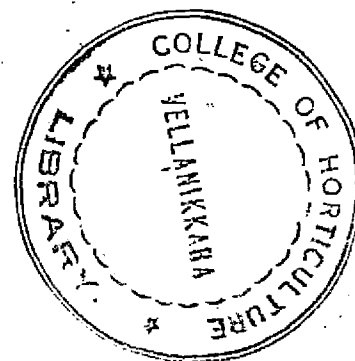


COMMUNICATION BEHAVIOUR OF TRIBAL FARMERS—A SYSTEM ANALYSIS

By

SUBRAMONIAM K.



THESIS

submitted in partial fulfilment of the requirement for the degree

Master of Science in Agriculture

(Agricultural Extension)

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Department of Agricultural Extension

COLLEGE OF AGRICULTURE

Vellayani - Trivandrum

1986

DECLARATION

I hereby declare that this thesis entitled "COMMUNICATION BEHAVIOUR OF TRIBAL FARMERS - A SYSTEM ANALYSIS" 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, fellowship or other similar title, of any other University or Society.



SUBRAMONIAM. K.

Vellayani

19-04-1986

CERTIFICATE

Certified that this thesis entitled
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SYSTEM ANALYSIS" is a record of research work done
independently by Sri. SUBRAMONIAM. K. under my
guidance and supervision and that it has not previously
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Dr. G. Balakrishna Pillai
(Chairman, Advisory Committee)
Associate Professor of Agri-
cultural Extension, College
of Agriculture.

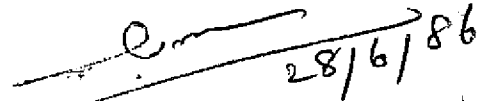
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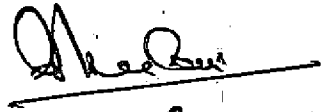
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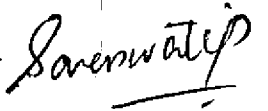

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Dr. G. Balakrishna Pillai.

MEMBERS

1. Dr. E. Babu



2. Dr. (Mrs.) P. Saraswathy



3. Dr. R.M. Prasad.



Dr. D. SOMASUNDARAM.
(External Examiner)


28.6.86

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Vellayani

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INTRODUCTION

CHAPTER I
INTRODUCTION

Tribal communities, the weakest section of the Indian Society constitute 29.9 million tribal population, which forms seven per cent of India's total population (Census of India, 1981). Despite the growing importance attached by social scientists to the study of tribal development and consequent prolific growth of literature on the subject, one has reasons to feel dissatisfied with the status of tribal research in India, which is marked by a low level of sophistication (Goswami, 1984).

For social scientists, tribes are those which are included in the scheduled tribe list in the Constitution of India. The 414 tribes listed following the 1956 Presidential Notification differ greatly in their habitats, modes of production, degree of isolation, degree of acculturation, level of development, social customs, beliefs and so on. The anthropologists' conception of a tribe "as a small, culturally distinct and economically self sufficient community with a language of its own and an autonomous political organisation" is utterly inappropriate to the so called tribal groups in India (Goswami, 1984). Some go even to the extent of stating that the concept of a tribe is an anachronism in the present day world, since there is no criterion to divide humanity into two branches, tribes and

non-tribes. Of late, smaller, isolated, technologically backward communities have either become extinct or have become part of one or the other greater civilizations of the world. Indian anthropologists have depicted tribes as small, self-contained, self-sufficient and autonomous communities practising subsistence economy with limited external trade.

In spite of all these facts, one cannot forget the widening chasm between the economically weaker sections and other sections of the society as clearly evident from the profile feature of the tribes in the country. Hence Article 46 of the Constitution of India lays down, "The state shall promote with special care the weaker section of the people, and in particular, of the scheduled castes and scheduled tribes, and shall protect them from social injustice and all forms of exploitations". With this concern, the Government of India has launched numerous tribal development programmes.

Even after the implementation of such programmes, tribes of India still stand on a lower socio-economic stratum. The condition of 2.61 lakhs tribal people in Kerala (Census of India, 1981) is not much different from the rest of the tribals in India. The members of scheduled tribes in Kerala belong to as many as 35 distinct communities and constitute 1.03 percent of Kerala's total population (Census of India, 1981). They form the decisively poorest sections of Kerala's

people. Their condition has become still worse owing to the lack of communication and infrastructural facilities, improper management, organisational arrangements and, above all, the exploitation by non-tribal population.

Apart from these problems, tribal communities enmeshed in age-old customs, beliefs and superstitions, have continued to remain conservative and extremely tradition bound with morbid fatalism.

As Dutta (1972) laments, lack of adequate communication facilities is one of the major reasons for agricultural backwardness of tribal villages. The diffusion of knowledge of improved agriculture is limited by the communication gap in tribal society (Mahapatra, 1978).

In order to study the communication behaviour of tribal farmers and to explore its relationship with their personal and socio-psychological characteristics and also to identify the key communicators among the tribal farmers, a research study was undertaken among 'Kanikkars', the dominant tribe in Trivandrum District. An attempt to study the cultural-anthropological characteristics and leadership modes among the tribal farmers has also been made since their culture and life style are related with agriculture. The specific objectives of the study were:

- (i) To study the communication behaviour in terms of information input, processing, output, and feed back pattern of tribal farmers.

- (ii) To study the information seeking behaviour of the tribal farmers.
- (iii) To find out the relationship between personal and socio-psychological characteristics of tribal farmers and the communication behaviour.
- (iv) To study the extent of credibility attached to various sources of information by the tribal farmers.
- (v) To identify the key communicators among the tribal farmers.
- (vi) To study the cultural-anthropological characteristics and leadership modes.

