises main points.
7. Presents the method in a lively and interesting manner.
8. Summarises at the end of the demonstration.
9. Encourages the audience to demonstrate the method.

Always      Sometimes      Never

10. Distributes printed materials such as leaflet, pamphlet etc. at the end of the demonstration.

0

11. Able to teach the skill to the farmer.

12. Checks whether the skill taught is adopted by the farmers or not.

8. Please indicate how frequently the Agricultural Demonstrator of your area follows the following principles.

Always      Sometimes      Never

1. Writes down the problems raised by the farmers and unsolved by the demonstrator, during the personal contact.

2. Collects samples or specimens of plants or soil related to the problem.

3. Collects the general field problems of the area during the time of group discussion.

4. Suggests the solutions for these problems during the next visit.



APPENDIX III

Factors related to the communication effectiveness of Village Level Extension Personnel. (For Agricultural Demonstrators)

Interview Schedule

Respondent No.

1. Name of the Agricultural Demonstrator:
2. Unit:
3. Circle Office:
4. Below are given some statements regarding our farmers. Give your extent of agreement/disagreement with the statements.

|                                                                                                                          | <u>Strongly agree</u> | <u>Agree</u> | <u>Un-decided</u> | <u>Dis-agree</u> | <u>Strongly disagree</u> |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------|-------------------|------------------|--------------------------|
| 1) The farmers of our State can be compared with progressive farmers of the world.                                       |                       |              |                   |                  |                          |
| 2) Even if God wants to improve the life of our farmers, they will not be able to do so.                                 |                       |              |                   |                  |                          |
| 3) If given a chance, our farmers will also show their ability for economic improvement.                                 |                       |              |                   |                  |                          |
| 4) The Agricultural Demonstrators are the most unfortunate group as they have to work with farmers.                      |                       |              |                   |                  |                          |
| 5) I am proud that I am working with farmers.                                                                            |                       |              |                   |                  |                          |
| 6) Our farmers will not change from their traditional ways, even if they are shown the advantages of the new technology. |                       |              |                   |                  |                          |

5. How many times you visit the nearest city or town in a period of one month.

- a) Two or more times a week
- b) Once in a week
- c) Once in a fortnight
- d) Once in a month
- e) Never.

2. Purpose of visit:

- a) Personal
- b) Job related

3. Membership in Organisations outside the Village:

- a) Non-member
- b) Member
- c) Office bearer.

4. Frequency of attending the meetings

- a) All the meetings.
- b) Occasionally
- c) Never.

6. Indicate how frequently you are seeking information regarding Scientific agriculture from the following sources.

Always    Sometimes    Never

- 1) Radio farm broadcast
- 2) Newspaper
- 3) Agricultural text books
- 4) Agricultural Guides/  
Diaries
- 5) Scientific Journals
- 6) Extension Journals
- 7) Agricultural Seminars
- 8) Agricultural Workshops
- 9) Agricultural trainings:
- 10) Agricultural exhibitions
- 11) Superior Officers
- 12) Personnel of Research  
stations.
- 13) Discussion with colleagues.
- 14) Any other (specify)

7. Below are given some statements please indicate your extent of agreement or disagreement with these statements?

Strongly Agree    Un-    Dis-    Strongly  
agree.    Agree    decided    agree.    disagree

- 1) New methods of farming give better results to a farmer than old methods.
- 2) The way of farming by our fore-fathers is the best way to farm today.
- 3) Even a farmer with lot of experience should use new methods of farming.
- 4) A good farmer experiments with new ideas in farming.
- 5) Though it takes time for a farmer to learn new methods in farming it is worthwhile the efforts.
- 6) Traditional methods of farming have to be changed in order to raise the living of a farmer.

8. Please answer the following questions.

1. Please give the recommendations of the plant protection chemicals for the following.

|    | <u>Name of chemical</u> | <u>Quantity/ha</u> |
|----|-------------------------|--------------------|
| a) | Rice stemborer          |                    |
| b) | Rice bug                |                    |
| c) | Blast                   |                    |
| d) | Sheath blight           |                    |

(2) Mention two short duration high yielding varieties of rice that can be grown for first crop season.

(1)

(2)

(3) What should be the spacing given to short duration varieties in the virippu season.

(1) 20x20 cm.

(2) 15 x 10 cm.

(3) 25x25 cm.

(4) 10 x 10 cm.

(4) What is the recommended dose of fertilizer for medium duration high yielding varieties of paddy?

(5) T x D is a hybrid coconut variety.

Yes/No

(6) What is the spacing recommended for planting coconut seedlings.

(7) What is the fertilizer dosage recommended for adult coconut palms growing under average management conditions.

(8) Please indicate your recommendation for plant protection chemicals for the following.

Chemical

Quantity

(a) Rhinoceros Beetle

(b) Budrot

(9) What is the recommended spacing for planting tapioca cuttings.

(a) 90 x 90 cms.

(b) 120 x 120 cms.

(c) 50 x 50 cms.

(10) What is the average length of a tapioca cuttings to be planted.

