

**COMMUNICATION BEHAVIOUR OF WOMEN, HEADING
FARM FAMILIES IN NEYYATTINKARA TALUK**

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THESIS

submitted in partial fulfilment of
the requirement for the degree

Master of Science in Agriculture

(Agricultural Extension)

Faculty of Agriculture

Kerala Agricultural University

Department of Agricultural Extension

COLLEGE OF AGRICULTURE

Vellayani - Trivandrum

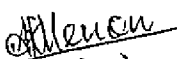
1993

Dedicated
to
My Beloved Parents

DECLARATION

I hereby declare that this thesis, entitled "Communication Behaviour of Women, heading farm families in Neyyattinkara Taluk" 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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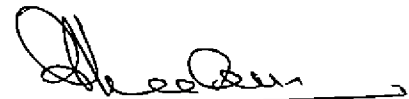

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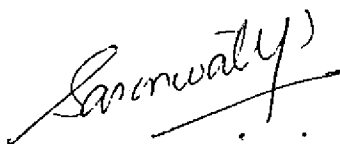
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ACKNOWLEDGEMENT

I acknowledge with deep sense of gratitude the guidance, encouragement and valuable help from Dr.B. Babu, Chairman of the Advisory Committee throughout my post-graduate study and in the conduct of this research work.

I owe deep sense of gratitude and indebtedness to the members of the Advisory Committee,

Dr.G.T.Nair, Professor, Department of Agricultural Extension for his valuable suggestions and encouragement during the study.

Dr.S. Bhaskaran, Associate Professor, Department of Agricultural Extension for his kindly interest, constant encouragement, valuable suggestions and expert help at every stage of my study and for the critical perusal of the manuscript.

Dr.(Mrs.) P. Saraswathy, Associate Professor, Department of Agricultural Statistics for the valuable suggestions and help rendered in the selection of statistical tools, analysis of the data and interpretation of results.

I wish to place on record my deep sense of

gratitude to Dr.C. Bhaskaran, Sri. Motilal Nehru, Sri.A.K. Sherief, Dr.N. Kishore Kumar, Sri.M.M. Hussain, Dr.V.B. Padmanabhan, Dr.R. Prakash, Dr.A.O. Rahiman, Smt.B. Seema, Smt.N.P. Sushama, Dr.S. Shilaja and Dr.G. Sobhana, staff of the Department of Agricultural Extension for their critical suggestions, encouragement and valuable help during my study.

I acknowledge with thanks the staff and post-graduate students of the Department of Agronomy and Sri.N. Narayanan Nair and Smt. Elsamma, Department of Agricultural Economics, for the valuable help rendered during my study.

I acknowledge with thanks Sri. Ajith, computer programmer, for analysing the data, his keen interest in the problem of research work and for the valuable help during the study.

My sincere thanks go to my colleagues Asha, Sreekala, Pradeep, Jnanadevan and Gangadharan who rendered necessary help and support throughout my post-graduate study. The encouragement and friendly advices of my friends Jiji, Deepthi, Jyothi, Shalini, Jayabharathi and Arul are a pleasure to be recalled and remembered. I extend my sincere

thanks to Sunil, Jaleel, Ramachandran, Nelson, Rajula, Shahila, Smt. Meera, Sri. Ramanathan, Fathima, Sindhu, Indu, Jiju, Sakeer and Riji for their support and help during my study. Special thanks are due to Dr. Ramasubramoniam, Professor, Department of Soil Science, Sri. Jnanaseelan Sir, Smt. Ambika Devi Teacher, Ramkumar, Anil Kuruvila and Ganesh for their valuable help in my need.

I acknowledge with a lot of thanks Sri. Ayaz uncle and family and Sri Krishnan uncle and family for their affection, keen interest and encouragement throughout my study.

Inevitable for the successful completion of my post-graduation, especially the research work was the inspiration, moral support, valuable help and good wishes I received from Sri.M.N. Shariff (Nayeem). I rejoice to place on record my heart felt acknowledgement to him.

I am deeply indebted to my father for encouraging me to do my post-graduation and providing necessary facilities for it, my mother for being what she really is, the Greatest one on earth for me. I am happy to place on record my sincere thanks to my eldest sister Vasantha (Valliechy) and brother-in-law Sri.J. Narayanan Nair

(Chettan) for all possible valuable help they gave. I acknowledge with affectionate regards my only brother Dinesh for all his encouragement and help throughout my study. I am thankful to my elder sisters Jaya and Raji, my brother-in-laws and the kids of the family, especially Biju mon and Deepu mon for their interest in my study and help during the preparation of thesis.

I am thankful to Sri. Nataraja Pilla for typing the draft of the thesis, Mrs. and Dr. M. Rajendran (Veeralakshmana Computers), Sri.P.U. Biju, Sri.M. Anil Kumar and Sri. Somesh Kumar for getting the thesis typed and bound.

Last, but not the least, I acknowledge with thanks all the administrative and technical staff under Agriculture Sub-Division Office, Neyyattinkara for their valuable help and, the farm women who formed the respondents of my study for their kind co-operation during data collection.

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May 1993

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LIST OF ABBREVIATIONS

- HYV - High Yielding Variety
- IE - Inward Exposure
- OE - Outward Exposure
- SE - Standard Error

INTRODUCTION

1. INTRODUCTION

"Good Communication is as stimulating as black coffee
and just as hard to sleep after"

- A.M. Lindbergh

The discovery of useful agricultural information would meet the national goal of self-sufficiency in food and balanced diets only when the farmers understand, accept and adopt the latest technology without any undue time lag. The proper application of farming practices to increase production can be effected only through communication of new, but appropriate farming technology to the farmers. Learner (1967) recognized the importance of communication as a stimulus for peasant modernization. He said, "rooted in their place and pride traditional mankind lives by its constraints unaware of them as constraints because no communication alerted them to alternatives". Communication is the basic step in effecting changes in any aspect of the client system.

The high proportion of female headed households in the country especially in the southern states places women as an integral part of the client system. With the farm

family as the economic unit of rural community, farm women play an important role both in farm and home. The situation of farm families where woman is the head of the family, will be different from that of other farm families. Here women are the decision makers and the implementing personnel in adoption of improved agricultural practices. Communication Behaviour provides information support to agricultural practices. Since communication Behaviour is said to be a product of function of traits of farmers and the situational factors, a clear understanding of these factors is necessary in the communication of technologies.

The importance of farm woman in the field of agriculture is very clear from the words of Cernea (1977): "If agriculture is a task to be carried out on the shoulders of giants, the giants are, now-a-days mainly the woman". Heggade (1982) stated that women's participation in economic decision making was a vital means by which their economic dependency and social inequality would be removed.

National Sample Survey organisation, in its report (1990) on the results of the Employment and Unemployment survey conducted during 1987-'88 presented for the first time data relating to some demographic and economic

characteristics of female headed households. At all India level 10.4 per cent of rural households were female headed in 1987-'88. In all southern states, the level is above national average. In spite of the socio-economic deprivation to which the women are exposed, they seem to be capable of rising up to the occasion for their farm and home improvement, as evidenced by the findings of Kharwara et. al (1991). In their study on the comparative adoption of improved technology by female and male headed scheduled caste families found that the yield of H.Y.V. from female headed farms was slightly higher than that of male headed farms and majority of the families headed by women adopted improved package of practices for rice cultivation.

The success or failure of agricultural programmes would ultimately hinge on the Communication Behaviour of the ultimate receivers of the technology.

Need for the study

It is observed that a majority of female headed households live below the poverty line. Besides economic deprivation these households suffer from other social

deprivation which reduced their access to opportunities. Many works were done on the communication behaviour of farmers but no work was done on women as such atleast in Kerala. Hence, it is of prime necessity to give attention to the farm women, and study the factors that affect their communication behaviour. Hence, a study on the "Communication Behaviour of women, heading farm families in Neyyattinkara taluk" was carried out with the following objectives.

1. To measure the Communication Behaviour of women, heading farm families including their Inward Exposure and Outward Exposure in relation to the adoption of improved agricultural practices.
2. To compare between the women engaged in paddy cultivation and coconut cultivation with regard to their Inward Exposure, Outward Exposure, Communication Behaviour and the various other characteristics which influence their Communication Behaviour.
3. To study the characteristics of women, heading farm families which influence their Communication Behaviour.
4. To find out the relationship between Communication Behaviour and the characteristics of women, heading

farm families.

5. To find out the direct and indirect effects of the selected characteristics of farm women on their Communication Behaviour.

Scope of the study

The information gained from the study can be made use of while planning for farm and home development programmes, as well as for providing better opportunities to women, engaged in agriculture.

The extension effort can be strengthened by understanding the communication behaviour of the women.

The change agent would be better equipped to improve his effectiveness in communicating views to his women clients if he knew the factors influencing the Communication Behaviour of the intended users of his message.

The Communication Behaviour of farmers goes a long way in furthering the cause of speedy agricultural development and therefore this study can help to determine the ways of farm and home improvement.

Limitations of the study

The study was undertaken as a part of the M.Sc. (Ag.) programme and so it was not possible to explore the area in greater depth. The study was limited to the women, heading farm families in Neyyattinkara taluk. The selection of this kind of specific women respondents limited the sample size of the study. The study also had the limitations of time and resources. The results of the study can be generalised only to that extent and may not be applicable as such to the entire population of women, heading farm families of the State.

Presentation of the report

This chapter introduces the subject of the thesis indicating its need, scope, limitations and the way in which the study has been pursued.

The other chapters are presented as follows:

Chapter II covers the relevant literature, conceptualisation of variables, the theoretical frame work of the study and the statement of hypothesis.

Chapter III deals with the methodology in which details regarding locale, sampling, empirical measures used, data collection and the statistical methods used for the analysis of the data, have been presented.

The results of the study in relation to the objectives are presented in chapter IV.

The Vth chapter reveals the discussion based on the salient results obtained. A summary of the entire study emphasising the salient findings is given in chapter VI.

THEORETICAL ORIENTATION

II THEORETICAL ORIENTATION

In this chapter it is aimed to develop a theoretical frame work based on past research studies. A well developed theoretical frame work will help to form realistic hypotheses and to draw meaningful conclusions. In accordance with the objectives of the study, the review of the previous work is furnished here. An attempt has also been made to develop a theoretical frame work for the study of communication behaviour of women, heading farm families in relation to their selected characteristics.

2.1 The concept of communication

The word communication originates from the word "communis" which means common.

Loomis and Beegle (1950) explains communication as "a process by which information, decisions, and directives pass through a social system and the ways in which knowledge, opinions, and attitudes are formed or modified".

According to Rogers and Yost (1960) agricultural communication is the "flow of research findings from

agricultural scientists to farmers".

According to Chatterjee (1973) communication has two distinct meanings. One is transmission of message from source to receiver and the other is concerned with physical, facilitatory, or the constraining factors, intervening between the source and the recipient of the message.

According to Schramm (1973), "Communication occurs when two corresponding systems coupled together through one or more noncorresponding systems assume identical status as a result of a single transfer along the chain, we are trying to establish commonness".

Agee et. al. (1979) defined communication as the act of transmitting information, ideas and attitudes from one person to another.

According to Dahama and Bhatnagar (1980), in a face-to-face situation, communication is not a mere exchange of information, but something more, because in such a situation, along with the information, one passes, the gestures, expression, language, the manner of expression and tone-all these combined together, create a sort of impact on both. Some kind of change may be visible in interaction of knowledge and behaviour.

Thus, communication does not refer to verbal, explicit and intentional transmission of messages alone. The concept of communication would include all those processes by which people influence one another.

2.2 Communication Behaviour

Berlo (1960) used the term communication behaviour to indicate communication in a personal context of the receiver. He also stated that communication behaviour explains how, why, when, with whom and with what consequences man behaves.

Rogers (1962) defined communication behaviour as the degree to which an individual is willing to seek information and advice.

Nafziger and White (1966) also related communication behaviour to modifications in knowledge, attitudes and overt action following attention given to a message.

Murthy and Singh (1974) conceptualized communication behaviour as a composite measure of awareness of technologically competent information sources,

comprehension, attitudinal change and adoption of the referent (H.Y.V. of paddy).

Singh and Singh (1974) considered communication behaviour as the extent to which an individual is exposed to the different messages from various communication sources for the sake of adopting a particular message.

Sandhu and Darbarilal (1976) studied communication behaviour as an individual farmer's exposure to the various information sources through which the technologies are transmitted.

Reddy and Singh (1979) considered that communication behaviour consists of two parts, such as the sender's communication behaviour and the receiver's communication behaviour. The sender's communication behaviour includes the components of communication ability, skills and channel use effectiveness and the receiver's communication behaviour includes components of awareness, comprehension and attitude change.

Kareem (1984) indicated that role performance and socio-economic status had maximum direct effects on interpersonal communication behaviour of farmers.

Subramoniam (1986) identified the factors

positively and significantly correlated with communication behaviour of tribal farmers as education, innovation proneness, attitude towards Block extension agency, social participation, information seeking behaviour and cosmopolitaness. He reported a negative significant correlation between age and communication behaviour.

2.2.1 Inward Exposure

Simon (1957) pointed out that the action of an individual was a function of his exposure to the sources of information. He further defined exposure as a willingness of a farmer to react with a particular information media.

Gangappa (1975) studied the communication behaviour of small farmers and found that the small farmers consulted more of formal and informal interpersonal sources than mass media sources.

Sandhu and Darbailal (1976) defined inward exposure as exposure of farmers to those information sources through which they receive information on any new idea, practice or skill (on H.Y.V.).

Narayanappa (1978) identified neighbours and

relatives as the most important sources of information in different stages of adoption of improved agricultural practices among Karnataka farmers.

Karippai (1981) observed that the small farmers used friends and relatives as the source of farm information to the maximum extent, followed by radio, newspapers, extension personnel and agricultural scientists.

Kareem (1984) observed that the contact farmers received most of the information on coconut cultivation from agricultural demonstrators.

Sherief (1985) reported that majority of the noncontact farmers received most of the information on paddy cultivation from "other farmers" in their locality. The "contact farmers" came next and the "agricultural scientists" were the least consulted source of information.

Subramoniam (1986) found that the information input of tribal farmers was relatively high since they received information from mass media such as "radio" and 'newspaper' and personal localite sources such as 'neighbours' and 'relatives'.

Vasanthakumar and Somasundaram (1988) reported that the leaders and followers of a progressive settlement

were significantly different in the use of personal cosmopolite channels and the frequency of use of personal cosmopolite and impersonal cosmopolite channels for getting information on (IR 20) paddy.

somasundaram et. al. (1990) observed that majority of the farm women were aware of the various farm broadcast programmes and farm telecast programmes followed by farm pages of newspaper and then farm magazines.

2.2.1 Outward Exposure

Sandhu and Darbarilal (1976) defined outward exposure as the exposure of the farmers with those information sources through which they pass on information on any new idea, skill and practice on high yielding variety to others.

Sandhu (1970) reported that 61 per cent of the farmer respondents in his study discussed the content after listening with family members or other farmers, but only 37 per cent were doing it regularly.

Singh (1972) found that 84 per cent of the farmer respondents discussed the contents of farm broadcast with

family members and friends.

Shakya (1973) observed that 61 per cent of farm broadcast listeners discussed the content of farm broadcast programme after hearing, but about 17 per cent alone were doing it regularly.

Sherief (1985) reported that most of the feedback from the noncontact farmers was mainly communicated to 'other farmers'.

Subramoniam (1986) reported that majority of farmers communicated to other farmers of the settlement while 'personal talk during home visit'.

Zend and Harode (1990) observed that 40-42 per cent housewives consulted friends, relatives and neighbours while taking decisions.

2.3 Age

According to Wolman (1973) age means the period of time from birth to any given time in life or chronological age.

Murthy and Singh (1974) found negative significant relationship between age and communication behaviour of

farmers.

Kalamegam and Menon (1977) stated that communication behaviour of small farmers was dependent on their age.

sherief (1985) found that age was negatively and significantly correlated with communication behaviour of farmers.

Subramoniam (1986) also reported a negative significant correlation between age and communication behaviour of tribal farmers.

Punjabi (1990) found that age was negatively and significantly related with information seeking behaviour of small farmers.

2.4 Education

Wolman (1973) meant education as progressive changes of a person affecting knowledge, attitudes and behaviour as a result of formal institution and study, and he further stated that it may be a development of a person resulting from experience rather than from maturation.

Abraham (1974) defined education as the actual

number of years in school and formal degree obtained.

According to Chamber's Dictionary (1976) 'Education' is bringing up or training, instructing, strengthening the power of body or mind or culture.