Scope of the study

Transfer of technology is vital in any type of development and comes to have utmost importance in agricultural development. Since tribal people fetch their livelihood mainly from agriculture, and the agricultural production in tribal area is found to be low, an adequate strategy for agricultural communication becomes imperative. Therefore, it is expected that the results of this study would yield types of information that may help to streamline the appropriate communication strategy for the diffusion of agricultural information among the tribal farmers.

Limitations of the study

A study of the personal and socio-psychological conditions of the tribal people has its own difficulties. The areas of their dwelling are inaccessible making it difficult to establish proper rapport with them. Similarly, as a student research project undertaken as a part of requirement for the M.Sc.(Ag.) programme, it has its own inherent difficulties such as lack of time and finance. Since no courses are offered in the College of Agriculture in cultural-anthropological areas, many limitations might have intruded into it. So, only a very general and cursory attempt has been made for studying the cultural-anthropological characteristics and leadership modes because of the low level of comprehension in these areas. Despite all these difficulties, sincere and devoted efforts have been made to make this study as objective and systematic as possible.

Presentation of the report

The thesis is divided into six chapters.

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

The second chapter covers the relevant literature, theoretical framework of the study, and derivation of hypotheses.

The third chapter deals with the definition of concepts and methodology in which details regarding locale, sampling, empirical measures used, data collection and the statistical methods used for the analysis of data have been presented.

In the fourth chapter, the results of the study are presented in relation to the objectives.

The fifth chapter deals with the discussions based on the results obtained.

A summary of the entire study emphasising salient findings is given in the sixth chapter.

The references and appendices are given at the end.

THEORETICAL ORIENTATION

CHAPTER II
THEORETICAL ORIENTATION

In this chapter, an attempt has been made to develop a theoretical frame work for the study of communication behaviour of tribal farmers in relation to their personal and socio-psychological characteristics, which helped to form realistic hypotheses. Research studies having direct relevance to the present study were very limited. However, every effort was made to review the available literature on the subject. In accordance with the objectives of the study, the review of the previous works is furnished in the following lines.

1. The concept of tribe.
2. Communication process.
3. Communication behaviour
 - (a) Information input
 - (b) Information processing
 - (c) Information output
 - (d) Information feed back
4. Information seeking behaviour
5. Personal and socio-psychological variables and their relationship with communication behaviour
6. Source credibility
7. Key communicators
8. Sociometry.

At the end, the hypotheses formulated with respect to the variables are presented.

1. The concept of tribe

According to Gazetteer of India, "a tribe is a collection of families bearing a common name, speaking a common dialect, occupying or professing to occupy a common territory and is not usually endogamous, though originally it might have been so."

According to Oxford English Dictionary, "a tribe is a group of people in a primitive stage of development acknowledging the authority of a chief and usually regarding themselves as having a common ancestor."

To quote Majumdar (1958), "a tribe is a collection of families or groups of families bearing a common name, members of which occupy the same territory, speak the same language, and observe certain taboos regarding marriage, profession or occupation and have developed a well assessed system of reciprocity and mutuality or obligations."

Madan (1967) defined tribe as follows: "A tribe descends from a common biological, mythical or legendary ancestor; it occupies a defined territory; it has a common history; the tribe speaks a common dialect and it is invariably endogamous".

According to Sharma (1975), "the tribe is a group of persons having a common definite territory, common dialect, common name, common religion and a common culture, in whom there is a blood relationship and consequently a feeling of unity, who have a peculiar political organisation and who

generally marry within their own group."

According to Chadhopadhyay (1978) the definition of "tribe" as it has emerged from attempts of scholars on tribal life is - a social group usually with a definite area, dialect, cultural homogeneity, and unifying social organization. It can include several subgroups, such as clans and sibs. A tribe ordinarily has an ancestor and a patron deity. The families or groups composing the larger tribal units are linked through "blood ties" as the term is commonly used, and through religious, social and socio-economic functions.

2. Communication process

Schramm (1960) opined that communication is the process of establishing "commonness" with someone. He explained communication process with elements such as source, encoder, signal, decoder, destination and feed back.

Leagans (1961) defined communication as a process by which two or more people exchange ideas, feelings, or impressions so that each gains a common understanding of the meaning, intent and use of the message.

Rogers and Svenning (1969) put forth a general theoretical view point that communication processes are integral, vital elements of modernisation and development. Hence it is hardly possible to design research in any field of human behaviour without making some assumptions about human communication.

Agee, Ault and Emery (1979) defined communication as the act of transmitting information, ideas and attitude from one person to another.

It could be summarised from the above reviews that communication exists at the root of all human behaviour. Hence for planning effective communication strategy, it is necessary to understand the communication behaviour of tribal farmers.

3. Communication behaviour

The term, communication behaviour was used by Schramm (1960), while reporting the study on radio audience by Katz and Kendall (1948).

Communication behaviour, according to Berlo (1960) explains why, how, when, with whom and with what consequences man behaves.

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

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.

Reddy and Singh (1979) considered that communication behaviour consists of two parts, such as receiver's communication behaviour and sender'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.

(a) Information input

Agarwal and Kulkarni (1976) reported that the mass media communication like radio broadcast, screening of agricultural films and other visual graphics communication media, have shown promising result in the case of marginal farmers. They also reported that the marginal farmers inclined more towards person-to-person communication.

Balasubramoniam (1976) reported that farmers utilized formal sources mostly, followed closely by informal sources and media sources for getting information about high yielding varieties of paddy.

Sripal (1978) reported that use of any projected or visual aids during the centre meeting was found to increase the tribal farmers' knowledge in the topic taught.