(11) The fertilizer dose for M<sub>4</sub> variety of tapioca is 50:50:50 N P K

Yes/No

9. Below are given a few questions regarding your job. Please answer the questions as how much you are satisfied/dissatisfied with your job.

Very  
much  
satis-  
fied.

Satis-  
fied

Un-  
deci-  
ded.

Dis-  
satis-  
fied

Very  
much  
dis-  
satis-  
fied.

- 1) Are you satisfied that you are given enough authority to do your job.
- 2) Are you satisfied with the progress you are making towards the goals which you had set for yourself in your present position?
- 3) How satisfied are you with your present position when you compare it with similar positions elsewhere?
- 4) Are you satisfied that the people in the area give you proper recognition to your work as a specialist in your subject?
- 5) How satisfied are you with your supervisors?
- 6) How satisfied are you with your salary?
- 7) How satisfied are you with your professional and clerical staff in your department or in your area?
- 8) How satisfied are you with your present position in the light of your career expectations?

- 9) How satisfied are you with your present position when you consider expectations at the time you took the position?
- 10) How satisfied are you with the amount of time and energy you are devoting to your present position and the satisfaction you derive from your position?
10. Below are given some statements regarding the communication process. Please indicate your degree of agreement or disagreement with these statements.

| <u>Strongly</u><br><u>Agree.</u> | <u>Agree</u> | <u>Unde-</u><br><u>cided</u> | <u>Dis-</u><br><u>agree.</u> | <u>Strongly</u><br><u>dis-</u><br><u>agree.</u> |
|----------------------------------|--------------|------------------------------|------------------------------|-------------------------------------------------|
|----------------------------------|--------------|------------------------------|------------------------------|-------------------------------------------------|

- 1) Communication is the art of sending message through gestures, taking and/or writing.
- 2) Communication process is sending as well as receiving of message without changing the meaning.
- 3) Communication is a process of transmitting ideas from a source to a receiver.
- 4) Communication serves as a means for establishing commonness with someone.
- 5) Communication is the vital element of modernisation and economic development.

- |                                                                                                         | <u>Stron-<br/>gly<br/>agree</u> | <u>Agree</u> | <u>Unde-<br/>cided</u> | <u>Dis-<br/>agree</u> | <u>Stron-<br/>gly<br/>dis-<br/>agree.</u> |
|---------------------------------------------------------------------------------------------------------|---------------------------------|--------------|------------------------|-----------------------|-------------------------------------------|
| 6) Communication is a give and take of ideas which help in mutual understanding of ideas or principles. |                                 |              |                        |                       |                                           |
| 7) Training in communication is essential to become an efficient communicator.                          |                                 |              |                        |                       |                                           |
| 8) For effective communication certain principles and techniques are to be followed.                    |                                 |              |                        |                       |                                           |

11. Please indicate your degree of agreement or disagreement with the following statements.

*Self analysis*

- |                                                                             | <u>Stron-<br/>gly<br/>agree</u> | <u>Agree</u> | <u>Unde-<br/>cided</u> | <u>Dis-<br/>agree</u> | <u>Strong-<br/>ly dis-<br/>agree.</u> |
|-----------------------------------------------------------------------------|---------------------------------|--------------|------------------------|-----------------------|---------------------------------------|
| 1) I feel no obstacle can stop me from achieving my final goals.            |                                 |              |                        |                       |                                       |
| 2) I am generally confident of my own ability.                              |                                 |              |                        |                       |                                       |
| 3) I am bothered by the feeling that I cannot compete with others.          |                                 |              |                        |                       |                                       |
| 4) I am not interested to do things at my own initiatives.                  |                                 |              |                        |                       |                                       |
| 5) I usually workout things for myself rather than get some one to show me. |                                 |              |                        |                       |                                       |
| 6) I get discouraged easily.                                                |                                 |              |                        |                       |                                       |
| 7) Life is a strain for me much of time.                                    |                                 |              |                        |                       |                                       |
| 8) I find myself worrying about something or other.                         |                                 |              |                        |                       |                                       |



10/16  
10/17/18

12. Below are given some statements. Please indicate your extent of agreement/disagreement with these statements.

| <u>Strongly</u><br><u>Agree.</u> | <u>Agree</u> | <u>Unde-</u><br><u>cided</u> | <u>Dis-</u><br><u>agree</u> | <u>Strongly</u><br><u>disagree</u> |
|----------------------------------|--------------|------------------------------|-----------------------------|------------------------------------|
|----------------------------------|--------------|------------------------------|-----------------------------|------------------------------------|

- 1) I am interested in people and things happening around me.
- 2) I am active in solving the cultivation problems of farmers.
- 3) I am systematic in all my activities so that I can finish the works allotted to me in time.
- 4) I am determined to achieve my goals as an agricultural demonstrator.
- 5) I am a person who believe that every experience bitter or sweet is good.
- 6) I am not courteous in my dealings with farmers.
- 7) I am eager to learn more on all subjects.
- 8) I am not capable of easily adjusting to new situations.