Nehru (1980) found that education of farm broadcast listeners was positively and significantly associated with their communication behaviour.

Rao and Reddy (1980) reported education as one of the essential characteristics associated with interpersonal communication behaviour of contact farmers.

Vijayaraghavan and Subramoniam (1981) found that education had non-significant association with information processing of farmers.

Kareem (1984) reported positive significant influence of education on interpersonal communication behaviour of farmers.

Sherief (1985) found that education was positively and significantly associated with the communication behaviour of farmers.

Subramoniam (1986) reported positive significant correlation between education and communication behaviour of tribal farmers.

2.5 Farm size

Land is the primary source of farming.

Sandhu and Darbarilal (1976) observed positive, but nonsignificant relationship between farm size and communication behaviour of farmers.

Kalamegam and Menon (1977) indicated that small farmers' communication behaviour depended on their farm size.

Sanoria and Sharma (1983) illumined that size of holding was significantly related to adoption behaviour in the case of beneficiaries of Training and Visit System.

2.6 Social participation

According to Rogers and Shoemaker (1971) participation is the degree to which members of social system are involved in the decision-making process.

Vasanth and Sudhakar (1975) found significant association between social participation and communication behaviour.

Ferreira et. al. (1983) reported that all farmers

with higher social participation tended to adopt more of the improved farm technology.

Cherian (1984) reported positive association between attitude and social participation.

Viju (1985) reported a significant correlation between social participation and extent of adoption of improved agricultural practices.

Sherief (1985) found positive significant relationship between social participation and communication behaviour.

Subramoniam (1986) found positive significant relationship between social participation and communication behaviour.

2.7 Cosmopolitaness

Cosmopolitaness was defined by sociologists in diverse ways, essence of which centered around a tendency on the part of an individual to accumulate information of outside world through extensive contact.

Rogers and Svenning (1969) defined cosmopolitaness as the degree to which an individual is oriented outside his

immediate social system.

Ambastha and Singh (1975) found positive and significant correlation between cosmopolitaness and information input and output indices of farmers.

Vijayaraghavan and Subramoniam (1981) found that farmers' cosmopolitaness had significant and positive correlation with information input and output and that it had significant association with information processing by farmers.

Ferreira et. al. (1983) in their study indicated that cosmopolite farmers were more inclined to adopt new technology.

Siddaramaiah and Rajanna (1984) found that farmers with high consmopolitaness had significantly higher gain in knowledge about agricultural aspects.

Sherief (1985) found that consmopolitaness was positively and significantly related to the communication behaviour of farmers.

Subramoniam (1986) operationally defined cosmopolitaness as the tendency of the tribal farmer to be in contact with outside world based on the belief that all the needs of an individual cannot be satisfied within his

agricultural inventions were characterized by more scientism compared to communicators and noncommunicators.

Reddy and Reddy (1975) found that farmers with high scientific orientation were more innovative and less prestige oriented than the farmers with medium and low scientific orientation.

Sandhu and Darbarilal (1976) found that value orientation had positive and significant correlation with communication behaviour of farmers.

Rao and Reddy (1980) found scientific orientation as one of the essential characteristics associated with interpersonal communication behaviour of contact farmers.

Vijayaraghavan and Subramoniam (1981) reported that scientific orientation had significant and positive correlation with information input and information output of farmers.

Kareem (1984) found that scientific orientation was not significantly associated with interpersonal communication Behaviour of farmers. He defined scientific orientation as those aspects of respondent's orientation, which commits him to the observance of scientific principles, which directly or indirectly influence his

behaviour.

2.10 Level of Aspiration

English and English (1958) defined level of aspiration as "the standard by which a person judges his own performance as a success or a failure or a being upto what he expects of himself".

Chauhan (1976) reported positive significant correlation between level of aspiration and adoption of scientific technology.

Rajenderan (1978) and Sushama (1979) defined aspiration as the degree to which an individual gets his goals realistically in relation to his physical and mental attributes and in accordance with his environment.

Sushama et. al. (1981) reported positive significant correlation between level of aspiration and adoption behaviour.

Sanoria and Sharma (1983) reported positive significant relationship between level of aspiration and adoption behaviour.

Sherief (1985) defined level of aspiration as the

desired state of future being expressed by the farmers. He reported positive significant relationship between level of aspiration and communication behaviour of non contact farmers.

Seema (1986) operationalised level of aspiration as the possible goal a farm woman sets herself in her performance.

2.11 Adoption of improved agricultural practices

According to Rogers (1962), adoption process is the mental process through which an individual passes from hearing about an innovation to final adoption.

Adoption has been defined by Rogers (1968) and Rogers and Shoemaker (1971) as decision to make use of the innovation.

According to Singh and Singh (1970) adoption behaviour of a farmer is a specific kind of action and is the function of the situation in which he lives, his sociopsychological system and his exposure to different sources of information.

Supe (1971) opined 'to adopt' or 'not to adopt' is

a function of the rational behaviour of man.

First-Dilic, Ruza (1975) defined adoption as the mental process through which the potential beneficiary passes heading to his decision to adopt the novelty.

Salunkhe and Thorat (1975) reported that contact with different communication channels has a significant relationship with the adoption Behaviour of small farmers.

Bhaskaran (1979) reported that the level of adoption was significantly associated with the farmers' interpersonal communication behaviour efficiency index in a less progressive and progressive village.

Nehru (1980) found that communication behaviour of the listeners of farm broadcasts was positively and significantly associated with their adoption behaviour.

Philip (1984) reported a positive and significant correlation between listening behaviour and adoption of recommended practices.

Kharwara et. al. (1991) in a study on comparative adoption of improved technology by female and male headed scheduled caste families found that the yields of high yielding varieties from female headed farms was slightly higher than that of male headed farms and majority (60%) of

families headed by women adopted the improved package of practices for rice cultivation.

2.12 Knowledge about improved agricultural practices

One of the main tasks of extension education is to provide or improve the knowledge of the people about improved agricultural practices, because knowledge as a component of behaviour plays an important role in the total behaviour of the individual.

English and English (1958) defined knowledge as the body of understood information possessed by an individual or by a culture.

Singh and Singh (1970) revealed that knowledge of package of practices was significantly contributing in explaining the adoption behaviour of the farmer.

Menon (1970) found that meetings and training helped in knowing about improved seeds, fertilizers and implements for small farmers.

Rogers and Shoemaker (1971) opined that knowledge of innovations could create motivation for their adoption.

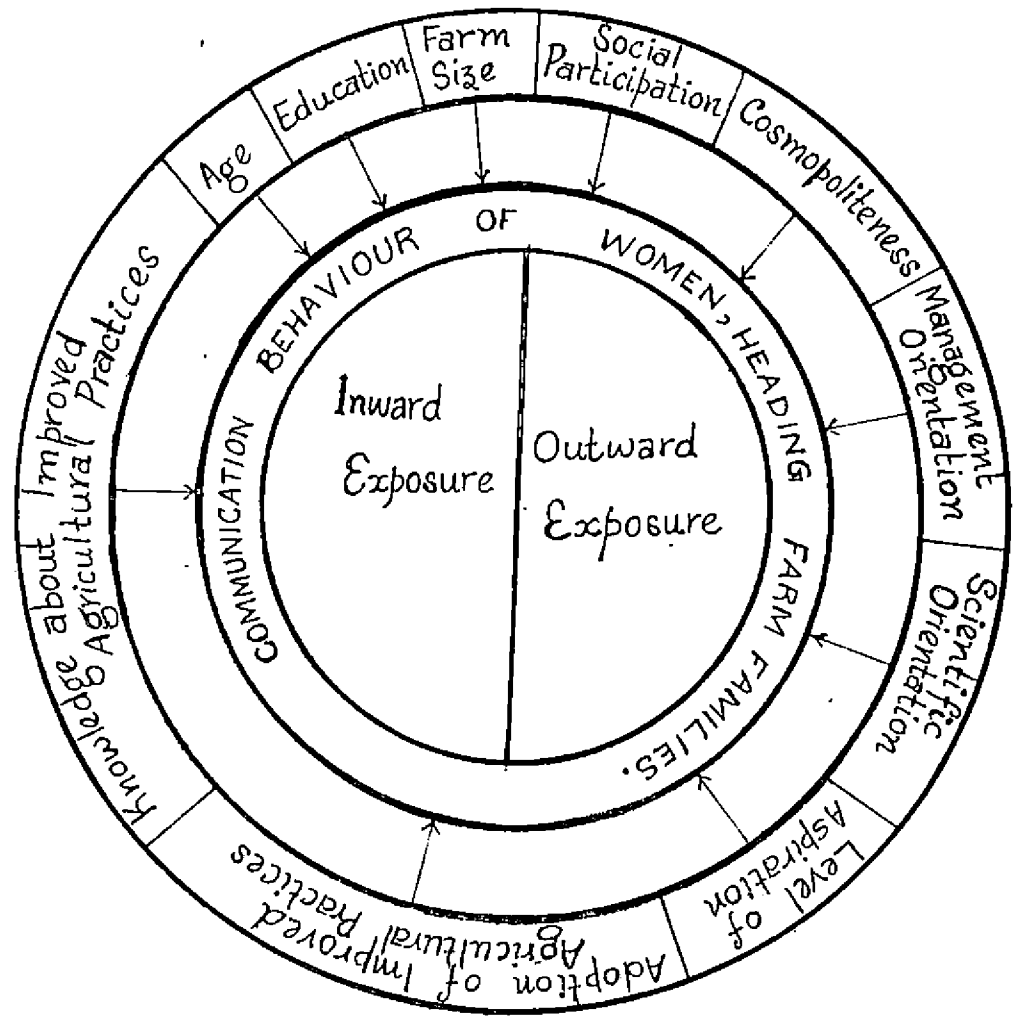


Fig.1. Conceptual Frame Work

Surendran (1982) reported that there was significant relationship between knowledge and attitude towards scientific agriculture.

Sethy et. al. (1984) reported that knowledge of technology is basic to adoption of high yielding rice technology for all categories of farmers.

Conceptual orientation of the study

The concepts of the variables under study are derived from past definitions as well as from the conceptual consideration. The conceptual frame work is presented as Fig.1.

1. Communication Behaviour

Communication behaviour is operationalised as the exposure of the farm woman to different sources of information through which informations on improved agricultural practices are transmitted.

2. Inward Exposure

Inward Exposure is operationalised as the exposure of the farm woman to those sources of information through which they receive information on improved agricultural practices.

3. Outward Exposure

Outward Exposure is operationalised as the exposure of the farm woman with those sources of information through which they pass on information on improved agricultural practices.

4. Age

Age is operationalised as the number of years completed by the farm woman respondent at the time of enquiry.

5. Education

Education is operationalised as the level of formal education the farm woman possesses.

6. Farm size

Farm size is operationalised as the extent of land available under paddy in case of women cultivating paddy cultivators and under coconut cultivation in case of women cultivating coconut.

7. Social Participation

Social participation is operationalised as the degree of involvement of the farm woman in social organisations as a member, as an office bearer or holding some other positions.

8. Cosmopolitaness

Cosmopolitaness is operationalised as the degree

to which an individual farm woman is oriented outside her own social system.

9. Management orientation

Management orientation is operationalised as the degree to which a farm woman is oriented towards scientific farm management comprising planning, production and marketing functions of farm enterprise.

10. Scientific orientation

Scientific orientation is operationally defined as those aspects of a farm woman's orientation, which commits her to the observance of certain scientific principles, which directly or indirectly influence her behaviour.

11. Level of Aspiration

Level of Aspiration is operationalised as the possible goal a farm woman sets herself in her performance in three years from the time of enquiry.

12. Adoption of Improved Agricultural Practices

Adoption is operationalised as the degree to which a farm woman has actually adopted selected practices in paddy cultivation or coconut cultivation compared to the degree she can extend her adoption.

13. Knowledge about Improved Agricultural Practices

Knowledge is operationalised as the understood information the farm woman has on improved agricultural practices in paddy or coconut.

Hypotheses

Based on the theoretical orientation, review of literature and in the light of the objectives of the study, the following null hypotheses were formulated.

1. There will be no significant difference between the women in paddy cultivation and coconut cultivation with regard to their Inward Exposure, Outward exposure and

Communication Behaviour.

2. There will be no significant difference between the women in paddy cultivation and the coconut cultivation with regard to the different independent variables.
3. There will be no significant relationship between Communication Behaviour of women, heading farm families and their.
 - i. age
 - ii. education
 - iii. farm size
 - iv. social participation
 - v. cosmopolitaness
 - vi. management orientation
 - vii. scientific orientation
 - viii. level of aspiration
 - ix. adoption of improved agricultural practices in paddy or coconut
 - x. knowledge about improved agricultural practices in paddy or coconut

METHODOLOGY

III. METHODOLOGY

The methodology employed for the study is presented in this chapter under the following main headings.

- 3.1 Selection of the locale for the study
- 3.2 Selection of the sample
- 3.3 Methods used for data collection
- 3.4 Selection and empirical measurement of variables
 - 3.4.1 Measurement of the dependent variable
 - 3.4.2 Measurement of the independent variables
- 3.5 Statistical tools used

3.1 Selection of the locale for the study

According to the Provisional Population Totals of Census of India, 1991, Kerala has a total population of 8,196,798 of which 1,901,924 are females. Thiruvananthapuram district, the capital of Kerala is administratively divided into four taluks namely, Chirayinkil, Nedumangad, Neyyattinkara and Thiruvananthapuram. The census data available at the time of undertaking this study was of 1981, and it showed the highest farm women population of 318,305

in Neyyattinkara taluk among all the four taluks of Thiruvananthapuram district. This taluk is selected as the locale for the study. The distribution of farm women population in the four taluks of Thiruvananthapuram district is given in Table 1. The distribution of rural farming population in the ~~district~~ taluks according to the Provisional Population Totals of Census of India, 1981 is presented in Table 2. The map showing the area of the study is furnished in fig.2.

Table 1 Taluk-wise distribution of rural population (1981)

Taluks	Total Persons	Male	Female
Chirayinkil	454,480	214,893	239,584
Nedumangad	461,025	227,808	233,217
Thiruvananthapuram	386,867	191,790	195,077
Neyyattinkara	637,979	319,674	318,305

Source: Census of India, 1981

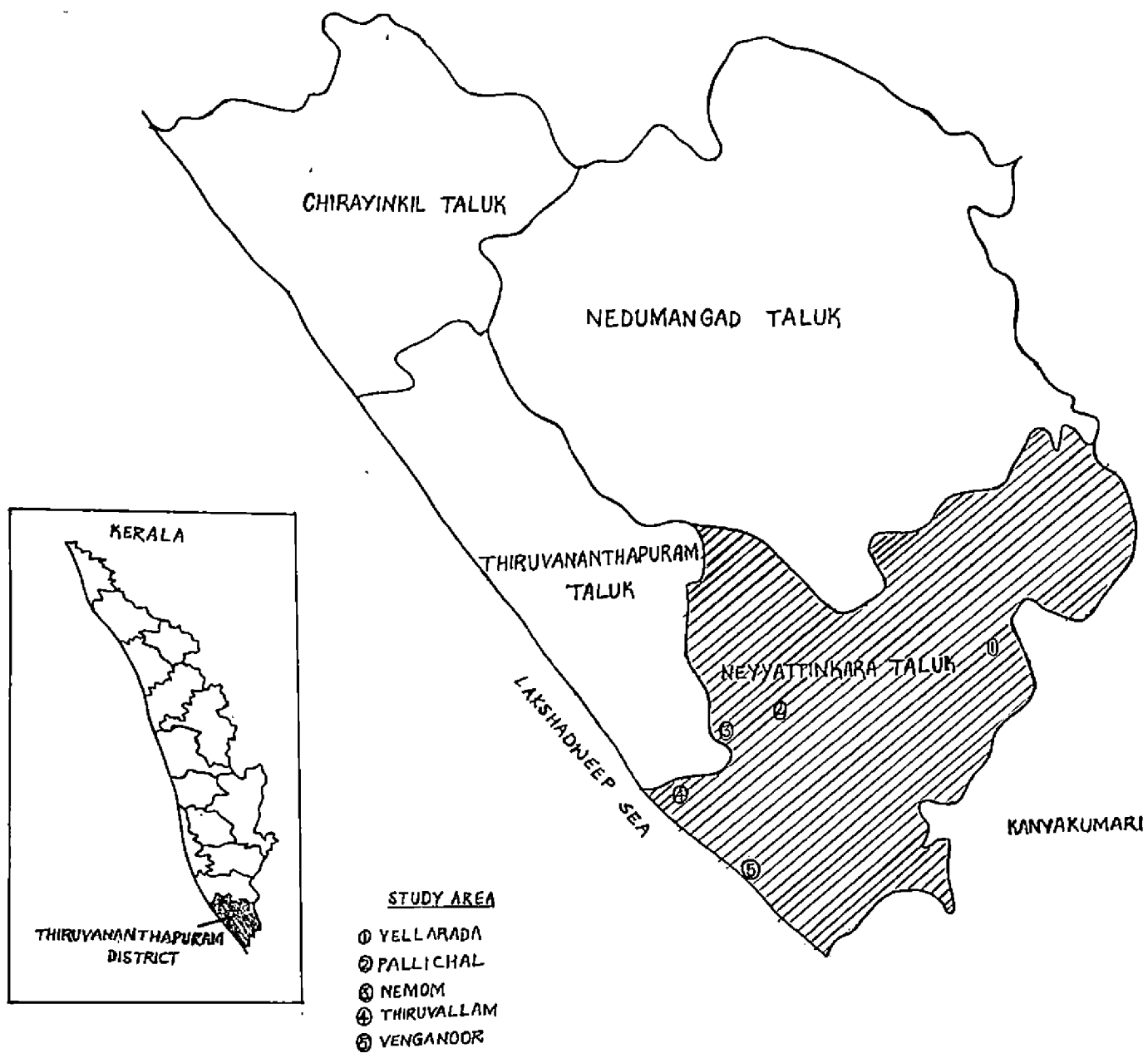


Fig.2. Map showing the study area

Table 2 Taluk-wise distribution of rural population (1991)

Taluks	Total Persons	Male	Female
Chirayinkil	143,651	99,571	44,060
Nedumangad	157,290	127,363	29,927
Thiruvananthapuram	72,285	56,030	16,255
Neyyattinkara	208,874	172,306	36,568

Source: Provisional Population Totals, Census of India, 1991

Selection of Krishi Bhavan area

There are 30 Krishibhavans in Neyyattinkara. Among these Krishibhavans, 5 Krishibhavans were randomly selected namely, Vellarada, Venganoor, Thiruvallam, Pallichal and Nemon. The samples were drawn from areas under these Krishibhavans.