Narayanappa (1978) identified neighbours and relatives as the most important sources of information in the different stages of adoption of improved agricultural practices among Karnataka farmers.

Obibuaku and Mustafa (1978) reported that demonstrations, films and lectures were more effective than other media which relied on reading ability among rural people.

Sherief (1985) reported that majority of the non contact farmers received most of the informations on paddy cultivation

from "other farmers" in their locality. The "contact farmers" came only next to "other farmers" as a source of information. "Agricultural Scientists" were the least consulted source of information.

(b) Information processing

Ambastha (1974) reported that majority of the farmers evaluated farm innovations by considering profitability (88.25 per cent), witnessing demonstration plots or plots cultivated by fellow farmers (78.12 per cent), conducting trial (70.62 per cent) and discussing with progressive farmers (64.75 per cent). The information processing indices ranged from 0.07 to 5.31, the average being 1.98. There was no significant difference between the processing average of non-package block farmers (2.04) and package block farmers (1.93).

Balasubramoniam (1976) reported that the farmers of the client system evaluated the information on high yielding varieties of paddy received mainly by "considering its profitability". Most of them discussed with friends and neighbours first and "observed such crops grown in other holdings" next before taking the final decision. They also consulted Village Level Workers before making the final decision.

Vijayaragavan (1976) reported that the most used methods of evaluation of an innovation by the gardenland farmers were discussion with family members, consideration

of availability of inputs and consideration of profitability, whereas in the case of dryland farmers, the method was discussion with family members, witnessing demonstration plots and consideration of profitability. Garden land farmers did not significantly differ from dryland farmers in respect of average information processing amount.

Sherief (1985) reported the increasing difficulty the non-contact farmers experienced as the complexity and cost implications of the messages increased.

(c) Information output

Reddy and Reddy (1972) found that the extent of adoption of improved seed, plant protection and fertilizers were 99.47 per cent, 66.32 per cent and 27.55 per cent respectively.

Ambastha (1974) reported that information output indices of the farmers ranged from 0.17 to 15.77, the average being 5.02. The mean output of package block farmers (6.75), was significantly higher than that of non package block farmers (5.51).

Bhatti (1975) found that majority of the non-adopters of various practices were small farmers.

Kalamegam (1975) concluded that the adoption of improved practices by small farmers was found relatively high in the progressive village than in the less progressive village.

Vijayaragavan (1976) found that the average use adoption and symbolic adoption quotients of garden land farmers

(86.50 and 67.40) were higher than that of dryland farmers' (29.50 and 52.50). Compared to dryland farmers, gardenland farmers communicated more information to their fellow farmers. The average information output amount of gardenland farmers was significantly higher than that of dryland farmers.

(d) Information feed back

Chatterjee (1973) pointed out that out of many factors, feed back was one of the important factors associated with the communication effectiveness of the change agents.

Mehrabian and Reed (1973) hypothesised that accuracy of communication is correlated with the availability of feed-back to the communicator.

Dahama and Bhatnagar (1980) stated that in effective communication, feed back is of paramount importance. An experienced communicator is attentive to feed back and constantly modifies his message in the light of what he observes in or hears from the audience.

Sherief (1985) reported that most of the feed back from the non contact farmers was mainly communicated to "other farmers". Contact farmers were involved in this process only to lesser extent. 'Personal talk during casual meeting' was found to be the most important occasion for feed back. 'Personal talk during farm visit' and 'personal talk during home visit' were also found to be used by the non contact farmer to a lesser extent.

4. Information seeking behaviour

Menon (1970) in his study on small farmers reported that their contact with extension agency was more or less unidirectional, the farmers had to go to the agent to avail themselves of concession or seek information. He further stated that the radio, exhibition, and filmshows were the extension methods more familiar to the small farmers.

Prasad and Sinha (1970) found that the relatives and family members, farm neighbours and Village Level Workers were the most utilised sources.

Pachori and Gureshi (1973) concluded that farmers utilised sources such as exhibition, demonstration, posters, radio and filmshows in the order of priority to know the information regarding agricultural technology.

Ambastha (1974) reported that the radio emerged as the most utilised source followed by progressive farmers, Village Level Workers and block level officials in the order of preference.

Mathur et al. (1974) found that the farmers have shown greater dependence in interpersonal-localite sources such as relatives, neighbours, friends, Village Level Workers, and to some extent IARI personnel for information and consultation.

Jha and Pathani (1975) revealed that small farmers ranked gramsevaks and neighbours as the two most frequently

used sources of information and they also found that Village Level Workers, neighbours and demonstrations were considered as highly credible sources of information for small farmers.

Kalamegam (1975) reported that the Village Level Workers, Deputy Agricultural Officers and campaigns in the progressive village, and neighbours and friends, Village Level Workers and relatives in the less progressive village were utilised more for adoption.

Agarwal and Kulkarni (1976) reported that the mass media communication such as radio broadcast, screening of agricultural films and other visual graphics communication media have shown promising results in the case of marginal farmers. They also reported that the marginal farmers inclined more towards person-to-person communication.

Balasubramoniam (1976) reported that farmers utilised formal sources mostly, followed closely by informal sources and media sources for getting information about high yielding varieties of paddy.

Ranganathan (1976) found that the radio was utilised by cent per cent paddy growers followed by posters, bamboo thatties, demonstration, newspapers, exhibition, folders and tea-shop boards in the order of preference.

Somasundaram (1976) reported that both adopter and nonadopter small farmers used office call, farm and home visits, tours and field trips to neighbours, progressive

farmers, input merchants, the radio, printed material and posters to get new informations about IR20 paddy innovation.