13. Give your extent of agreement or disagreement on the following statements.

| <u>Strongly</u> | <u>Agree</u> | <u>Unde-</u> | <u>Dis-</u>  | <u>Strongly</u> |
|-----------------|--------------|--------------|--------------|-----------------|
| <u>agree.</u>   |              | <u>cided</u> | <u>agree</u> | <u>disagree</u> |

- 1) I feel a sense of responsibility in carrying out my duties as an agricultural demonstrator.
- 2) I devote all my working hours for carrying out extension activities.
- 3) I try to meet even those farmers who are staying in most interior places.
- 4) I am careful in collecting up to date information and giving the same to farmers.
- 5) If given a chance I will opt for jobs other than the extension work.
- 6) I am visiting the farmers because of the supervision of my superior officers.
- 7) If time permits, I try to meet the farmers other than contact farmers in my area.
- 8) I carry out extension activities among non-contact farmers also.

14. Below are given some statements regarding the T and V project in our State. Please indicate your extent of agreement/disagreement with these statements.

| <u>Strongly</u><br><u>agree.</u> | <u>Agree</u> | <u>Unde-</u><br><u>cided</u> | <u>Dis-</u><br><u>agree</u> | <u>Strongly</u><br><u>disagree</u> |
|----------------------------------|--------------|------------------------------|-----------------------------|------------------------------------|
|----------------------------------|--------------|------------------------------|-----------------------------|------------------------------------|

- 1) The farmers will not be adversely affected if T and V system is closed.
- 2) T and V system will make the rich farmers richer and poor farmers poorer.
- 3) The T and V system helps to improve farmers knowledge about scientific methods of farming.
- 4) T and V system has brought out a new outlook in the field of agricultural extension work.
- 5) There is nothing new to be offered in the T and V system.
- 6) After the start of T and V system there has been significant improvement in the economic conditions of the farmers.
- 7) People talk much of T and V system, but actually no work is done.
- 8) The entire state should be brought under T and V system.

15. Below are given a few problems which make the communication of an Agricultural Demonstrator in effective. please indicate the importance of each problem to you.

- |                                                                                                                     | <u>Most<br/>impor-<br/>tant.</u> | <u>Impor-<br/>tant.</u> | <u>Least<br/>impor-<br/>tant.</u> |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------|-----------------------------------|
| 1) Lack of communication facilities.                                                                                |                                  |                         |                                   |
| 2) Lack of housing facilities in the working unit.                                                                  |                                  |                         |                                   |
| 3) Non-availability of timely instructions from the superiors.                                                      |                                  |                         |                                   |
| 4) Lack of transport facilities.                                                                                    |                                  |                         |                                   |
| 5) Large and unwieldy area of operation.                                                                            |                                  |                         |                                   |
| 6) Heavy work load.                                                                                                 |                                  |                         |                                   |
| 7) Total dependance on superior officers for information.                                                           |                                  |                         |                                   |
| 8) Lack of proper support by supplies and services.                                                                 |                                  |                         |                                   |
| 9) Lack of training in communication.                                                                               |                                  |                         |                                   |
| 10) Lack of an office room or building to facilitate the contact with the farmers, other than the scheduled visits. |                                  |                         |                                   |
| 11) Others (specify)                                                                                                |                                  |                         |                                   |

# **A STUDY ON THE FACTORS RELATED TO THE COMMUNICATION EFFECTIVENESS OF VILLAGE LEVEL EXTENSION PERSONNEL**

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**ABSTRACT OF THE THESIS**  
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## ABSTRACT

With a view to identifying the factors related to the communication effectiveness of Village Level Extension Personnel (Agricultural Demonstrators), a research study was conducted in Trivandrum District of Kerala State. It was also aimed at measuring the communication effectiveness of Village Level Extension Personnel and identifying the problems faced by them in making their communication effective.

The study revealed that as much as 16.67 percent of the Village Level Extension Personnel (Agricultural Demonstrators) were low, 66.66 percent were medium and 16.67 percent were high in their communication effectiveness.

Out of the eleven independent variables tested for relationship with communication effectiveness, eight variables viz., attitude towards farmers, information seeking behaviour, scientific orientation, knowledge of scientific agriculture, concept of communication, self confidence, self concept and job commitment were positively and significantly correlated with communication effectiveness. Three other variables viz., cosmopolitaness, job satisfaction and attitude towards T and V system of agricultural extension were not significantly correlated with communication effectiveness of Agricultural Demonstrators. Significant Intercorrelations were obtained

between most of the independent variables. Results of path analysis indicated that four independent variables, namely attitude towards farmers, job commitment, information seeking behaviour and concept of communication had maximum direct effect on communication effectiveness.

Lack of office facilities, lack of facilities to supply inputs, lack of transport facilities, large and unwieldy area of operation, lack of housing facilities in the working unit and heavy work load were the most important problems identified by the Agricultural Demonstrators in making their communication effective. Strengthening of the present input supply systems, provision of incentives and financial aids to farmers, providing office facilities, reducing the area of operation, distributing printed materials and starting additional demonstration plots were the important suggestions put forward by the Agricultural Demonstrators for making their communication more effective.