3.2 Selection of the Sample

The respondents of the study are women who are the heads of the family and also engaged in paddy and coconut cultivation. No statistics are available of such women. From the information supplied by the Agricultural officers of the five selected Krishibhavans, from their list of farmers under them fifty respondents each under paddy and coconut cultivation respectively and who also heads the family were purposively selected.

3.3 Methods used, for data collection

A structured interview schedule was prepared, including the appropriate questions for obtaining the required data relating to the Communication Behaviour of the respondents and their selected profile characteristics. The schedule thus made was discussed with the members of the advisory committee and necessary modifications were made. The schedule was pre-tested in non-sample area of Thiruvananthapuram taluk and necessary modifications were made in the schedule. The data were collected through

personal interview method. Interview schedule used for the study is furnished in Appendix I.

3.4 Selection and empirical measurement of variables

After a thorough review of relevant literature, a list of independent variables which were expected to have association with the dependent variable, communication behaviour were presented to a group of experts for relevance rating. Considering the rating and suggestions by the judges eleven variables were selected to be included in the study. After pre-testing, one variable was eliminated and the remaining ten variables were included in the final schedule.

3.4.1 Measurement of dependent variable

Communication Behaviour of women, heading farm families was considered as the dependent variable for the study.

Katz and Lazarsfeld (1964) measured communication behaviour from listening and reading habits of the respondents.

Ambastha and Singh (1975) used the system analysis technique to study the communication pattern of farmers, in terms of information-input pattern, information processing pattern and information-output pattern.

Sandhu and Darbarilal (1976) measured communication behaviour as inward exposure and outward exposure.

$$\text{Communication Behaviour (score)} = \text{Inward Exposure (score)} + \text{Outward Exposure (score)}$$

Pandyaraj (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.

Somu et. al. (1978) measured communication behaviour of opinion leaders as the extent to which they were exposed to the messages through different sources and channels. The components considered were the newspaper reading habit, radio listening habit, extension agency contacts and participation in the activities arranged by extension workers.

Bhaskaran (1979) developed an interpersonal communication behaviour efficiency index. It indicates the effectiveness of the interpersonal communication behaviour of farmers which is measured in terms of the sub-dimensions such as inertia, intention, directness and transitivity. The cumulative score obtained from the above measure indicates the extent of effective interaction among farmers in interpersonal information exchange situations.

Babu (1981) followed the procedure adopted by Sandhu and Darbarilal (1976) with modifications to measure the communication behaviour of farmers belonging to different caste groups in selected regions of Kerala. He measured communication behaviour as the sum total of inward exposure and outward exposure scores.

Kareem (1984) modified the method of Pandyaraj (1978) and measured communication behaviour as a composite of the specific activities such as information receipt or input, information-processing, information communication or output and information feed back.

Sherief (1985) measured the communication behaviour of non-contact farmers in terms of the following dimensions.

Information-input or inward exposure

Information-processing consisting of information decoding and information-encoding.

Information-output or outward exposure, and Information feed back.

Subramoniam (1986) measured the communication behaviour of tribal farmers in terms of information input, information processing, information output and information feed back.

Vasanthakumar and Somasundaram (1988) studied communication behaviour in terms of Information Need Perception, use of communication channels, frequency of use of communication channels, extent of information received, credibility of channels and information giving behaviour.

Sinha et. al. (1988) measured the communication behaviour of opinion leaders in terms of three components; information seeking behaviour, credibility of different sources of information as perceived by the opinion leader and information dissemination behaviour (ie. information input, processing and output).

The above mentioned reviews indicate a diversity of quantification procedures followed by various research

workers in studying the communication behaviour. The method developed by Sandhu and Darbarilal (1976), as modified by Babu (1981) was used here with necessary modifications for the present study. The communication behaviour of women, heading farm families was measured in terms of the following sub-dimensions.

3.4.1.1 Inward Exposure and

3.4.1.2 Outward Exposure

There are many sources of information through which farm women get information about improved technology. They also discuss among themselves, with their friends and fellow cultivators and in this process pass on the information so received to other fellow farmers. But to what extent the farm women expose themselves to the various information sources, both for receiving as well as for passing on the information is the crux of the problem and this has been called Communication Behaviour in this study.

3.4.1.1 Inward Exposure

Inward Exposure relates to the exposure of the farm women to information sources through which they receive

information on improved agricultural practices. Eighteen sources of information were identified and classified by Babu (1981) into 7 categories. With slight modifications in some specific sources due to the change in the administrative set up the sources selected were.

1. Demonstration center
2. Radio
3. Newspaper
4. Farm bulletins/literature
5. Agricultural Assistants
6. Agricultural Officer
7. Assistant Director of Agriculture
8. Kerala Agricultural University (K.A.U.) Scientists
9. Market Committees
10. Co-operatives
11. Fertilizers/seed stores
12. Commercial agencies of insecticides and pesticides
13. Family members
14. Friends and relatives
15. Neighbours
16. Fellow cultivators
17. Farmers outside villages

18. Extension training programme/Krishimela/exhibitions/camps.

The scoring procedure of seven different categories of inward exposure score are described below based on the methodology adopted by Sandhu and Darbarilal (1976).

1. Demonstration

The respondents were asked whether (a) the demonstration center or plot was laid on their farm, (b) They were exposed to demonstration 3-4 times during the last year (1990-'91), (c) They were exposed to demonstration 1-2 times during the last year (1990-'91) and (d) They was never exposed to a demonstration. The corresponding scores given were 3,2,1 and 0.

2. Farm literature

The respondents were asked the frequency of reading the following farm publications in an year (a) farm bulletins, (b) agricultural magazines and (c) agricultural articles published in newspaper. A four-point rating scale

like 'quite frequently' (9 and above), frequently (5 to 8), 'some times' (1 to 4), and 'never' (0) has been utilised with corresponding scores 2, 1, 1/2 and 0, in the case of farm bulletin. In the case of farm magazines against the same scale the scores were 3, 2, 1 and 0. In the case of agricultural articles read in newspaper the corresponding scores were 1, 1, 1/2 and 0.

3. Radio

The respondents were asked the frequency of listening in a week to four different farm programmes, broadcasted from All India Radio Station, Thiruvananthapuram in the local language namely, (a) Vayalum veedum (farm and home), (b) Karshakarkulla Ariyippukal (information to farmers), (c) Karshika Mekhala Varthakal (agricultural news), and (d) Kalavastha suchana and ariyippukal (agricultural weather information and marketing). The responses were rated on 4 point rating scale like 'quite frequently', 'frequently', 'sometimes', and 'never' with corresponding scores of 2, 1, 1/2 and 0 except in the case of agricultural weather information and marketing

information where the score were 1, 1, 1/2 and 0.

4. Agro-utility service centers

The respondents were asked their number of visits during an year (1990-'91) to (a) market, (b) co-operatives, (c) fertilizers/seed stores, (d) commercial agencies of insecticides/pesticides, on a 4-point rating scale viz., 'quite frequently' (5 times and above), 'frequently' (3 to 4 times), 'sometimes' (1 to 2 times) and 'never' (0) with corresponding scores of 3, 2, 1 and 0.

5. Extension Agency Contact

The respondents were asked about the number of contacts made by them, during an year (1990-'91) for getting information on agriculture with (a) agricultural assistants, (b) agricultural officer, (c) Assistant director of agriculture and (d) K.A.U. Scientists on a 4-point rating scale ie., 'quite frequently', 'frequently', 'sometimes' and 'never' with corresponding scores like 6, 4, 2 and 0 except in the case of Assistant director of agriculture (A.D.A)

where the scores were 4, 2, 1 and 0.

6. Web-of-word-of-mouth

The respondents were asked about the frequency of discussions in a month on agricultural subjects with (a) family members, (b) friends and relatives, (c) neighbours, (d) fellow cultivators and (e) farmers outside village on a 4-point rating scale 'quite frequently' (17 and above), 'frequently' (9-16), 'sometimes' (1-8) and 'never' with corresponding scores 4, 2, 1 and 0.

7. Agricultural extension training programme

The respondents were asked the number of extension training courses/camps they attended during the year 1990-'91 on a 4-point rating scale ie. (a) 'none', (b) 1-2, (c) 3-4, (d) 5 and above with the corresponding scores 0, 2, 4 and 7.

By adding the scores obtained in each category the total Inward Exposure Score was found.; based on the formula $\text{mean} \pm 1.96 \text{ S.E. (mean)}$, the respondents were classified into

low, medium and high level of Inward Exposure.

3.4.1.2 Outward Exposure

In this study, outward exposure refers to the exposure of the farm women with information sources through which they pass on information on improved agricultural practices to others.

The measurement of different variables on outward exposure are described below:

The respondents were asked the frequency of talks in a month on improved agricultural practices with (a) family members, (b) friends/relatives, (c) neighbours, (d) fellow cultivators and (e) farmers outside village on a 4-point rating scale ie. 'quite frequently' (17 and above), 'frequently' (9-16), 'sometimes' (1-15) and never (0) with the corresponding scores 4, 2, 1 and 0.

The scores obtained by the respondent on all these categories were added to find the total Outward Exposure Score. Based on the formula $\text{mean} \pm 1.96 \text{ S.E. (mean)}$, the respondents were classified into low, medium and high level of Outward Exposure.

Computation of scores for Communication Behaviour

The scores for Communication Behaviour of the farm women respondents were obtained by adding the scores of each respondent in Inward Exposure and Outward Exposure.

$$\begin{array}{rcc} \text{Communication Behaviour} & = & \text{Inward Exposure} + \text{Outward Exposure} \\ \text{(score)} & & \text{(score)} \quad \quad \quad \text{(score)} \end{array}$$

The respondents were categorized into 'low', 'medium' and 'high' levels of Communication Behaviour based on the formula $\text{mean} \pm 1.96 \text{ S.E. (mean)}$.

3.4.2 Measurement of the Independent Variables

The independent variables included in the study to test their relationship with the Communication Behaviour of women, heading farm families were:

- 3.4.2.1 Age
- 3.4.2.2 Education
- 3.4.2.3 Farm size
- 3.4.2.4 Social Participation
- 3.4.2.5 Cosmopolitaness

- 3.4.2.6 Management Orientation
 - 3.4.2.7 Scientific Orientation
 - 3.4.2.8 Level of Aspiration
 - 3.4.2.9 Adoption of Improved Agricultural Practices in Paddy/Coconut
 - 3.4.2.10 Knowledge about Improved Agricultural Practices in Paddy/Coconut
- 3.4.2.1 Age

Age was measured as the number of years the women respondent has completed at the time of interview since her date of birth.

The respondents were classified into three groups, viz., young, middle age and old as per Census of India, 1991.

Serial Number	Category of farm women	Age
1	Young	Below 35 years
2	Middle age	35-50 years
3	Old	Above 50 years

3.4.2.2 Education

Education was measured by assigning scores for different educational level as per scoring system followed in S.E.S. scale of Trivedi (1963).

Serial Number	Level of Education	Score
1	Illiterate	0
2	Can read only	1
3	Can read and write (or adult education center certificate holder)	2
4	Primary school level	3
5	Middle school level	4
6	High school level	5
7	Graduate level	6
8	Above	7

The respondents were further classified as low, medium and high in education by combining the first three levels as low (0-2), second three as medium (3-5) and the last two levels as high (6-7) for interpretation.

3.4.2.3 Farm size

Farm size was measured in land units. The area of paddy/coconut lands possessed and cultivated by the respondents was taken as an index of measure for farm size. The range of farm size of respondents was from 0.08 ha-0.8 ha in case of paddy cultivators and 0.04 ha to 2 ha in the case of coconut cultivators.

Cheriyian (1984) and Sherief (1985) classified non-contact farmers in accordance to their farm size as marginal (below 0.4 ha), small (0.4-1.2 ha), and medium (above 1.2 ha).

In the present study also, the above classification was made use of.

Serial Number	Category of farmers	Area
1	Marginal	Below 0.4 ha
2	Small	0.4-1.2 ha
3	Medium	Above 1.2 ha

3.4.2.4 Social Participation

The social participation scores were calculated as per the scoring system followed in the S.E.S. scale of Trivedi (1963) which was used by Murthy and Singh (1974), Babu (1981), Kareem (1984), Sherief (1985) and Subramoniam (1986).

The respondents were asked whether they had 'membership in one organisation', 'membership in more than one organisation, 'office holder' or had any 'distinctive features (MLA, MP etc.)'. The corresponding scores given were 1, 2, 3 and 6. The non-members were given '0' score.

The respondents were classified into 3 categories based on the formula $(\text{mean} \pm 1.96 \text{ S.E. (mean)})$ as low, medium and high level of social participation.

3.4.2.5 Cosmopolitaness

The cosmopolite farm woman is likely to be an unique individual in that she is motivated to look beyond her environment when most others are content to maintain a localistic frame of reference. Cosmopolitaness was measured by using the scale developed by Desai (1981) along the following two dimensions:

1. Frequency of visit to the nearest town in a month

Serial Number	Frequency of visit	Score
1	Twice or more a week	5
2	Once a week	4
3	Once a fortnight	3
4	Once a month	2
5	Very rarely	1
6	Never	0

ii. Purpose of visits to the town in a month

Serial Number	Purpose of visit	Score
1	All visits relating to agriculture	5
2	Some relating to agriculture	4
3	Personal or domestic matters	3
4	Entertainment	2
5	Any other purpose	1
6	No response	0

The total score of cosmopolitanism for each respondent was found by adding the scores of the above two dimensions of cosmopolitanism. Based on the formula $\text{mean} \pm 1.96 \text{ SE (mean)}$, the respondent women were classified into three groups as low, medium and high.

3.4.2.5 Management Orientation

Management Orientation emphasises systematisation of production and marketing of enterprises.

Management Orientation was measured using the scale developed by Samantha (1977), which was followed by Kareem (1984) to measure the relationship between management orientation and Communication Behaviour of contact farmers. The scale consisted of 18 statements, six statements each for planning, production and marketing orientation. In each group, positive and negative statements were mixed retaining at the same time, a more or less psychological order of the statements. The respondents were asked to state their agreement or disagreement to each of the statements and scores of 1 and 0 were assigned respectively considering whether the statement is positive or negative. Scores for each respondent was obtained by summation of the scores for all the 18 statements. The respondents were classified into three categories of low, medium and high management orientation based on the formula $\text{mean} \pm 1.96 \text{ SE (mean)}$.

3.4.2.7 Scientific Orientation

Scientific agriculture has contributed well to the advance in production. Scientific orientation was measured using the scale developed by supe (1969) modified by Kareem

(1984) to measure its relation to the communication behaviour of contact farmers.