Panneerselvam (1978) found that cent per cent farmers of both the progressive and less progressive villages utilised gramasevaks as their information sources. The radio and agricultural journals were used more in progressive villages than in non-progressive villages.

Ravi (1979) reported that newspapers and the radio were more used by more number of farmers than other mass-media sources; the radio was used to receive 'most' of the information and it was considered as the most credible source when compared to other mass media sources.

Sherief (1985) reported that among the mass media sources, 'newspaper' emerged as an important source of information for non contact farmers. The next important mass-media source was the 'farm broadcasts'. The least consulted sources were 'leaflets', 'bulletins' and 'campaigns'.

5. Personal and socio psychological variables and their relationship with communication behaviour.

(1) Age

Age plays a significant role in the ordinary tribal life, according to Sachidananda (1968), Sahay (1969) and Dube (1977).

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

Sandhu and Darbarilal (1976) observed positive but non 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.

Nehru (1980) reported that age was not significantly related to the communication behaviour of listeners of farm broadcasts.

Batara (1983) in his study on the impact of communication on the acceptance of technological innovations in a rural community found that age of the farmers was negatively related to the adoption of technological innovations.

Siddaramaiah and Rajanna (1984) found that gain in knowledge of the farmers about agricultural aspects was significantly associated with their age.

The relation between the age of the tribal and his technological gap has been reported by Tripathi (1972) and Sadamate (1978).

Sherief (1985) reported that age was found to be negatively and significantly correlated with communication behaviour.

(ii) Education

Sahu (1970) and Srivastava and Singh (1970) reported illiteracy as a major problem in tribal areas.

Singh and Sahay (1970) revealed a close association between education and communication behaviour of farmers.

Singh (1970) observed that education has positive association with the source utilization component of differential communication behaviour.

Sundaraswamy (1971) reported that education has shown a significant relationship with the use of information sources.

Ramachandran (1974) found positive association between education and information source utilization of big, medium, and small farmers.

Viswanathan et al. (1975) found that education of small farmers had reduced their contact with informal source.

Singh and Ambastha (1975) found that educational level of farmers was not significantly correlated with their information input.

Sandhu and Darbarilal (1976) found that education and communication behaviour of farmers were significantly correlated.

Kirpal (1978) observed that in spite of many facilities being reserved for the scheduled castes and tribes in the education system, they remain a backward sector of the community.

Sadamate (1978) reported low levels of education (84.39 percent illiterates) of tribal respondents.

Ravi (1979) observed a non significant relationship between education and information seeking behaviour.

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

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

(iii) Innovation proneness

Innovation proneness was found to be positively associated with adoption of farm practices. (Moulik, 1965; Bhilegaonkar, 1976).

Singh (1981) reported that adoption level was positively correlated with innovation proneness of the small, medium and pooled sample of farmers, but no association was found in the case of marginal farmers.

(iv) Attitude towards Block extension agency

Gnanasekharan (1978) observed that attitude towards extension agency and information seeking behaviour were positively and significantly related.

Ravi (1979) observed a non-significant relationship between attitude and information seeking behaviour of the tapioca growing farmers.

Sadamate (1978) reported that attitude of tribes towards Block extension personnel was negatively and significantly related to technological gap.

Surendran (1981) reported that most of the tribals had medium to low level of family norms and showed favourable attitude towards tribal development programme.

(v) Social participation

Singh (1970) reported that lack of participation by the tribals was one of the shortcomings of the tribal development block scheme.

Social participation was reported to be negatively and significantly related to technological gap, according to Sadamate (1978).

(vi) Fatalism

Sen (1969) reported that the leaders' fatalism does not influence the adoptive behaviour of others.

Burman and Sharma (1970) found that the question of values had been found to affect the adoption of settled agriculture where lands were available with the tribals or made available by the government.

Dar (1970) reported that the tribal attitudes, tradition and religion made it difficult for the tribals to accept restrictions on shifting cultivation. The isolation of the tribal areas from being exposed to new ideas made them extremely tradition bound.

Sahu (1970) reported that due to the prevalence of rigid, traditional, social and cultural outlook, tribal agriculture could rightly be classified as subsistence sector of the tribal economy.

Srivastava and Singh (1970) reported that the tribals have continued to remain conservative and tradition bound.

Yadav (1970) reported that the tribal leaders gave more emphasis on sticking to the traditional way of life.

Rattan (1973) reported "communication of agricultural information in hills faces a fully animated individual who is aggressive enough to protect his values, rigid enough to defy even an idea of change. People with queer individual and group psychology, morbid fatalism and abhorrence to any change queer the pitch of the communicator."

Drieberg (1977) observed that in the tribal institutions and cultures, taboos played a fundamental role and were inamicable to change. He further added that local religious priests played a key part in ordering tribal life which was observed to be a major problem to the change agents. About their beliefs, he further added that tribes organised mass hunt to propitiate their deities and ensure good crop.

Dass (1978) reported about the highly superstitious nature of Bond tribes of Orissa and Vedas of Ceylon.

Racine (1978) reported that 'Malaiyali' tribes of Kalrayan mountains in Tamil Nadu are maintaining traditional social structures.

Vyas and Mann (1980) stated that the tribal society continued to be superstition ridden. The predominance of superstition had not been shaken even under the changing conditions in certain other fields.

(vii) Cosmopolitaness

Tripathi (1972) found that new values were replacing old because the tribals had continuous contact with outsiders.

Murthy and Singh (1974) also reported positive and significant correlation between cosmopolitaness and information input and output indices of farmers.

Troisi (1975) reported "the interaction with exogenous economics and social elements of the wider urban culture has meant that the 'Santals' have a blurred cultural identity."

Kalamegam and Menon (1977) in their study on the communication behaviour of small farmers found that personal cosmopolite sources were utilized to a greater extent in the progressive villages than in a less progressive village.

Vijayaragavan 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 also indicated that cosmopolite farmers were more inclined to adopt new technology.

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

Sherief (1985) reported a positive and significant correlation between cosmopolitaness and communication behaviour of non contact farmers.

The review revealed that most of the above studies indicated the significant relationship between communication behaviour and the selected variables, whereas results of certain studies were different. Taking into consideration the differences in socio-cultural characteristics of the tribes of Kerala, it has been decided to test the validity of the association of the personal and socio-psychological variables with the communication behaviour of the tribal farmers of the study area.

6. Source credibility

Berlo (1960) defined credibility as the degree to which the communicator is perceived as trustworthy and competent by the receiver.

Singh and Singh (1972) reported that in the non-progressive village, progressive farmers were given the highest credibility followed by relatives. Demonstration was given fifth rank in the order of importance and the least credible sources were the radio and bulletin.

Singh (1973) found that in progressive villages, maximum credibility was given to the scientists whereas in non-progressive villages, the maximum credibility was given to demonstration. Progressive farmers, block extension agency and radio were given the intermediary positions. Folders and newspapers were given the least credibility in both the villages.

Singh and Prasad (1974) concluded that in non-progressive village, the most credible source was demonstration followed by

Village Level Worker, friends and neighbours and others. The least mentioned sources were self-experience, magazines and newspaper.

Singh et al. (1976) reported that the more credible and accessible media for small farmers were still the localite sources and small farmers attached fairly high credibility to demonstrations.

Talukdar (1976) found that block staff, radio, demonstrations, neighbours, friends and relatives and press were ranked as credible sources in the order of preference.

Chole and Rahudkar (1978) reported that personal formal sources were ranked high credibility by big farmers whereas, personal informal sources were accorded more trustworthiness by small farmers. Except demonstrations, all other media sources were ranked as least credible sources by high and small farmers.

Panneerselvam (1978) report^{ed} that the progressive village farmers considered the "Deputy Agricultural Officer" as the most credible source whereas non-progressive village farmers considered "demonstration as the most credible source". "Commercial agency" was the least credible source in both the villages.

Perumal (1979) reported that the majority of the farmers placed highest credibility upon radio followed by Gramsevaks, Agricultural Assistants, and Deputy Agricultural Officers in the order of priority.

Ravi (1979) reported that a larger number of farmers used the newspapers and the radio rather than other mass media sources. The radio was used to receive 'most' of the information and it was considered as the 'most credible' source when compared to the other mass media sources.

Karippai (1981) reported that friends and relatives were found to be the most utilised source of information followed by radio, newspaper, extension-personnel and agricultural scientists in the descending order.

7. Key communicators

^{and Shoemaker}
Rogers (1971) defined opinion leadership as the degree to which an individual is able to influence informally other individuals' attitudes or overt behaviour in a desired way with relative frequency.

Tripathy (1960) found that 'Santhal' leaders were mostly cultivators and their average size of holding was greater than that of followers.

Khan (1967) found that the tribal leaders had significantly more land holding and education than their followers.

Shankar (1969) found that the majority of the leaders were more innovative than their followers. Further, the overall socio-economic status of leaders was found to be significantly higher than that of their followers.

Singh (1973) reported that key communicators were distinctly characterised by more cosmopolitaness compared to communicators or noncommunicators.

Babu (1977) found that opinion leaders were better users of mass media and cosmopolite interpersonal sources for getting information on improved cultivation practices.

8. Sociometry

Franz (1939) defined sociometry as "a method used for the discovery and manipulation of social configuration by measuring the attractions and repulsions between individuals in a group".

Bron Fenbrunner (1943) defined sociometry as "a method of discovering, describing, and evaluating social status structure and development through measuring the extent of acceptance or rejection between individuals in groups".

The sociometric test explained by Frankel and Potashinad (1944) consists in having each member of a group chosen, from all the other members those with whom they preferred to associate themselves in specific situation. The results of sociometric tests were supplemented by personal interview. This was the procedure originally followed by Moreno (1937) in his study among the girls in a training school. The sociometric choices were plotted in a sociogram, depicting the attractions and repulsions among the members of the group studied.

Another technique for portraying and analysing sociometric data is the matrix. As Moreno (1960) stated, a typical matrix is a simple cross tabulation of $N \times N$ dimensions, corresponding to the group of N individuals, the various entries frequently represented by symbols indicating each person's feeling towards other members of the group.

Rahim (1961) used the sociometric technique to locate the opinion leaders in an East Pakistan community.

Mulay et al. (1966) studied the traditional and emerging pattern of leadership in a village of Delhi Union Territory by use of sociograms which were drawn with three choices for each situation. Quantification of data was achieved by allocating weightages for the first, second and third choices.

Singh and Arya (1968) used sociometric test to all family heads in two villages near Delhi to measure the opinion leadership of these villages.

Shah and Patel (1970) employed sociometric technique for the identification of farm opinion leaders in two North Indian villages.

Veerabhadraiah et al. (1971) used sociometric method for the identification of perceived best farmers in a North Karnataka Village.

Dubey and Dwivedi (1972) used this technique for the identification of opinion leaders and their characteristics.

Gaikwad et al. (1972) identified opinion leaders with the help of a sociometric test which also helped in understanding the functions performed and the roles played by the leaders.

Reddy and Sahay (1973) employed this technique to identify the rural leaders in two North Indian Village communities.

Shankaraiah (1972) made use of sociometric test in his studies on "different patterns of communication in two Indian Villages to locate the influentials".

Singh and Singh (1972) on a study of socio-economic characteristics of polymorphic and monomorphic opinion-leaders in a farming community employed the technique.