The scale consisted of statements which were either positive or negative. The respondents were asked to indicate their agreement or disagreement to the statements. Scores of 1 and 0 were given for 'agree' and 'disagree' respectively for positive items and scores of 0 and 1 were given for 'agree' and 'disagree' respectively for negative statements. The scientific orientation score for each individual was obtained by adding the scores corresponding to each response pattern.

Based on mean ± 1.96 SE (mean), the respondents were classified into low, medium and high level of scientific orientation.

3.4.2.8 Level of Aspiration

Level of Aspiration in the study relates to the possible goal the farm woman respondent sets herself in her performance in the coming three years from the time of the study.

Chattopadhyay (1963) used a semi structured

projective technique to measure the level of aspiration of farmers.

In this study level of aspiration was measured using the scale developed by Muthayya (1971). The main areas included in this scale were education and occupation to their children or grand children, income, landholding, crop produce, type of house, agricultural implements, furniture and material possession, general contentment, possession of livestock and other home reared animals and shelter for livestock.

In the interview schedule there were 12 statements to measure the level of aspiration, with three alternatives provided for each item. Relative weights of 1, 2, 3 were assigned for the three alternatives. The scores obtained for each item were added to get the total level of aspiration score. These respondents were grouped into three categories of low, medium and high level of aspiration based on the formula $\text{mean} \pm 1.96 \text{ SE (mean)}$.

3.4.2.9 Adoption of Improved Agricultural Practices in Paddy/Coconut

Selection of messages to measure adoption

Paddy and coconut form two major crops of Kerala, and the available statistics show a decreasing trend in areas and production of these crops. Taking into consideration the various factors in promoting paddy cultivation, it is necessary that the farming population understand and act upon the messages communicated to them. With the introduction of group farming in paddy and group management in coconut, improvement is expected with rapidity. It is necessary to understand whether the neglected section of the farming community namely the women also keep pace with technology advancement. Therefore, a list of 14 improved agricultural practices (IAP) in paddy and 20 IAP in coconut were selected after reviewing the package of practices recommendations of Kerala Agricultural University (1991) and fortnightly messages communicated to the farmers in the study area from the Agriculture Subdivision Office, Neyyattinkara. The list of practices was

given to judges for rating. The practices selected finally include (i) selection of suitable variety, (ii) nursery preparation (iii) plant protection measures and (ix) fertilizer application for paddy and (i) organic manure application (ii) fertilizer application (iii) plant protection and (iv) intercropping for coconut.

Chattopadhyay (1963) constructed "Adoption Quotient" to measure farm practices adopted. He took into consideration the different variables like potentiality, extent, weightages and time in developing the Adoption Quotient.

$$AQ = \frac{\sum_{j=1}^N Y_j W_j}{N} \times 100$$

where

$$Y_j = \frac{t_p - t_i (e_j/P_j)}{t_p - t_i}$$

N = Number of practices which the individual has the potentiality to adopt

W_j = Weightage to be given to jth practice based on its

difficulty of adoption determined from a list of differential weights of practice.

$\sum_{t=ti}^{tp} ti$ = Summation over each season from t_i to t_p

t_p = Time of investigation

t_i = Time of introduction of j th practice

e_j = Extent of adoption of any particular (j th) practice in a particular season

p_j = Potentiality of any particular (j th) practice in that season

Jaiswal and Dave (1972) measured the extent of adoption as follows:

$$\text{Extent of adoption} = \frac{\frac{e_1}{p_1} + \frac{e_2}{p_2} + \dots + \frac{e_n}{p_n}}{N} \times 100$$

where

$$\frac{e_1}{p_1} = \frac{\text{extent of adoption of a practice}}{\text{potentiality of adoption of that practice}}$$

N = Total number of practices applicable to the respondent

Viju (1985) developed an adoption scale on the basis of the composite score of single practices which were

logically consistent. He selected five practices in tapioca and scores were given to individual items on the basis of the response of the tribal farmer respondent to the questions as to whether he had adopted a practice or not (1 and 0 respectively).

Adoption of Improved Agricultural Practices in paddy and coconut were measured using the extent of adoption scale according to Jaiswal and Dave (1972).

Extent of adoption of a practice refers to the degree to which a farm woman respondent has actually adopted a practice.

Potentiality of adoption of practice refers to the maximum degree to which a farm woman can extent her adoption, if she so wishes, depending on the maximum utilization of the resources she commands or can command.

The adoption of each respondent was calculated using the formula:

$$EP = \frac{\frac{e1}{p1} + \frac{e2}{p2} + \frac{e3}{p3} + \frac{e4}{p4}}{4} \times 100$$

where EP = Extent of Adoption.

e1 = extent of adoption of the 1st practice viz., 'selection of variety' in paddy or 'organic manure application' in coconut.

p1 = potentiality of adoption of the above practice.

e2 = extent of adoption of the 2nd practice, viz., 'nursery preparation' in case of paddy or 'fertilizer application' in case of coconut.

p2 = potentiality of adoption of the above practice.

e3 = extent of adoption of the 3rd practice, viz., 'fertilizer application' in paddy or 'plant protection' in coconut.

p3 = potentiality of adoption of the above practice.

e4 = extent of adoption of the 4th practice, viz., 'plant protection measures' in paddy or 'intercropping' in coconut.

The respondents were categorised into low, medium and high level of adoption categories based on the formula $\text{mean} \pm 1.96 \text{ SE (mean)}$.

3.4.2.10 Knowledge about Improved Agricultural Practices in Paddy/Coconut

Knowledge is that part of a person's information which is in accord with established fact (English and English, 1958).

The 'teacher-made test' described by Remmers et. al. (1967) consisted of simple question items and constant alternative items (True-False).

Singh and Singh (1974) developed a knowledge test based on the response of the farmers to questions in various aspects of wheat cultivation. The total score of each respondent was calculated by the formula.

$$\frac{x_i}{n} \times 100$$

where x_i = number of correct answers

n = total number of questions

Babu (1981) used a knowledge scale with 52 items to measure the knowledge about some recommended practices and assigned scores of 0 and 1 for 'wrong answer' or 'do not

ow' and 'right answer' respectively.

Viju (1985) developed a knowledge test with 14 items on tapioca cultivation with dichotomous questions correct/incorrect and yes/no types.

In the present study, the measurement of the respondents knowledge was related to some of the recommended practices in paddy & coconut included in the fortnightly sages communicated by the State Department of Agriculture. Hence the term knowledge in the present study refers to a body of understood information regarding approved agricultural practices in paddy or coconut. Knowledge of farm woman was measured using the knowledge test developed for the study. In all, 10 items each were included for paddy and coconut referring to the fortnightly sages communicated and in consultation with experts. The questions were open ended and a score of '1' was given for right answer and '0' for the wrong answer. Thus the maximum score one respondent could get was 10 and the minimum score

Based on the formula $\text{mean} \pm 1.96 \text{ SE (mean)}$ the knowledge level of respondents were classified into low, medium and high.

3.5 Statistical tools used

The statistical tools employed in the study are detailed as follows:

3.5.1 Simple correlation analysis

Correlation coefficient is a measure of the association between two or more variables. Correlation coefficient was worked out to test the relationship between the selected dependent and independent variables.

3.5.2 Mann-Whitney 'U'-test to test the significance of difference between farm women in paddy cultivation and farm women in coconut cultivation

Mann-Whitney 'U'-test is a non-parametric statistical test to test whether two groups or samples are from the same population or not. When the measurement is in the ordinal scale, this is a powerful non-parametric test, corresponding to 't'-test in the parametric case. Mann-Whitney 'U' test is available for samples of size less than

8, between 9 and 20 and more than 20. In the present study the sample size is above 20, that is, 50 each from paddy cultivators and coconut cultivators.

$$U = \frac{n_1 n_2}{2}$$

The test criterion, $Z = \frac{U - \frac{n_1 n_2}{2}}{\sqrt{\frac{n_1 n_2 (n_1 + n_2 + 1)}{12}}}$

where U, the statistic = $n_1 n_2 + \frac{n_1(n_1+1)}{2} - T_1$

or

$$n_1 n_2 + \frac{n_2(n_2+1)}{2} - T_2$$

n_1 = size of the first sample

n_2 = size of the second sample

T_1 = sum of the ranks of first sample

T_2 = sum of the ranks of second sample

If the calculated 'Z' value is greater than 1.96 we conclude that the samples differ significantly and vice versa, at 5 per cent level of significance. The calculated value is compared with 2.58 at 1 per cent level of significance.

3.5.3 Path analysis .

Correlation studies in conjunction with path coefficient analysis will give a better picture of cause and effect relationship existing between pairs of variables. The technique of path coefficient analysis involves a method of partitioning of the total correlation between the dependent variable and the independent component variable into direct effect of independent variable and its indirect effect via third variable on dependent variable.

Path coefficient can be defined as the ratio of the standard deviation of the effect due to a given cause to the total standard deviation of the effect, that is, if y is the effect and x_1 is the cause, the path coefficient for the path from cause x_1 to effect y is x_1/y .

Path analysis was carried out in the case of all independent variables to study their effect on communication behaviour.

3.5.4 Percentage Analysis

Percentage analysis was carried out in the case of

the dependent variable, Communication Behaviour, its sub-dimensions Inward Exposure and Outward Exposure and all the independent variables in case of women in both paddy and coconut cultivation.

RESULTS

IV. RESULTS

The results of the study in accordance with the objectives are presented in this chapter in the following lines.

- 4.1 Inward exposure of women, heading farm families
- 4.2 Outward exposure of women, heading farm families
- 4.3 Overall Communication Behaviour of women, heading farm families
- 4.4 Significance of difference between farm women, cultivating paddy and coconut with regard to their Inward exposure, Outward exposure and Communication Behaviour
- 4.5 Significance of difference between farm women cultivating paddy and coconut with regard to the selected independent variables
- 4.6 Characteristics profile of women, heading farm families
- 4.7 Relationship between Communication Behaviour and the selected independent variables
- 4.8 Direct and indirect effects of independent variables on the Communication Behaviour of women, heading farm families

Fig.3. Distribution of farm women in paddy cultivation according to their Inward Exposure

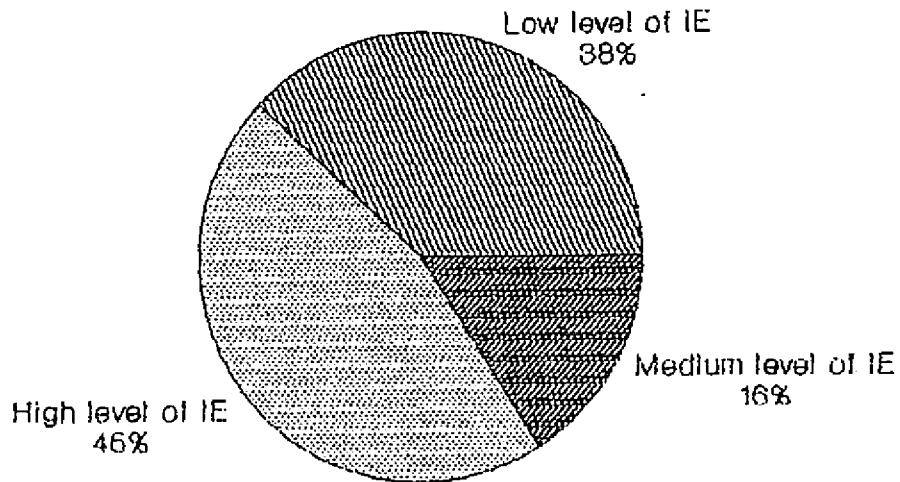
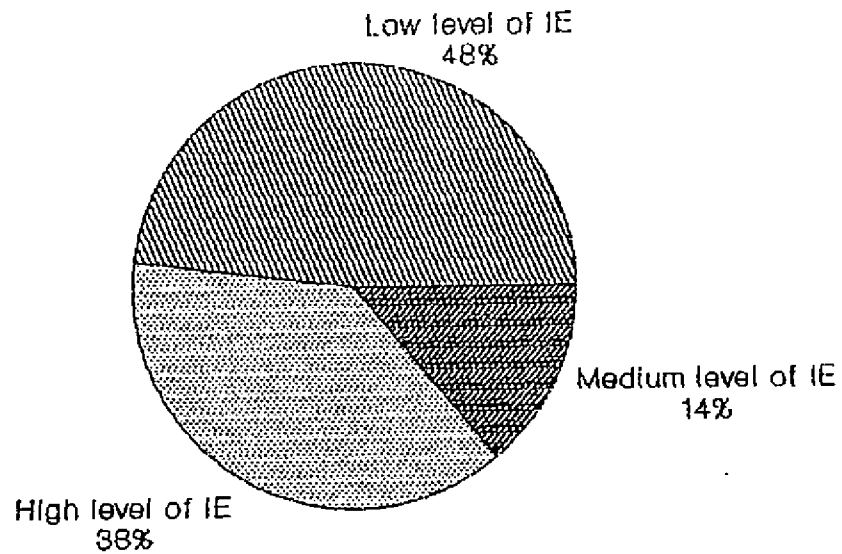


Fig.4. Distribution of farm women in coconut cultivation according to their Inward Exposure



4.1 Inward Exposure of women, heading farm families

The results on the Inward Exposure of women, heading farm families in paddy and coconut cultivation are presented in Table 3 and diagrammatically represented in Fig. 3 and 4.

Table 3 Distribution of Farm women according to their Inward Exposure

Sl. No.	Level of Inward Exposure	Farm women					
		Paddy cultivation n=50			Coconut cultivation n=50		
		Score range	No.	%	Score range	No.	%
1	Low	< 25	19	38	< 26	24	48
2	Medium	25-30	8	16	26-32	7	14
3	High	> 30	23	46	> 32	19	38
Total			50	100		50	100

It is seen from the table that among farm women, nearly half of them (46%) had high level of Inward Exposure followed by 38 percent with low level of Inward Exposure with reference to paddy cultivation. The remaining 16 per cent had medium level of Inward Exposure. In the case of coconut cultivation nearly half of the farm women (48%) had low level of Inward Exposure, followed by 38 per cent of farm women with high Inward Exposure and then 14 per cent with medium level of Inward Exposure. Hence it is in that the farm women had high level of Inward Exposure respect to paddy cultivation where as farm woman ha level of Inward Exposure with respect to c cultivation.

4.2 Outward Exposure of women, heading farm families

The distribution of farm women, according to Inward Exposure is presented in Table 4 and illustrate Fig.5 and 6.

Fig.5. Distribution of farm women in paddy cultivation according to their Outward Exposure

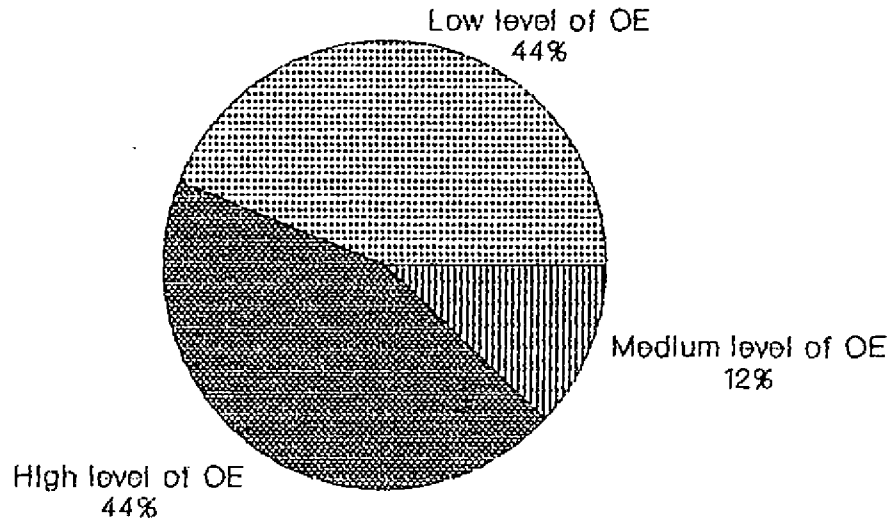


Fig.6. Distribution of farm women in coconut cultivation according to their Outward Exposure

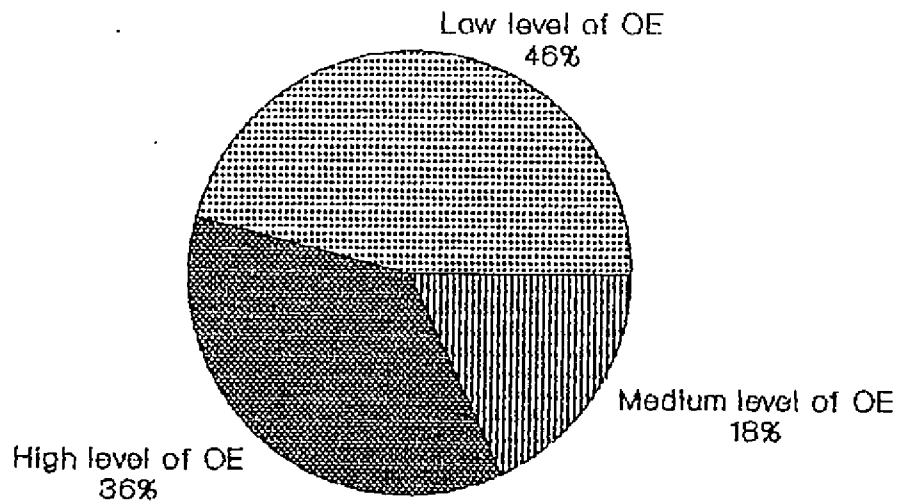


Table 4 Distribution of Farm women according to their Outward Exposure

Sl. No.	Level of Outward Exposure	Farm women					
		Paddy cultivation n=50			Coconut cultivation n=50		
		Score range	No.	%	Score range	No.	%
1	Low	< 7	22	44	< 7	23	46
2	Medium	7-9	6	12	7-9	9	18
3	High	> 9	22	44	> 9	18	36
	Total		50	100		50	100

The results presented in Table 4 indicated that while 44 per cent of farm women cultivating paddy had high level of Outward Exposure and low level of Outward Exposure in paddy cultivation. The remaining 12 per cent had medium level of Outward Exposure.