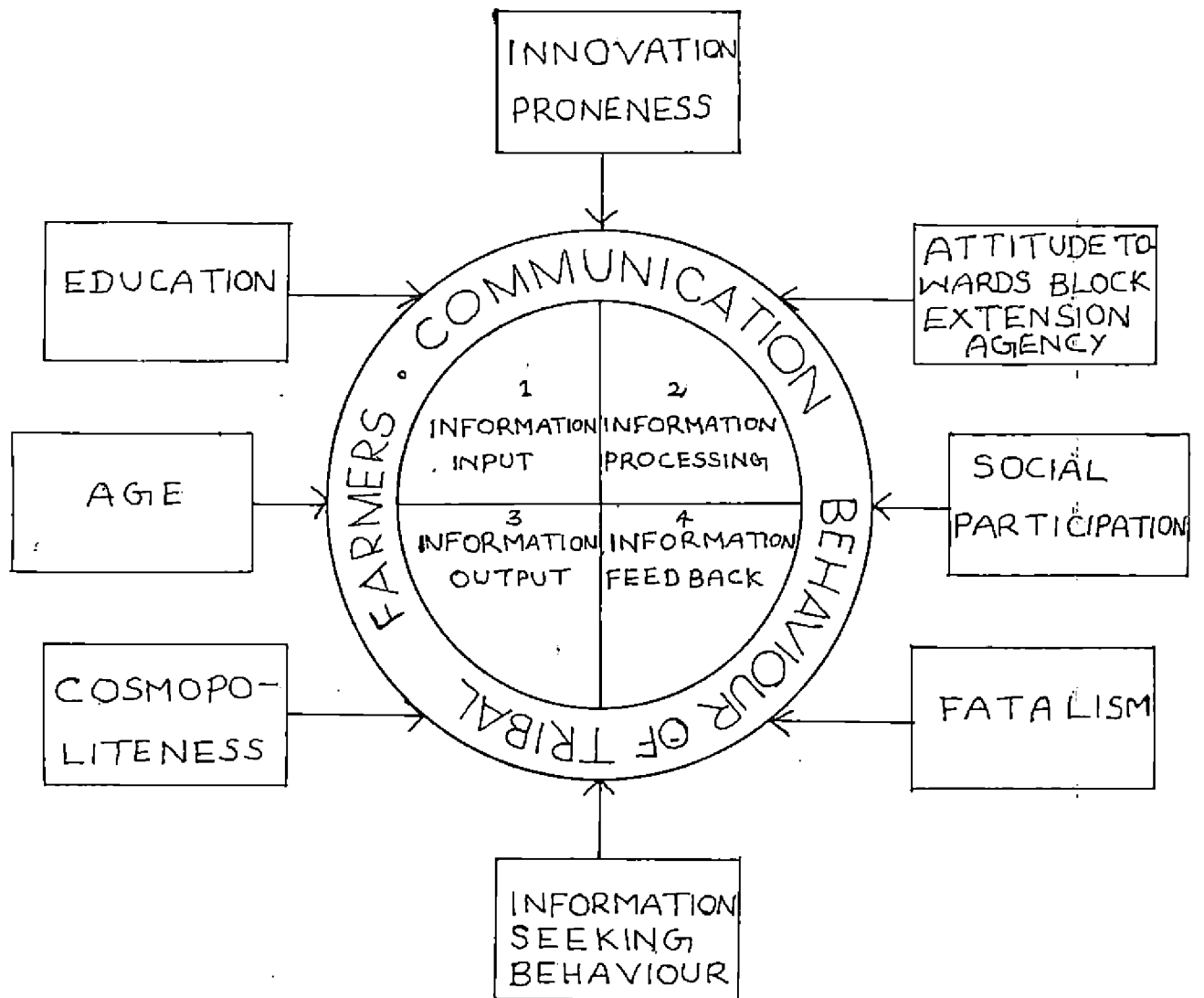
Verma (1972) in his study on personal influence in transmission of ideas used sociometric technique to identify the opinion leaders in a village in Uttar Pradesh.

Somu (1975) in his study "Identification of opinion-leaders and their characteristics", made use of sociometric technique to identify the opinion leaders in a South Indian village.

Shailaja (1981) used sociometric technique to identify four categories of leaders namely, adoptive leaders, opinion leaders, discussion group leaders and progressive leaders while studying their influence in the development of rural areas.

With the support of the above mentioned review of literature, the conceptual frame work has been developed and is illustrated in Fig.1.

Fig. 1 CONCEPTUAL FRAMEWORK



Hypotheses

Based on the review of literature, and in the light of the objectives of the study, the following hypotheses were formulated to test the relationship of the dependent variable with the independent variables.

General Hypothesis (GH-1)

There will be significant association between the communication behaviour of tribal farmers and the personal and socio-psychological variables.

Sub-hypotheses (SH-1)

There will be significant association between communication behaviour of tribal farmers and their

1. Age,
2. Education,
3. Innovation proneness,
4. Attitude towards block extension agency,
5. Social participation,
6. Fatalism,
7. Information seeking behaviour, and
8. Cosmopolitaness.

METHODOLOGY

CHAPTER III

METHODOLOGY

This chapter deals with the research methods and procedures used in the study which are presented under the following subheadings.

- A. Sampling
 - B. Description of the study area
 - C. Selection and empirical measurement of variables
 - D. Measurement of source credibility
 - E. Identification of key communicators
 - F. Techniques of data collection
 - G. Statistical methods used
- A. Sampling

The head of the selected household constituted the sampling unit referred to in this study.