Nearly half of the farm women (46%) had low level of Outward Exposure followed by 36 per cent with high level and 18 per cent with medium level of Outward Exposure with regard to coconut cultivation.

It can be inferred from the results that the farm

Fig.7a. Distribution of farm women in paddy cultivation according to their Overall Communication Behaviour

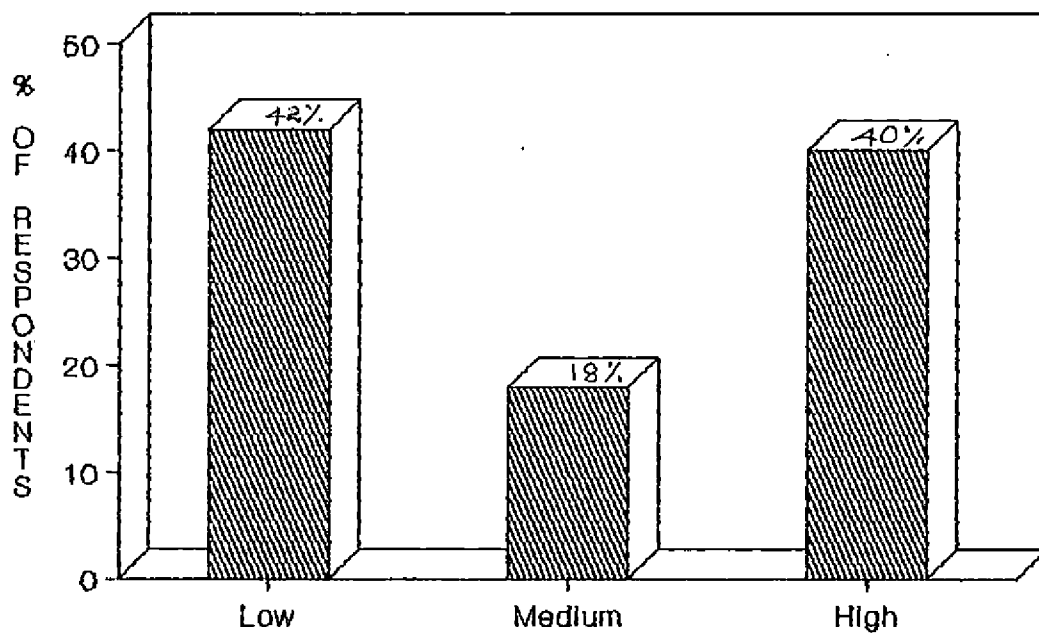
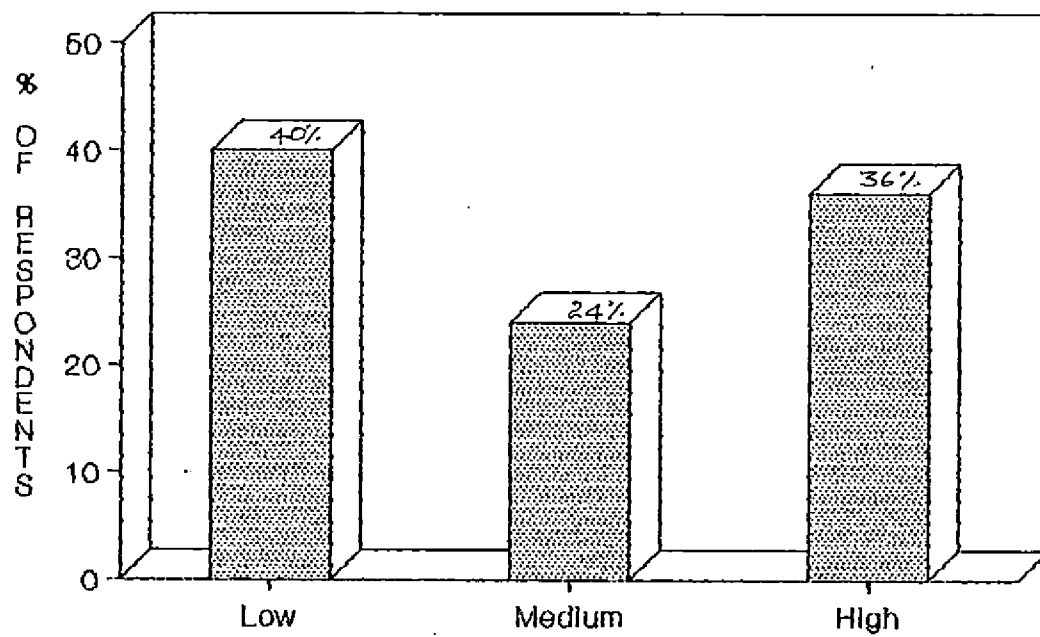


Fig.7b. Distribution of farm women in coconut cultivation according to their Overall Communication Behaviour



women were distributed equally in the low and high level of Outward Exposure categories with regard to paddy cultivation while the farm women in coconut cultivation had low level of Outward Exposure.

4.3 Overall Communication Behaviour of the women, heading farm families

The results on the overall Communication Behaviour of the farm women are presented in Table 5 and graphically represented in Fig. 7a and 7b

Table 5 Overall Communication Behaviour of women, heading farm families

Sl. No.	Level of Communication Behaviour	Farm women					
		Paddy cultivation n=50			Coconut cultivation n=50		
		Score range	No.	%	Score range	No.	%
1	Low	< 33	21	42	< 31	20	40
2	Medium	33-40	9	18	31-40	12	24
3	High	> 40	20	40	> 40	18	36
	Total		50	100		50	100

The data in Table 5 revealed that 42 per cent of farm women in paddy cultivation had low Communication Behaviour followed by 40 per cent under high level of Communication Behaviour category and the remaining 18 per cent with medium level of Communication Behaviour.

Majority of the farm women (40%) had low Communication Behaviour followed by 36 per cent of farm women with high Communication Behaviour with regard to coconut cultivation. In the medium level of Communication Behaviour, there were 24 per cent of the farm women.

Hence, it can be inferred that majority of farm women engaged in paddy as well as coconut cultivation had low level of Communication Behaviour.

4.4 Significance of difference between paddy and coconut farm women with regard to Inward Exposure, Outward Exposure and Communication Behaviour

The 'Z' values worked out to find the significant difference between farm women cultivating paddy and coconut with regard to Inward Exposure, Outward Exposure and Communication Behaviour is presented in Table 6.

Table 6 Results of Mann-Whitney 'U' test with respect to Inward Exposure, Outward Exposure and Communication Behaviour

Sl. No.	Variable	Mean Score Farm Women		Mann Whitney 'U' test
		Paddy cultivation	Coconut cultivation	
1	Inward Exposure	28.7	27.54	0.613 ^{ns}
2	Outward Exposure	7.98	8.04	0.0093 ^{ns}
3	Communication Behaviour	36.68	35.56	0.5205 ^{ns}

ns-not significant

From Table 6, it is seen that there was no significant difference between farm women in paddy cultivation and coconut cultivation with regard to their Inward Exposure, Outward Exposure and Communication Behaviour. The average score for both the sets of women were nearly equal. Hence it is inferred that farm women in paddy and coconut cultivation had equal level of Inward Exposure, Outward Exposure and Communication Behaviour.

4.5 Significance of difference between farm women cultivating paddy and coconut with respect to the independent variables

In Table 7 'Z' values of the Mann-Whitney 'U' test conducted to find the significance of difference between farm women cultivating paddy and coconut are presented.

The Mann-Whitney 'U' test revealed no significant difference between the 2 sets of farm women with respect to their characteristics.

Table 7 Results of Mann-Whitney 'U' test with respect to the independent variables

Sl. No.	Characteristics	Mean score Farm Women		Mann Whitney 'U' test
		Paddy cultivation	Coconut cultivation	
1	Age (in completed years)	46	46	0.0689 ^{ns}
2	Eduction	4.14	4.2	0.5412 ^{ns}
3	Farm size	49.46	82.78	0.6997 ^{ns}
4	Social participation	1.16	0.92	1.4684 ^{ns}
5	Cosmopoliteness	6.82	7.32	1.6511 ^{ns}

cent farm women with low level of education and finally 12 per cent with high education level. It is inferred that more than two third of them had education up to the high school level.

A large majority of the farm women (92%) were marginal holders and the remaining had small sized holding. It is inferred that the farm women were mostly marginal holders with farm size below 0.4 ha.

Table 8 Characteristic profile of farm women in paddy cultivation

n=50

Sl. No.	Characteristics	Mean score	Category					
1	Age (in completed years)	46	Young below 35 years		Middle aged 35-50 years		Old above 50 years	
			No.	%	No.	%	No.	%
2	Education	4.14	Low		Medium		High	
			No.	%	No.	%	No.	%
3	Farm size	49.46	Marginal		Small		Medium	
			No.	%	No.	%	No.	%
			5	10	25	50	20	40
			8	16	35	70	6	12
			46	92	4	8	0	0

4.5 Significance of difference between farm women cultivating paddy and coconut with respect to the independent variables

In Table 7 'Z' values of the Mann-Whitney 'U' test conducted to find the significance of difference between farm women cultivating paddy and coconut are presented.

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Sl. No.	Characteristics	Mean score FARM WOMEN		Mann Whitney 'U' test
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2	Education	4.14	4.2	0.5412 ^{ns}
3	Farm size	49.46	82.78	0.6997 ^{ns}
4	Social participation	1.16	0.92	1.4684 ^{ns}
5	Cosmopolitaness	6.82	7.32	1.6511 ^{ns}

6	Management orientation	12.8	12.18	0.7411	ns
7	Scientific orientation	4.72	4.58	0.6136	ns
8	Level of aspiration	23.56	22.24	1.4891	ns
9	Adoption of improved agricultural practices	74.86	63.86	1.7062	ns
10	Knowledge about improved agricultural practices	6.88	6.54	0.8315	ns

ns—not significant

4.6 Characteristic, Profile of Women, heading farm families

The results on the analysis of characteristic profile of women, heading farm families is presented in Table 8 with regard to farm women in paddy cultivation and in Table 9 with regard to farm women in coconut cultivation.

From Table 8, it is understood that majority of the farm women in paddy cultivation (50%) were middle aged, followed by old (40%) and young farm women (10%). Hence it is inferred that most of the farm women in paddy cultivation were middle aged.

With regard to education majority of the farm women (70%) had medium level of education followed by 16 per

cent farm women with low level of education and finally 12 per cent with high education level. It is inferred that more than two third of them had education up to the high school level.

A large majority of the farm women (92%) were marginal holders and the remaining had small sized holding. It is inferred that the farm women were mostly marginal holders with farm size below 0.4 ha.

Table 8 Characteristic profile of farm women in paddy cultivation

n=50

Sl. No.	Characteristics	Mean score	Category					
			Young below 35 years		Middle aged 35-50 years		Old above 50 years	
			No.	%	No.	%	No.	%
1	Age (in completed years)	46	5	10	25	50	20	40
			Low		Medium		High	
			No.	%	No.	%	No.	%
2	Education	4.14	8	16	35	70	6	12
			Marginal		Small		Medium	
			No.	%	No.	%	No.	%
3	Farm size	49.46	46	92	4	8	0	0

			Low		Medium		High	
			No.	%	No.	%	No.	%
4	Social participation	1.16	14	28	17	34	19	38
5	Cosmopolitaness	6.82	19	38	10	20	21	42
6	Management orientation	12.8	20	40	6	12	24	48
7	Scientific orientation	4.72	22	44	4	8	24	48
8	Level of aspiration	23.56	21	42	12	24	17	34
9	Adoption of improved agri. practices in paddy	74.86	20	40	8	16	22	44
10	Knowledge about improved agri. practices in paddy	6.88	20	40	9	18	21	42

Regarding social participation, it is seen that 38 per cent farm women were having high level of social participation followed by 34 per cent with medium level of social participation and the remaining 28 per cent with low

level of social participation. It is inferred that more than 1/3rd of them had high level of social participation.

From the table it is observed that, majority of the farm women (42%) had high level of cosmopolitaness. Of the remaining, 38 per cent had low level of cosmopolitaness and 20 per cent had medium level of cosmopolitaness. Hence it is inferred that most of them had high level of cosmopolitaness.

Nearly half of the farm women (48%) had a high level of management orientation followed by 40 per cent of the farm women with low level of management orientation and 12 per cent with medium level of management orientation. Hence, it is inferred that majority of them had high level of management orientation.

It is clear from the table that majority of farm women (40%) had high level of scientific orientation followed by low and medium level of scientific orientation (44 per cent and 8 per cent respectively). It is inferred that nearly half of them had high level of scientific orientation.

Majority of the farm women (42%) had a low level of aspiration followed by 34 per cent under high level of

aspiration category. The remaining 24 per cent of the farm women had medium level of aspiration. So it is inferred that most of them had low level of aspiration.

With regard to the adoption of improved agricultural practices in paddy, 44 per cent of the farm women were high level adopters followed by low and medium level adopters with 40 per cent and 16 per cent respectively. So it is inferred that majority of the farm women were high level adopters of improved agricultural practices in paddy.

Regarding knowledge about improved agricultural practices in paddy, it is seen from the table that 42 per cent of farm women had high level of knowledge about improved agricultural practices in paddy, closely followed by 40 per cent with low level of knowledge and then 18 per cent had medium level of knowledge about improved agricultural practices. So it is inferred that more than two fifth of the farm women had high level of knowledge about improved agricultural practices in paddy.

From Table 9, it is understood that majority of the women (42%) were middle aged, followed by old (40%) and young (18%). Hence, it is inferred that most of the farm

women in coconut cultivation were middle aged.

With regard to education majority of the farm women (74%) had medium level of education followed by 14 per cent with low level of education and 12 per cent with high level of education. Hence it is inferred that most of the farm women in coconut cultivation had medium level of education.

A majority of the farm women (84%) were marginal holders followed by 10 per cent with small farm size and 6 per cent with medium farm size. Hence, it is inferred that more than three fourth of the women cultivating coconut were marginal holders.

With regard to social participation of farm women cultivating coconut 40 per cent had medium level social participation, followed by 38 per cent with low level of social participation and 22 per cent with high level of social participation. Therefore, it can be inferred that majority of the farm women cultivating coconut had medium level of social participation.

It is seen from the table that half of the farm women (50%) had high level of cosmopolitaness, followed by 28 per cent with low level of cosmopolitaness and 22 per

Table 9 Characteristic profile of farm women in coconut cultivation n=50

Sl. No.	Characteristics	Mean score	Category					
			Young below 35 years		Middle aged 35-50 years		Old above 50 years	
			No.	%	No.	%	No.	%
1	Age (in completed years)	46	9	18	21	42	20	40
			Low		Medium		High	
			No.	%	No.	%	No.	%
2	Education	4.2	7	14	37	74	6	12
			Marginal		Small		Medium	
			No.	%	No.	%	No.	%
3	Farm size	82.78	42	84	5	10	3	6
			Low		Medium		High	
			No.	%	No.	%	No.	%
4	Social participation	0.92	19	38	20	40	11	22
5	Cosmopolitaness	7.34	14	28	11	22	25	50
6	Management orientation	12.18	20	40	11	22	19	38
7	Scientific orientation	4.58	22	44	-	-	28	56

8	Level of aspiration	22.24	24	48	5	10	21	42
9	Adoption of improved agrl. practices in paddy	63.86	22	44	5	10	23	46
10	Knowledge about improved agrl. practices in paddy	6.54	20	40	10	20	20	40

cent with medium level of cosmopolitaness. Hence, it can be inferred that majority of the farm women cultivating coconut had high level of cosmopolitaness.