Selection of District

According to the census of 1981, Kerala had a total population of 25,453,680 of which 2,61,475 belonged to scheduled tribes (1.03 per cent). Out of the 48 tribal communities in the State, 35 are scheduled tribes (Appendix I) and the rest denotified tribal communities (Mathur, 1977). Of these 35 scheduled tribes, the largest group in Southern Kerala is the "Kanikkars". They form the fifth major scheduled tribe of the State in population as they account for 5.68 per cent of the tribals (Bureau of Economics and

Statistics, 1979). They are a typical community of the South and are found distributed only in five taluks of Trivandrum and Quilon districts. Of the total Kanikkar households, about 80 per cent are concentrated in Nedumangad taluk of Trivandrum district. Hence the district of Trivandrum was selected for the study.

Selection of Taluk

Trivandrum district is administratively divided into four taluks, viz., Chirayinkil, Nedumangad, Neyyattinkara, and Trivandrum. Among these four taluks, Nedumangad has the maximum number (10,783) of scheduled tribes. Hence Nedumangad taluk was purposively selected as the locale for the study. The distribution of scheduled tribes in the four taluks of Trivandrum district is given in Table 1.

Table 1. Population of scheduled tribes in Trivandrum district (Taluk-wise).

Taluk	Total tribal population	Rural	Urban
Chirayinkil	69	68	1
Nedumangad	10,783	10,727	56
Trivandrum	948	267	681
Neyyattinkara	2,345	2,326	91
Total	14,145	13,388	757

Source: Census of India 1981 series - 10 Kerala (Part II B)

Selection of Villages

Nedumangad taluk consisted of 20 villages. The tribal population in each village of Nedumangad taluk is given in Table 2. From these 20 villages, six having higher tribal population were selected for the study. They are Tholikor, Vithura, Palode, Kallara, Peringamala and Anad in the descending order of the tribal population. From these six villages, further selection of the respondents for the study was made.

Table 2. Details about the population of scheduled tribes in Nedumangad taluk (village-wise)

Sl. No.	Village	Area in sq.km.	No. of house-holds	Popula-tion	Scheduled tribe population
1.	Nallanad	18.46	3,521	18,729	3
2.	Vamanapuram	27.43	4,750	24,394	-
3.	Kallara	49.49	6,340	33,531	685
4.	Pullampara	35.64	4,829	25,432	90
5.	Manickal	33.34	5,305	28,054	37
6.	Vembayam	30.58	5,347	28,052	156
7.	Karakulam	31.37	8,108	42,319	42
8.	Nedumangad	0.63	102	642	-
9.	Anad	24.15	4,610	23,864	328
10.	Panavur	21.90	3,015	15,624	44
11.	Palode	38.72	4,656	23,003	1383
12.	Peringamala	43.05	5,216	26,812	405
13.	Vithura	28.83	3,685	17,535	1729

Sl. No.	Village	Area in Sq.km.	No. of households	Population	Scheduled tribe population
14.	Tholikorod	28.74	4,730	25,332	1825
15.	Uzhamalakkal	18.75	3,372	17,255	64
16.	Vellanad	28.30	5,526	28,237	213
17.	Perumkulam	21.26	4,069	21,038	238
18.	Ariyanad	22.92	4,415	22,518	32
19.	Mannurkara	19.74	2,888	14,745	17
20.	Veeranakavu	18.19	4,166	20,529	238

Selection of Respondents

The address of the heads of families in each settlement of the selected six villages were collected from secondary data. The names of the heads who are farmers in each settlement were arranged in alphabetic order for selecting the sample. Using the table of random numbers, the farmers were selected at random. Samples proportionate to the number of the families were then selected as given in Table-3. By taking ten per cent of the heads of families from each of the six villages, a total sample size of 110 for the study was obtained. Both the population and sample were from the only community in the area viz. 'Kanikkars'.

The distribution of respondents in the selected settlements is given in Table-3.

Table 3. Distribution of Respondents in the selected settlements

Sl. No.	Name of the village	Total No. of settlements	No. of families	Total population	Sample size selected
1.	Tholikod	9	108	1825	11
2.	Vithura	15	549	1729	55
3.	Palode	6	220	1383	22
4.	Kallara	4	58	685	6
5.	Peringamala	8	147	405	15
6.	Anad	2	14	328	1
Total		44	1094	6355	110

B. Description of the study area

Trivandrum district lies in the southern most region of Kerala State. Nedumangad taluk which is the study area, is located in Trivandrum district and it lies in the north latitude between $8^{\circ} 36'$ and $8^{\circ} 45'$ and in east longitude between $77^{\circ} 00'$ and $77^{\circ} 07'$. The taluk comprises of 926.8 sq. km. out of which an area of 50.16 sq. km. is under forest. The elevation varies from 60 to 1074 m above MSL.