Majority of the farm women (40%) had low level of management orientation followed by 38 per cent with high level of management orientation and 22 per cent with medium level of management orientation. Hence, it is inferred that the farm women cultivating coconut had low level of management orientation.

More than half of the farm women (56%) had a high level of Scientific Orientation. The remaining 44 per cent had a low level of scientific orientation. Hence, it can be inferred that the women cultivation coconut had a high level

of scientific orientation.

With regard to level of aspiration most of the respondents (48%) had low level of aspiration, followed by 42 per cent with high level of aspiration and 10 per cent with medium level of aspiration. Hence, it is inferred that majority of the farm women had a low level of aspiration.

Table 9 revealed that most of the farm women (46%) had high level adoption of improved agricultural practices in coconut followed by 44 per cent with low level of adoption of improved agricultural practices in coconut and 10 per cent with medium level of adoption of improved agricultural practices. Hence it is inferred that majority of the farm women had high level of adoption of improved agricultural practices in coconut.

With regard to knowledge about improved agricultural practices in coconut, 40 per cent had high level of knowledge and another 40 per cent had low level of knowledge. Medium level of knowledge about improved agricultural practices in coconut was noticed in 20 per cent of farm women. Hence, it can be inferred that the farm women, cultivating coconut were distributed equally in low and high level of knowledge about improved agricultural

practices in coconut.

4.7 Relationship between communication Behaviour and the independent variables

The results on the correlation analysis between the dependent variable Communication Behaviour and the independent variables are presented in Table 10 and graphically represented in Fig.8 and 9 for women cultivating paddy and coconut respectively.

The correlation co-efficients in Table 10 revealed that Communication Behaviour was negatively correlated with the age of the farm women and the correlation was significant at 5% level with regard to women in paddy cultivation and at 1% level with regard to women in coconut cultivation. In the case of all other independent variables, the correlation with Communication Behaviour was positive and highly significant at 1% level.

In the light of the above results, the null hypotheses formulated in the study that there would be no significant relationship between the different independent variables viz. age, education, farm size, social

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4.7 Relationship between communication Behaviour and the independent variables

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Fig.8. Profile characteristics of farm women in paddy cultivation

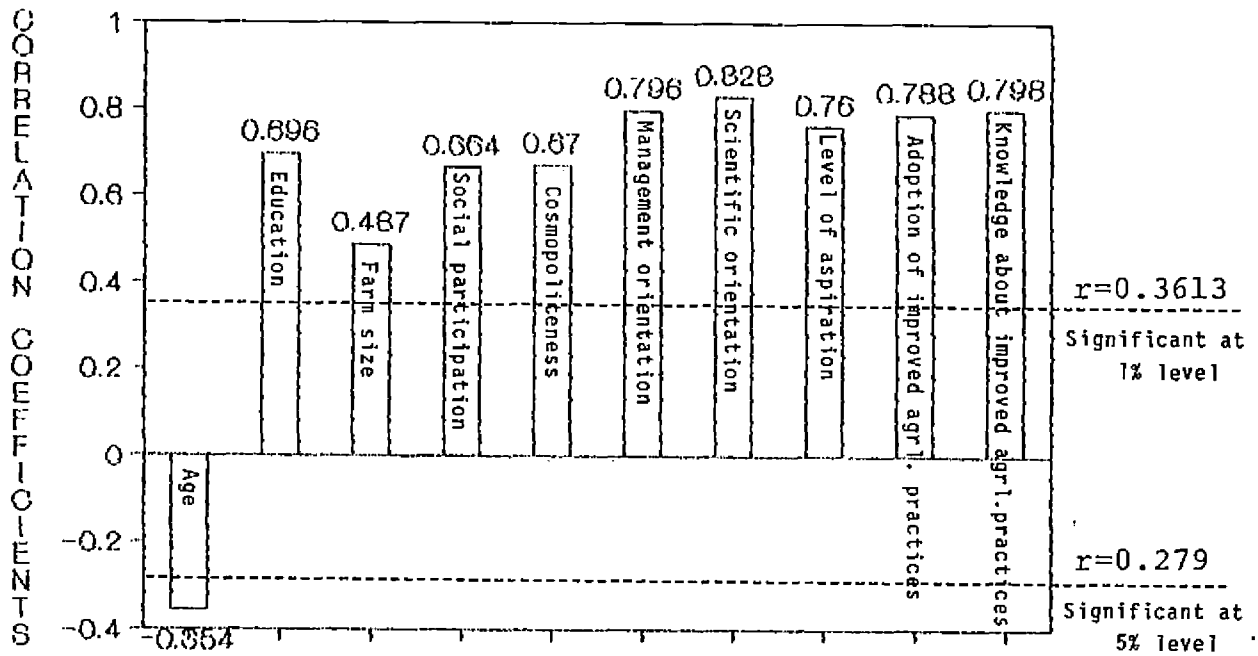


Fig.9. Profile characteristics of farm women in coconut cultivation

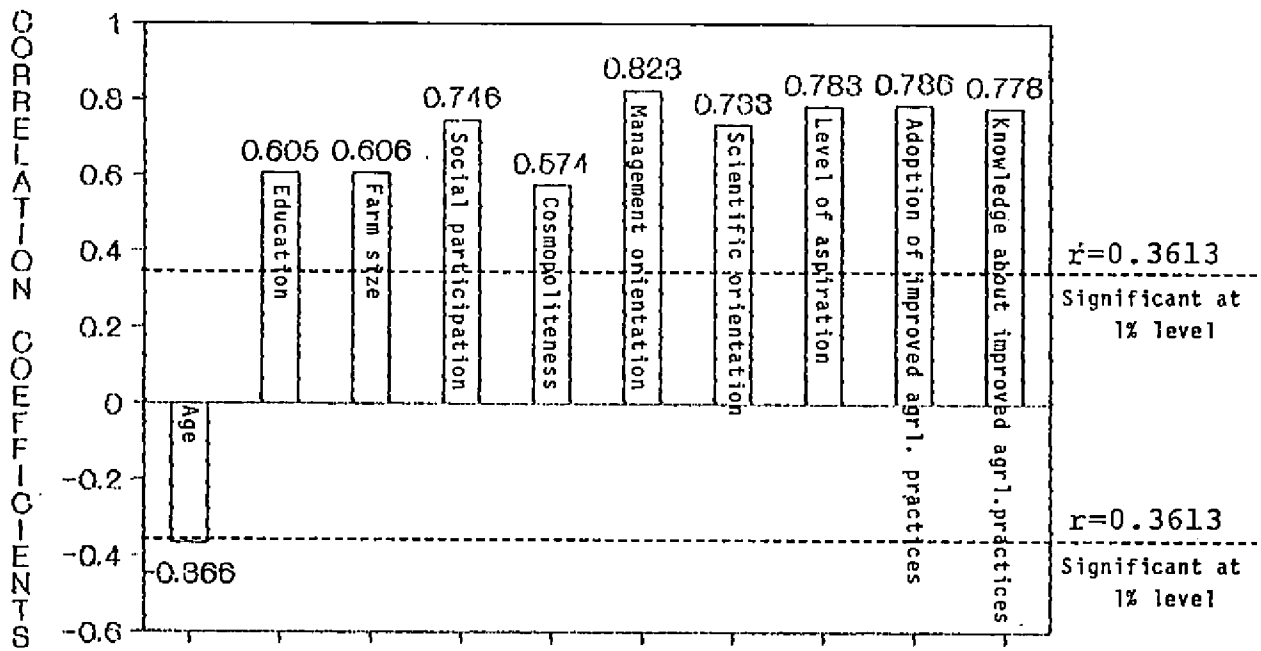


Table 10 Correlation of communication Behaviour with the independent variables

Serial Number	Independent variables	Correlation coefficient 'r' farm women	
		Paddy cultivation n=50	Coconut cultivation n=50
1	Age	-0.3544*	-0.3656**
2	Education	0.6956**	0.6052**
3	Farm size	0.4868**	0.6058**
4	Social participation	0.6641**	0.7460**
5	Cosmopolitaness	0.6700**	0.5737**
6	Management orientation	0.7959**	0.5136**
7	Scientific orientation	0.8278**	0.7329**
8	Level of aspiration	0.7598**	0.7832**
9	Adoption of improved agrl. practices	0.7882**	0.7863**
10	Knowledge about improved agrl. practices	0.7984**	0.7782**

* Significant at 5% level

** Significant at 1% level

participation, cosmopolitaness, management orientation, scientific orientation, level of aspiration, adoption of

improved agricultural practices and knowledge about improved agricultural practices, and the dependent variable Communication Behaviour of women, heading farm families, were rejected.

It can be concluded that Communication Behaviour of women, heading farm families is the function of the various characteristics of women namely their age, education, farm size, social participation, ^{cosmopolitaness, management orientation,} scientific orientation, level of aspiration, adoption of improved agricultural practices and knowledge about improved agricultural practices with respect to paddy and coconut cultivation.

4.8 Direct and indirect effects of the independent variables on the Communication Behaviour of women, heading farm families

The results of the correlation analysis showed that all the independent variables selected for the study were correlated with Communication Behaviour. These ten variables were considered for their direct and indirect

Table 11 Results of path analysis with respect to women cultivating paddy

Sl. No.	Variables	Direct effect	+ Indirect effect	- Indirect effect	Total correlation
1	Age (X) 1	+0.0864	+0.0311	-0.4719	-0.3544*
2	Education (X) 2	+0.1211	+0.6556	-0.0811	+0.6956**
3	Farm size (X) 3	-0.0077	+0.5308	-0.0363	+0.4868**
4	Social participation (X) 4	+0.0410	+0.7054	-0.0823	+0.6641**
5	Cosmopolitaness (X) 5	-0.0599	+0.7765	-0.0466	+0.6700**
6	Management orientation (X) 6	+0.1006	+0.7629	-0.0676	+0.7959**
7	Scientific orientation (X) 7	+0.2634	+0.6494	-0.0850	+0.8278**
8	Level of aspiration (X) 8	+0.2267	+0.5944	-0.0613	+0.7599**
9	Adoption of improved agricultural practices in paddy (X) 9	+0.0907	+0.7775	-0.0800	+0.7882**
10	Knowledge about improved agricultural practices in paddy (X) 10	+0.3253	+0.5587	-0.0856	+0.7984**

Residue = 0.40

* Significant at 5% level ** Significant at 1% level

effects on Communication Behaviour. The results of path analysis with regard to farm women cultivating paddy is presented in Table 11 and those with regard to farm women cultivating coconut is presented in Table 12. The data in detail is presented in Appendix II.

From Table 11, it is clear that the correlation between X_1 (age) and Y (Communication Behaviour) was negative and significant (-0.3544), but its direct effect was positive ($+0.0864$). The negative indirect effect of X_1 (age) via X_2 , X_4 , X_6 , X_7 , X_8 , X_9 and X_{10} resulted in this correlation. The maximum indirect effect was contributed through X_{10} knowledge about improved agricultural practices (-0.1356) followed by X_7 , scientific orientation (-0.1258).

Education and Communication Behaviour were positively correlated (0.6956) at 1 per cent level of significance. The direct effect of education on Communication Behaviour was positive ($+0.1211$). The total positive indirect effect (0.6556) compared to total negative direct effect (-0.0811) was high. The maximum indirect effect was contributed through X_{10} knowledge about improved agricultural practices (0.2117) followed by X_7 , scientific orientation (0.1781).

Though the Communication Behaviour of women cultivating paddy was positively correlated with farm size (+0.4868^{**}) and cosmopolitaness (+0.6700^{**}), their direct effects were negative (-0.0077 and -0.0599 respectively). The positive indirect effects of X₁ (farm size) and X₅ (cosmopolitaness) via X₂, X₄, X₆, X₇, X₈, X₉ and X₁₀ resulted in the positive correlations. The remaining variables were significantly correlated with Communication Behaviour at 1% level of significance. The direct effect of social participation on Communication Behaviour was positive (0.0410) and the positive indirect effects through knowledge about improved agricultural practices X₁₀ (0.1962) followed by X₇, scientific orientation (0.1822) resulted in the positive correlation (0.6641^{**}).

In the case of management orientation the direct effect was positive (0.1006) like the correlation coefficient (0.7958^{**}). The maximum positive indirect effect was through X₇, scientific orientation (0.2284) followed by X₁₀ knowledge about improved agricultural practices (0.2054).

The direct effect of scientific orientation (0.2634) on Communication Behaviour was positive, so also

the correlation co-efficient (0.8278^{**}). The maximum positive indirect effect through X₁₀, knowledge about improved agricultural practices (0.2273) followed by X₈, level of aspiration (0.1575) resulted in this correlation.

Level of aspiration was positively correlated with Communication Behaviour (0.7599^{**}) and its direct effect was also positive (0.2267). The positive indirect effect was maximum through X₁₀, knowledge about improved agricultural practices (0.1949) followed by X₇, scientific orientation (0.1830).

Positive correlation (0.7880^{**}) was noticed between adoption of improved agricultural practices and Communication Behaviour and the direct effect of X₉ (0.0907) on Communication Behaviour was positive. The correlation is the result of the positive indirect effects of other variables mainly X₁₀, knowledge about improved agricultural practices (0.2573) followed by X₇, scientific orientation (0.1949).

The direct effect of knowledge about improved agricultural practices in paddy (X₁₀), was positive (0.3253) like its correlation coefficient (0.7984^{**}). The maximum positive indirect effect was through X₇; scientific

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orientation (0.1840) followed by X₈ level of aspiration (0.1358). In the case of paddy cultivating farm women, the maximum direct effect on Communication Behaviour was exerted by knowledge about improved agricultural practices in paddy (+0.3253) followed by scientific orientation (+0.2634) and level of aspiration (+0.2267). Considering the indirect effect it is apparent from Table 11 that the largest positive indirect effect was exerted by 'adoption of improved agricultural practices (+0.7775) and the maximum negative indirect effect was due to age (-0.4719).

Sixty per cent of variation in Communication Behaviour of farm women in paddy cultivation may be contributed by the selected independent variables as evidenced from residue, the factor 0.40 or 40 per cent.

The results on path analysis in Table 12 represent the direct and indirect effects of the selected independent variables on Communication Behaviour of women in coconut cultivation.

The correlation between age and Communication Behaviour was negative and significant (-0.3656^{**}), but its direct effect was positive (+0.0377). The negative correlation was the result of the negative indirect effect

Table 12 Results of path analysis with respect to women cultivating coconut n=50

Sl. No.	Variables	Direct effect	+ Indirect effect	- Indirect effect	Total correlation
1	Age (X) 1	+0.0377	+0.0623	-0.4656	-0.3656**
2	Education (X) 2	+0.0681	+0.6571	-0.1200	+0.6052**
3	Farm size (X) 3	+0.3287	+0.3655	-0.0884	+0.6058**
4	Social participation (X) 4	+0.3602	+0.4873	-0.1015	+0.7460**
5	Cosmopolitaness (X) 5	+0.0057	+0.6820	-0.1140	+0.5737**
6	Management orientation (X) 6	+0.3125	+0.6238	-0.1228	+0.8135**
7	Scientific orientation (X) 7	+0.0622	+0.7937	-0.1231	+0.7329**
8	Level of aspiration (X) 8	+0.1436	+0.7715	-0.1319	+0.7832**
9	Adoption of improved agricultural practices in coconut (X) 9	+0.0663	+0.8563	-0.1363	+0.7863**
10	Knowledge about improved agricultural practices in coconut (X) 10	-0.1400	+0.9350	-0.0168	+0.7782**

Residue = 0.38

** Significant at 1% level

through $X_2, X_3, X_4, X_5, X_6, X_7, X_8$ and X_{10} . Likewise, the correlation between Communication Behaviour and knowledge about improved agricultural practices in coconut is positive (+0.7783) but its direct effect was negative (-0.1400). The positive indirect effect exerted by X_{10} , knowledge about improved agricultural practices in coconut through $X_2, X_3, X_4, X_5, X_6, X_7, X_8$ and X_9 resulted in this positive correlation.

The remaining other variables like education, farm size, social participation, cosmopolitaness, management orientation, scientific orientation, level of aspiration and adoption of improved agricultural practices exerted positive direct effect of Communication Behaviour and their correlation coefficients were also positive.

Positive direct effect on Communication Behaviour was exerted by other remaining variables namely X_2 , education (0.0681), X_3 , farm size (0.3287), X_4 , social participation (0.3602), X_5 , cosmopolitaness (0.0037), X_6 , management orientation (0.3125), X_7 , Scientific orientation (0.0622), X_8 , level of aspiration (0.1436) and X_9 , adoption of improved agricultural practices (0.0663) and all the above variables were positively correlated with

Communication Behaviour at 1% level of significance.

The indirect effect of education was exerted maximum through X₆, management orientation (0.2113) followed by X₄, Social participation (0.1766).

The positive indirect^{effect} of farm size through X₆, Management orientation (0.1276) followed by X₄, social participation (0.0875) resulted in the positive correlation between farm size and Communication Behaviour.

Social participation exerted positive indirect effect on Communication Behaviour mainly through X₆, management orientation (0.1977) followed by X₈, level of aspiration (0.0929).

The positive correlation between cosmopolitaness and Communication Behaviour was the result of the positive indirect effect of cosmopolitaness through X₄, social participation (0.2072) followed by X₆, management orientation (0.1925).

The indirect effect of management orientation was maximum via X₄, social participation (0.2280) followed by X₈, level of aspiration (0.1117).

The variables scientific orientation, level of aspiration and adoption of improved agricultural practices

exerted their indirect effects on Communication Behaviour mainly through X₆, management orientation (0.2495, 0.2431 and 0.2391) respectively followed by X₄, social participation (0.1985, 0.2331 and 0.2286 respectively).

The maximum direct effect on Communication Behaviour of farm women cultivating coconut was contributed by the variable social participation (+0.3602) followed by farm size (+0.3287) and management orientation (+0.3125).

Out of the ten independent variables, the largest positive indirect effect was exerted by knowledge about improved agricultural practices in coconut (+0.9350) and the maximum total negative indirect effect was due to age (-0.4656).

Sixty two per cent of variation in Communication Behaviour of farm women in coconut cultivation may be contributed to the selected ten independent variables as evidenced from residue, the factor 0.38 or 38 per cent.

DISCUSSION

V. DISCUSSION

A detailed discussion of the salient results of this study is presented in this chapter. The discussion is presented in the following lines.

- 5.1 Significance of difference between farm women cultivating paddy and those cultivating coconut with regard to the dependent and independent variables - Mann-Whitney 'U'-test.
 - 5.2 Characteristic profile of women, heading farm families.
 - 5.3 Results on the correlation analysis between the dependent and independent variables.
-
- 5.1 Significance of difference between farm women cultivating paddy and those cultivating coconut - Mann Whitney 'U'-test

The results of the Mann-whitney 'U'-test revealed that the women did not differ significantly in their Communication Behaviour and its sub-dimensions such as Inward Exposure and Outward Exposure. This may be due to the reason that being from a similar living background, their

access to information sources may be nearly similar; irrespective of the crops they cultivate.

With regard to independent variables, it was brought to focus that irrespective of the cultivated crops, the farm women did not differ significantly on various independent variables. This may be mainly due to the reason that the crop criterion alone could not have helped to induce difference on the characteristics of women. Both the type of women had almost similar background and characteristics as evidenced from tables 8 & 9.

5.2 Characteristic profile of women, heading farm families

The results revealed that more than half of the respondents cultivating either paddy or coconut were middle aged. The high concentration of farm women in the middle age and then the old age category may be because of the type of the women selected for the study, namely, women who were heads of their family. Hence it is natural to find hardly any young woman in the distribution.

Regarding education, majority of the respondents either cultivating paddy or coconut had a medium level of

education. Kerala, being the State with the highest literacy, it is only natural to observe the women educated, but it being restricted to a medium level may be attributed to the family constraints faced by the women in getting further educated.

It was observed that the women cultivating paddy and those cultivating coconut had a marginal farm size. The farm size was very less due to the fact that the average holding size in Kerala is less than half an acre and hence the sample represents the true population.

The study revealed that the farm women cultivating paddy had a high level of social participation and the women cultivating coconut had a medium level of social participation. The high and medium level of social participation was experienced among the farm women due to reason that by virtue of their position in the family as the head, they might have had membership in social organisations so as to avail the facilities extended by these organisations.

The women cultivating either paddy or coconut had a high level of cosmopolitaness. This may again be attributed to the position they are holding in the family.

Being the custodian of both farm and home, they are quite likely to have a frame of reference outside their immediate social system.

The study revealed that the management orientation level was high among women cultivating paddy and it was low among women cultivation coconut. The high level of management orientation among paddy cultivators may be due to the nature of the crop paddy which needs intensive frequent attention as the maturation period is very low coupled with pest and disease problems; whereas the low level of management orientation among women cultivating coconut may be due to the reason that coconut needs less attention and is a perennial crop. Hence, this may be the reason for such a result.

The farm women, cultivating either paddy or coconut had a high level of scientific orientation and this may be the result of their education, social participation and cosmopolitaness. More over the educated farm women might have inquisitiveness to know the latest technology that would increase the crop yield. Hence the scientific orientation was more.

The level of aspiration was found to be low both

among women in paddy cultivation and coconut cultivation. This retreading tendency in aspiring for material possession, land, livestock etc. may be due to the reason that these are expensive and probably the farm women might have had the feeling that these are unachievable in the near future period of three years. The low level of aspiration also pinpoints a lack of confidence among women and future uncertainty felt by them.

It was observed that the farm women cultivating paddy had a high level of adoption of improved agricultural practices in paddy and the level of adoption of improved agricultural practices in coconut by women cultivating coconut was also high. This high level of adoption may be attributed to many of the earlier discussed characteristics of women, namely their education, social participation, cosmopolitaness, management orientation and scientific orientation. Being the decision maker of both farm and home, it is likely to find these women put their decisions into practice in the form of adoption in their farms.

The women, cultivating paddy and those cultivating coconut had a high level of knowledge about improved agricultural practices in paddy and a high and low level of

knowledge about improved agricultural practices in coconut respectively. Educated, cosmopolite, scientifically oriented farm women with a high level of adoption would have had the zest for information and that would have put her on the search for knowledge on latest farming technologies. Hence the high level of knowledge.

5.3 Results on the correlation analysis between the dependent and independent variables

All the independent variables were significantly correlated with Communication Behaviour in the case of farm women of both paddy and coconut cultivation. Of these, age was negatively correlated, while all others were positively correlated.

The correlation between 'age' and Communication Behaviour was significant at 5% level of probability in the case of women cultivating coconut and at 1% level of probability with women cultivating paddy. In the study most of the women were middle aged. Young people tend to be more innovative and seek out information especially regarding latest technologies. The negative correlation implies that

result of this study is on par with the findings of Kalamegam and Menon (1970) and Sanoria and Sharma (1983).

Communication Behaviour and social participation were positively correlated at 1% level of significance. Membership in formal organisations helps to come into contact with different individuals, agencies and information sources. By this the individuals are likely to be more receptive to new practices.

Positive significant relationship between social participation and Communication Behaviour reported by Vasanth and Sudhakar (1975), Sherief (1985) and Subramoniam (1986) supports the results of this study.

The correlation between Cosmopolitaness and Communication Behaviour was positive and significant at 1% level of probability. A highly cosmopolite person will possess extensive contact with world outside his own social system. This tendency to maintain a wide frame of reference would naturally increase one's Communication Behaviour. The results of this study are in confirmation with the findings of Vijayaraghavan and Subramoniam (1981), Sherief (1985) and Subramoniam (1986).

Management orientation and Communication Behaviour

was found to be positively and significantly correlated at 1% level of probability. The more oriented a farmer is to the planning, production and marketing aspects of his farm management, he is likely to be more exposed to information sources. A farm woman would require timely information for proper planning, production and marketing of his enterprise. For this she entwines herself in various acts of communication with many information sources. Therefore, higher the management orientation, higher will be the level of Communication Behaviour. The result of this study is supported by the observations of Bhaskaran (1979) and Kareem (1984).

Scientific orientation showed positive significant correlation with Communication Behaviour at 1% level of probability. A farmer who has a good scientific orientation will eschew the old, traditional practices to adopt the new improved farming. In this attempt one is likely to come into contact with more information sources. The result of this study are on par with the findings of Sandhu and Darbarilal (1976), Rao and Reddy (1980) and contrary to the findings of Kareem (1984).

Level of aspiration and Communication Behaviour

was found to be positively and significantly correlated at 1% level of probability. One who has a high aspiration will seek out for information to better the condition of living and will have more communication contacts. Higher the level of aspiration, higher will be the Communication Behaviour. The result of this study is supported by the findings of Sanoria and Sharma (1983) Sherief (1985).

Adoption of improved agricultural practices and Communication Behaviour was positively and significantly correlated at 1% level of probability. Often it is said that efficiency in one Communication Behaviour may reflect on his adoption behaviour also. The result of this study is supported by the findings of Bhaskaran (1979), Nehru (1980) and Philip (1984).

Knowledge about improved agricultural practices was positively and significantly correlated with Communication Behaviour at 1% level of probability. Communication Behaviour provides information support to agricultural practices. In order to increase the level of knowledge one has to necessarily come in contact with sources of knowledge. The tendency to acquire more knowledge will naturally have a bearing on one's Communication

Behaviour. The result of this study is supported by the related studies of Singh and Singh (1970), Menon (1970), Surendran (1982) and Sethy et. al. (1984).

SUMMARY

1

VI SUMMARY

There has been an increase in the proportion of female headed households in the country over the last decade, their percentage share being around 10.4%. In all the southern States, the level is above national average. Of the four taluks of the capital city of Kerala, Neyyattinkara taluk was found to have the highest farm women population according to 1981 census.

The female headed households are in a clearly deprived position. The woman is accepted as the head of the family when there are no adult male members in the family or with the presence of adult male members other than husband and the woman head is a widow, divorcee, separated, deserted or unmarried or when the living male spouse is disabled; unemployed or underemployed.

It is observed that besides economic deprivation, those households suffer from social deprivation which reduce their access to opportunities. The proper application of farming practices to increase production can be effected only through communication of new, but appropriate farming technique to the farmers. Communication Behaviour provides

information support to agricultural practices.

In order to improve farm and home condition for agricultural progress among women, we need to analyse their Communication Behaviour and the factors influencing it. Hence, a study was undertaken among women, heading farm families with the following objectives.

1. To measure the Communication Behaviour of women, heading farm families including their Inward Exposure and Outward Exposure in relation to the adoption of improved agricultural practices.
2. To study the characteristics of women, heading farm families which influence their Communication Behaviour.
3. To compare between women engaged in paddy cultivation and coconut cultivation with regard to their Inward Exposure, Outward Exposure, Communication Behaviour and the various other characteristics which influence their Communication Behaviour.
4. To find out the relationship between Communication Behaviour and the characteristics of women, heading farm families.
5. To find out the direct and indirect effects of the selected characteristics of farm women on their

Communication Behaviour.

The study was carried out in five Krishi Bhavan areas under Neyyattinkara taluk among a sample of hundred women (fifty cultivating paddy and fifty coconut), heading farm families.

A detailed review of literature was done and experts were consulted. Communication Behaviour was selected as the dependent variable with subdimensions Inward Exposure and Outward Exposure. Considering the rating^{and} suggestions by the experts and pretesting, the independent variables finally selected for the study were, age, education, farm size, social participation, cosmopolitaness, management orientation, scientific orientation, level of aspiration, adoption of improved agricultural practices and knowledge about improved agricultural practices.

The data were collected by interviewing the respondents individually with the help of a structured and pretested schedule developed for the study. The data were subjected to statistical analysis after tabulation using tests like Mann-Whitney 'U'-test, correlation and path analysis. The salient findings of the study are summarised below.

Salient Findings

1. Majority of the farm women, cultivating paddy had high level of Inward exposure. Equal number of respondents were distributed in the low and high level of Outward Exposure category with respect to paddy cultivation whereas the women, cultivating coconut had a low level of ^{Inward and} Outward Exposure. Majority of the respondents had low level of Communication Behaviour with regard to both paddy (42%) and coconut cultivation (40%) closely followed by 40% and 36% respectively with high level of Communication Behaviour.
2. There was no significant difference between farm women cultivating paddy and those cultivating coconut with regard to Inward Exposure, Outward Exposure, Communication Behaviour and the various independent variables selected for the study.
3. Nearly half of the respondents were middle aged , 48% under paddy and 52% under coconut cultivation and had medium level of education (70% under paddy and 74% under coconut cultivation) with marginal farm size (92%

and 84% respectively under paddy and coconut cultivation).

4. Majority of the farm women cultivating paddy had high level of social participation (38%), cosmopolitaness (42%), management orientation (48%), scientific orientation (48%), adoption (44%) and knowledge about improved agricultural practices in paddy (42%). With regard to farm women cultivating coconut, majority had a medium level of social participation (40%), high level of cosmopolitaness (50%), scientific orientation (56%), adoption (46%), and an equal 40% had low and high level of knowledge about improved agricultural practices and low level of management orientation (40%). The level of aspiration was found to be low among majority of the farm women cultivating paddy (42%) and coconut (48%).
5. All the ten independent variables selected for this study showed significant correlation with the dependent variable Communication Behaviour. The variable 'age' had a negative correlation whereas all other variables like 'education', 'farm size', 'social participation', 'cosmopolitaness', 'management orientation', 'scientific

and 84% respectively under paddy and coconut cultivation).

4. Majority of the farm women cultivating paddy had high level of social participation (38%), cosmopolitaness (42%), management orientation (48%), scientific orientation (48%), adoption (44%) and knowledge about improved agricultural practices in paddy (42%). With regard to farm women cultivating coconut, majority had a medium level of social participation (40%), high level of cosmopolitaness (50%), scientific orientation (56%), adoption (46%), and an equal 40% had low and high level of knowledge about improved agricultural practices and low level of management orientation (40%). The level of aspiration was found to be low among majority of the farm women cultivating paddy (42%) and coconut (48%).
5. All the ten independent variables selected for this study showed significant correlation with the dependent variable Communication Behaviour. The variable 'age' had a negative correlation whereas all other variables like 'education', 'farm size', 'social participation', 'cosmopolitaness', 'management orientation', 'scientific

orientation', 'level of aspiration', adoption of improved agricultural practices' and 'knowledge about improved agricultural practices' showed positive correlation with Communication Behaviour.

6. Path analysis between the independent variables and Communication Behaviour indicated that in the case of farm women cultivating paddy, the maximum positive direct effect on communication Behaviour was exerted by 'Knowledge about improved agricultural practices (in paddy)', followed by 'scientific orientation' and 'level of aspiration'. The maximum indirect effect was due to 'adoption of improved agricultural practices (in paddy)', followed by 'management orientations'.

The maximum positive direct effect on the Communication Behaviour of farm women cultivating coconut was exerted by 'social participation' followed by 'farm size' and 'management orientation'. The maximum positive indirect effect was exerted by 'knowledge about improved agricultural practices (in coconut)', followed by 'scientific orientation' and 'level of aspiration'.

Implications

1. The results of the study imply that Communication Behaviour is an important aspect of any client system and it may be made more efficient by increasing the information input through various sources and by encouraging farmers to pass on the information they gain to others.
2. To improve the farm woman's receptivity to improved agricultural practices, there should be optimum use of interpersonal-mass media and localite-cosmopolite channels in right combination and in parallel.
3. Introduction of new and complex technologies among the women should be made through young, educated and highly cosmopolite women.
4. The social organisations may be made use of in encouraging participation of women in local social gatherings where in useful agricultural information are also given and thereby help the farm women to receive and exchange information.
5. The relationship established between the Communication Behaviour and the various independent variables will

help the change agent to improve his efficiency in communication while dealing with women headed farm families and help in planning for future extension programmes.

6. The study also imply the need to give special attention to the women headed farm families considering the nature of the family, their family restrictions and other socio-economic deprivations and provide for periodic trainings to them.
7. In order to bring about an overall improvement in the farm and home front, the research, extension, client and input system may be revitalised.

Suggestions for future research

1. Studies on Communication Behaviour may be undertaken among farm women in general, so that a comparison can be made with women, heading farm families.
2. Studies may be conducted considering Communication Behaviour as independent variable and Adoption Behaviour as dependent variable.
3. Other than paddy and coconut, the major crops of the

locality may be selected to study the information input and output on those crops which would contribute to the Communication and Adoption Behaviour of the cultivators.

4. A profile characteristic study may be taken up among women headed families of different target groups.
5. Studies may be conducted on Communication Behaviour among farm women from different socio-economic background like tribals and ordinary village farm women to find the impact of socio-economic status on Communication Behaviour.

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APPENDICES

APPENDIX I

Interview Schedule

Respondent Number:

Communication Behaviour of Women, Heading Farm Families in
Neyyattinkara taluk

PART. I GENERAL INFORMATION

1. Name of the farm woman:
2. Age :
3. Address :
4. Block :
5. Farm size: Total :
Wet land :
Dry land :
6. Possession: Radio/Television
7. Nature of Female headed family :

- A. Without any adult male member with female head as
 - a. Widow
 - b. Divorced/Separated
 - c. Deserted
 - d. Unmarried
- B. Male spouse disabled, wife functions as family head
- C. Male spouse unemployed (under employed) earning wife function as head.
- D. With adult male members other than husband, a woman accepted as family head, who is
 - a. Widow
 - b. Divorced/Separated
 - c. Deserted
 - d. Unmarried

PART II

Dependent Variable

Communication Behaviour

A. Inward Exposure for receiving the information

How many times during last year you visited the demonstration conducted in your village?

1. Demonstration

Degree of Exposure

Centre/Plot

- a. Laid on your farm
- b. Have visited 3-4 times
last year
- c. Have visted 1-2 times
during last year
- d. Have never visited once

2. Farm Literature

Number of publications read in a year

How many farm publications you read last year?	Quite frequently 9 & above	Fre- quently 6-8	Some times 1-4	Never 0
---	----------------------------------	------------------------	----------------------	------------

- a. KAU farm bulletins
- b. Issue of Kerala Karshakan
- c. Agricultural articles
read in newspaper

3. Radio Farm broadcast

How many times during the period of which you
listen to radio?

Frequency of listening in a week

- a. Farm and house programmes
- b. Agril. information from farmers
- c. Type of better farming
- d. Agril. marketing and weather forecast

4. Agro utility service centres

How many times did you visit the following places?

Number of visits last year

Quite frequently	Frequently	Often	Never
5 & above	3 to 4 times	1 to 2 times	0

- a. Market
- b. Co-operatives

- c. Fertilizers/seed stores
- d. Commercial agencies or
insecticide and pesticide

5. Extension Agency

Please indicate the number of visits you made to the extension agency during last year?

Quite	Fre-	Some	Never
frequently	quently	times	0

- a. Agril. Asst.
- b. Agril. Officer
- c. Asst. Director of
Agriculture(ADA)
- d. KAU Scientists

6. Web-of-word-of-mouth

Please indicate the frequency of talks in improved

agricultural practices in a month to the following persons.

Quite frequently 17 & above	Fre- quently 9-16	Some times 1-8	Never 0
-----------------------------------	-------------------------	----------------------	------------

- a. Family members
- b. Friends/relatives
- c. Neighbours
- d. Fellow cultivators
- e. Farmers outside
village

7. Agricultural Extension training programmes

How many Agricultural Extension Training Courses
or Camps have you attended last year?

- a. None
- b. 1-2
- c. 3-4
- d. 5 & above

8. Outward Exposure for passing the information

How many times in a month will you discuss with the following persons about improved agricultural practices?

Quite frequently 17 & above	Fre- quently 9-16	Some times 1-8	Never 0
--------------------------------	-------------------------	----------------------	------------

- a. Family members
- b. Friends/relatives
- c. Neighbours
- d. Fellow cultivators
- e. Farmers outside
village

PART III

INDEPENDENT VARIABLES

1. Age (in completed years)
2. Education Please indicate your level of education.
 - a. Illiterate (0)
 - b. Can read only (1)
 - c. Can read and write (2)
(Adult Education Centre Certificate holder)
 - d. Primary school level (3)
 - e. Middle school level (4)
 - f. High school level (5)
 - g. Graduate level (6)
 - h. Above (7)

3. Farm size

Area available under paddy (Cents)

Area available under coconut

4. Social Participation

Please indicate your position in the following organisations.

Institution	Member	Officer	bearer	Other positions
-------------	--------	---------	--------	-----------------

1. Panchanyat
2. Co-operative
3. B.D.C./Ela Committee
4. Farmers club
5. Farmers Discussion group
6. Any other organisations
(like Mahilasamajam etc.)

5. Cosmopolitaness

How often do you go out to the nearest town in a month and for what purpose?

Frequency

Purpose

6. Management Orientation

Please state the agreement or disagreement to each of the statements below.

Statements	Agree	Disagree
------------	-------	----------

Planning Orientation

1. Each year one should think afresh about the crops to be cultivated in each type of land.

(contd...)

(contd...)

Statements	Agree	Disagree
<hr/>		
2. It is not necessary to make prior decision about the variety of the crop to be cultivated.		
3. The amount of seed, fertilizers and plant protection chemicals needed for raising a crop should be assessed before cultivation.		
4. It is not necessary to think ahead of the cost involved in raising a crop.		
5. One need not consult any agricultural expert for crop planning.		
6. It is possible to increase the yield through farm production plan.		

Production Orientation

1. Timely planting of a crop ensures good yield.
 2. One should use as much fertilizer as he likes.
-

(contd...)

(contd...)

Statements	Agree	Disagree
<hr/>		
3. Determining fertilizer dose by soil testing saves money.		
4. For timely weed control, one should know suitable herbicide.		
5. Seed rate should be given as recommended by specialists.		
6. With low water rates one should use as much irrigation water as available.		

Marketing Orientation

1. Market news is not useful to a farmer
 2. A farmer can get good price by grading his produce
 3. Ware houses can help the farmers to get better price for his produce
 4. One should sell his produce to the nearest market irrespective of the price
-

(contd...)

(contd...)

Statements	Agree	Disagree
<hr/>		
5. One should purchase his inputs from the shop where his relatives purchase		
6. One should grow those crops which have more market demand		

7. Scientific Orientation

Below are given some statements. Please indicate your agreement or disagreement with the statements.

Statements	Agree	Disagree
<hr/>		
1. New methods of farming give better results to farmers than old methods		
2. The way of farming by our forefathers is the best way to farm today		

(contd...)

(contd...)

Statements	Agree	Disagree
3. Even a farmer with a 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 of farming, it is worthwhile the efforts		
6. Traditional methods of farming have to be changed in order to raise the level of living of a farmer		

8. Level of Aspiration

Here are a few questions regarding some of the areas with which you may be mostly concerned. Don't bother about whether you are really going to make it or not, but still you may expect certain of these events to happen in the near future. Please indicate your opinion frankly.

1. What is the extent of education that your children should have?

School level/College level/Technical or
Professional

2. What kind of job or work your children should take after their education?

Agriculture/Government job/Business or
Professional

3. Compared to previous years what would be the increase in the annual income you expect to get in the next three years?

After one year/ two years/ three years

4. What would you expect to be the increase in your land holding in the next 3 years?

No increase/Increase to some more/Double the area

5. What would be the type of house you expect to have in the next 3 years?

No improvement/Improve it to some extent/Make it a pucca house

6. What would be the furniture you expect to possess in the next 3 years?

No improvement/Improve to some extent/Definitely furnish well

7. What would be the material possession you expect to

have in the next 3 years?

Radio/TV/Pumpset or biogas plant

8. What would be the agricultural implements you expect to possess?

No increase/Purchase some more/Purchase all the required ones.

9. What would you expect to be your general contentment?

Somewhat better/Mostly better/Certainly better.

10. What would you expect to be the increase in your livestock in the next 3 years?

No increase/have one or two animals/have it on large scale.

11. What would be the kind of shelter you expect to provide for your livestock in the next 3 years?

Shed/mudwalled/full mudwalled.

12. What would be the other animals, like sheep, poultry, pigs you expect to possess?

Don't want/only for house purpose/want to possess on a large scale.

Question Number 9 and 10 for Women in Paddy cultivation only

9. Extent of Adoption of Improved Agricultural Practices in Paddy transplanted crop

Total areas of paddy cultivated

A. Name of the Variety	Area	Season
------------------------	------	--------

i.

ii.

iii.

B. Nursery Preparation

a. Area

b. Cattle manure/compost(kg/sq.m)

c. Fertilizer application (kgs) N P K Variety

a. Basal dose

b. Top dressing

D. Plant Protection

a. Rice Pest Control

Name of Pest	Insecticide	Dosage	Symptom
--------------	-------------	--------	---------

E. Rice Disease Control

Name of disease	Chemical	Dosage	Symptom
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10. Knowledge Test on Improved Agricultural Practices in Paddy

a. Name any one of the HYV of paddy suited to first crop season

b. What is the age of seedlings for transplanting 120 days duration crop

- c. What is the name of the fertilizer which substitutes the nutrient N?
- d. Name one pest of paddy during the nursery stage
- e. What is the fertilizer schedule for short duration Rice in first crop season?
- f. Name one fungicide
- g. Name one insecticide
- h. Name one pest of paddy
- i. Name one fungal disease of paddy
- j. At what stage is top dressing done during the first crop season?

Question Number 11 and 12 for Women in Coconut cultivation only.

11. Extent of Adoption of Improved Agricultural Practices in
Coconut

A. Irrigation

1. Area under irrigation

2. In the case of new planting area, give the number of
times you irrigate your coconut garden, per month?

B. Use of Fertilizers

1. Give the quantity of compost/FYM that you apply to a
palm per year.

Young palm

Adult palm

2. Give the quantity of fertilizers applied for a palm
per year.

Fertilizer	Quantity applied	Split doses
		(No. and time)

c. Use of Plant Protection Chemicals

1. Name of the pest	Chemical	Dosage	Symptom
2. Name of the disease	Chemical	Dosage	Symptom

D. Intercropping

1. Crops cultivated
2. Area (out of the total area of garden)

12. Knowledge Test on Improved Agricultural Practices in Coconut

1. Name a latest variety of coconut
2. What is the age of selected seed nuts for planting?
3. Name the chemical used to control termite attack in nursery.

4. Name one moisture conservation practice in coconut garden.
5. What is the quantity of organic manure to be applied per palm for the first three years?
6. What is the dose of coconut mixture applied per palm per year?
7. Name a major pest of coconut.
8. Name a serious disease of coconut which can be controlled.
9. Name a serious disease of coconut which cannot be controlled.
10. Name the chemical used to inject the trunks of coconut palms, affected by red palm weevil.

APPENDIX II
PATH ANALYSIS

FARM WOMEN CULTIVATING PADDY

Direct & Indirect effects

8.642884E-02 .12109 -7.668287E-03 4.100478E-02 -5.991292E-02 .1006195 .263372 .226709 9.074151E-02
0.3252585

	X 1	X 2	X 3	X 4	X 5	X 6	X 7	X 8	X 9	X 10
X 1	0.0864	-0.0635	0.0010	-0.0174	0.0301	-0.0363	-0.1258	-0.0550	-0.0383	-0.1356
X 2	-0.0453	0.1211	-0.0027	0.0239	-0.0331	0.0668	0.1781	0.1124	0.0627	0.2117
X 3	-0.0113	0.0422	-0.0077	0.0231	-0.0250	0.0380	0.1133	0.1101	0.0447	0.1594
X 4	-0.0367	0.0704	-0.0043	0.0410	-0.0413	0.0568	0.1822	0.1432	0.0566	0.1962
X 5	-0.0434	0.0669	-0.0032	0.0283	-0.0599	0.0562	0.1776	0.1387	0.0601	0.2487
X 6	-0.0312	0.0803	-0.0029	0.0232	-0.0335	0.1006	0.2284	0.1626	0.0629	0.2055
X 7	-0.0413	0.0819	-0.0033	0.0284	-0.0404	0.0872	0.2634	0.1575	0.0671	0.2273
X 8	-0.0210	0.0600	-0.0037	0.0259	-0.0366	0.0722	0.1830	0.2267	0.0585	0.1949
X 9	-0.0365	0.0839	-0.0038	0.0256	-0.0397	0.0697	0.1949	0.1461	0.0907	0.2573
X 10	-0.0360	0.0788	-0.0038	0.0247	-0.0458	0.0636	0.1840	0.1358	0.0718	0.3253

Residue = 0.4018444

PATH ANALYSIS

FARM WOMEN CULTIVATING COCONUT

Direct & Indirect effects

3.771365E-02 6.810236E-02 .3287059 .3602413 5.690754E-03 .312471 6.220448E-02 .1435733 6.631708E-02
-0.1399784

	X 1	X 2	X 3	X 4	X 5	X 6	X 7	X 8	X 9	X 10
X 1	0.0377	-0.0456	-0.0695	-0.1175	-0.0030	-0.1191	-0.0262	-0.0586	-0.0271	0.0623
X 2	-0.0252	0.0681	0.0925	0.1966	0.0038	0.2113	0.0346	0.0794	0.0389	-0.0948
X 3	-0.0080	0.0192	0.3287	0.0875	0.0013	0.1276	0.0272	0.0669	0.0358	-0.0804
X 4	-0.0123	0.0372	0.0798	0.3602	0.0033	0.1977	0.0343	0.0929	0.0421	-0.0892
X 5	-0.0196	0.0453	0.0756	0.2072	0.0057	0.1926	0.0376	0.0878	0.0359	-0.0944
X 6	-0.0143	0.0460	0.1342	0.2280	0.0035	0.3125	0.0497	0.1117	0.0507	-0.1085
X 7	-0.0160	0.0379	0.1437	0.1985	0.0034	0.2495	0.0622	0.1072	0.0535	-0.1071
X 8	-0.0154	0.0377	0.1532	0.2331	0.0035	0.2431	0.0465	0.1436	0.0544	-0.1165
X 9	-0.0154	0.0399	-0.1775	0.2285	0.0031	0.2392	0.0502	0.1178	0.0663	-0.1209
X 10	-0.0168	0.0461	0.1888	0.2297	0.0038	0.2422	0.0476	0.1195	0.0573	-0.1400

Residue = 0.3820894

170418

**COMMUNICATION BEHAVIOUR OF WOMEN, HEADING
FARM FAMILIES IN NEYYATTINKARA TALUK**

By

ANITHA K. MENON

ABSTRACT OF THE THESIS

submitted in partial fulfilment of
the requirement for the degree

Master of Science in Agriculture

(Agricultural Extension)

Faculty of Agriculture

Kerala Agricultural University

Department of Agricultural Extension

COLLEGE OF AGRICULTURE

Vellayani - Trivandrum

1993

ABSTRACT

A study on the Communication Behaviour of women, heading farm families was carried out in five Krishibhavan areas under Neyyattinkara taluk of Thiruvananthapuram district. Fifty women engaged in paddy cultivation and fifty from coconut cultivation formed the total sample of hundred respondents. The study was aimed to measure Communication Behaviour including Inward Exposure and Outward Exposure and to compare between the women cultivating paddy and the women cultivating coconut with regard to the dependent and independent variables of the study. It was also aimed to find the characteristics of women which influence Communication Behaviour, the relationship and the direct and indirect effects of these characteristics on Communication Behaviour. The data were collected using pre-tested structured interview schedule.

The study revealed that the farm women^{in paddy cultivation} had a high level of Inward Exposure. Women cultivating paddy were equally distributed in the low and high level of Outward Exposure categories and low level of ^{Inward and} Outward Exposure was noticed in majority of women cultivating coconut. The farm

women had a low level of Communication Behaviour. Irrespective of the difference in the crop cultivated, the women did not differ significantly with regard to Inward Exposure, Outward Exposure, Communication Behaviour, and other selected characteristics. The characteristic profile study revealed that the respondents were middle aged and had a medium level of education (ie., upto high school) with a marginal farm size below 0.4ha. The women cultivating paddy had high level of social participation, cosmopolitaness, management orientation, scientific orientation, adoption of improved agricultural practices in paddy and knowledge about improved agricultural practices in paddy. With regard to women cultivating coconut, a medium level of social participation, high level of cosmopolitaness, scientific orientation, adoption of improved agricultural practices in coconut and a low level of management orientation were noticed. The women in coconut cultivation were distributed equally in the low and high level of knowledge about improved agricultural practices in coconut. The correlation co-efficients revealed that the selected characteristics of women were significantly correlated with Communication Behaviour and the correlation was positive except with the

variable 'age'. Path analysis results revealed that the maximum positive direct effect on Communication Behaviour was exerted by 'knowledge about improved agricultural practices' and 'social participation' with regard to women cultivating paddy and coconut respectively. The maximum positive indirect effect was exerted by 'Adoption of improved agricultural practice' and 'knowledge about improved agricultural practices' with regard to women cultivating paddy and coconut respectively.