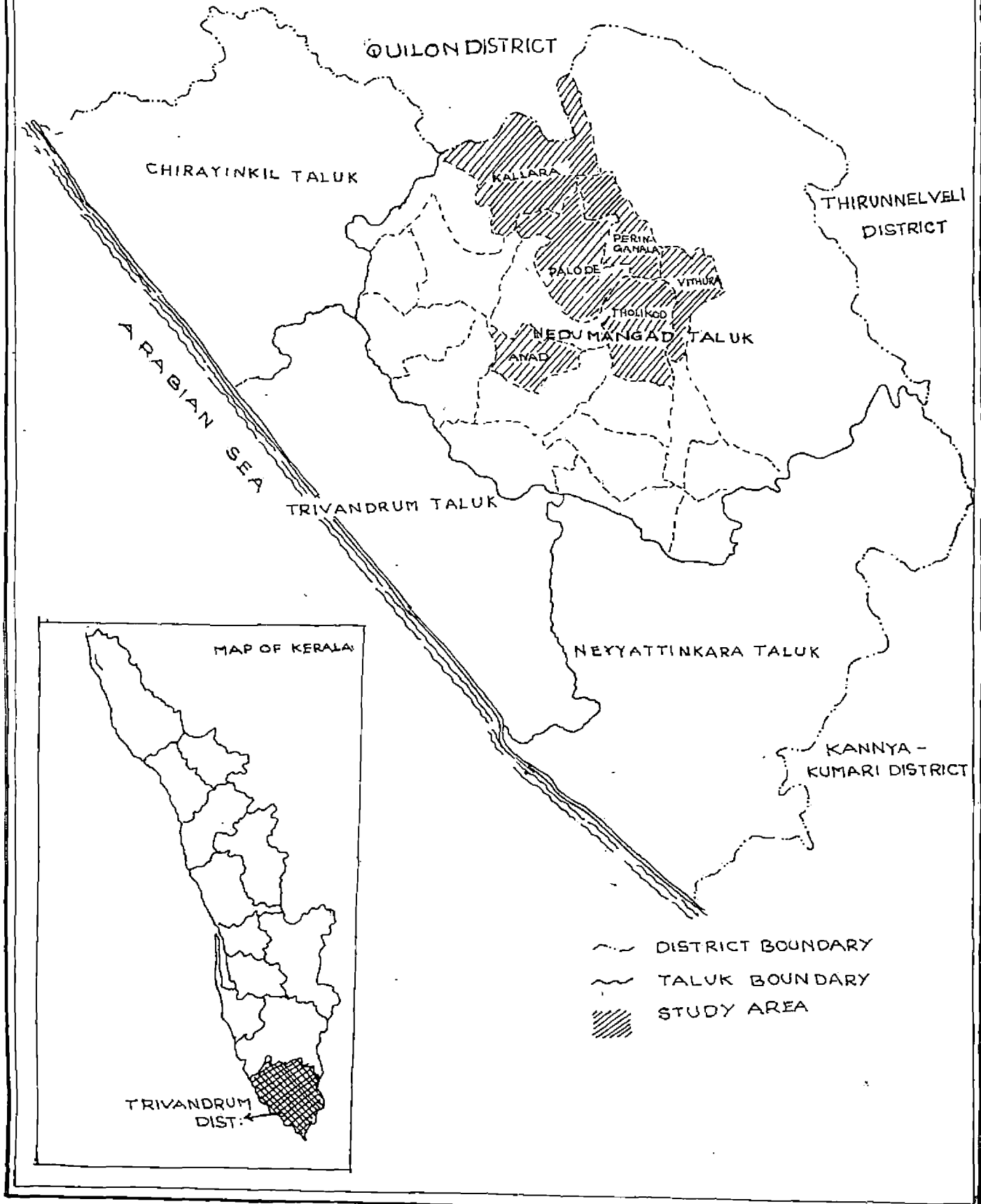
The rainfall varies from 215 cm to 420 cm. The climate is humid tropical and the temperature varies from 10° to 35°C (Meteorological Centre, Trivandrum). The important crops

FIG. 2

TRIVANDRUM DISTRICT

SHOWING TALUKS

SCALE 1CM = 3.25KM
RF 1:325000



cultivated in the taluk are tapioca, coconut, paddy, arecanut, and to a certain extent rubber and tea. Of these, tapioca is the major crop.

According to 1981 census, Trivandrum district had a total tribal population of 14,145 of which the tribes of Nedumangad taluk account for a population of 10,783 (76.23 per cent). The literacy percentage in the taluk is 69.24 with male literary percentage 74.62 and female literary percentage 63.79. The increase in tribal population during 1971-81 in the taluk was from 7518 to 10,783.

The map of Trivandrum district showing Nedumangad taluk with the taluk boundaries is given in Figure 2.

C. Selection and empirical measurement of variables.

The list of variables selected along with the instruments used to measure them are given below:

Variables	Measurement technique used
<u>Dependent variable</u>	
Communication behaviour	The procedure followed by Sherief (1985) with suitable modifications.
<u>Independent variables</u>	
X ₁ . Age	Actual age completed in years at the time of interview
X ₂ . Education	Socio-economic status scale developed by Trivedi (1963)

Variables	Measurement technique used
X ₃ . Innovation proneness	Moulik's (1965) self rating innovation proneness scale.
X ₄ . Attitude towards Block extension agency	Attitude scale developed by Sadamate (1978)
X ₅ . Social partici- pation	The method developed by Lokhande (1974)
X ₆ . Fatalism	The scale developed by Chadhopadhyay as followed by Verma (1970)
X ₇ . Information seek- ing behaviour	The procedure followed by Shailaja (1981)
X ₈ . Cosmopolitaness	The scale developed by Desai (1981)

Measurement of the dependent variable
communication behaviour

Communication behaviour of tribal farmers was considered as the dependent variable for the study.

Singh and Sahay (1970) operationalised communication behaviour of farmers as their information seeking habits based on the use of information sources such as personal-localite, personal-cosmopolite and mass media sources.

Murthy and Singh (1974), in their study, conception-
alised communication behaviour of farmers as a composite measure

of awareness of technologically competent information sources, comprehension, attitude change and adoption of the referrent.

Singh and Prasad (1974) measured communication behaviour of the farmers as the extent to which farmers are exposed to different messages from various communication sources for the sake of adopting these messages.

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.

Reddy (1976) measured communication behaviour of village level workers as a composite measure of awareness, comprehension, attitude, education, skills and effective use of communication channels.

Sandhu and Darbarilal (1976) measured communication behaviour as inward exposure and outward exposure. Inward exposure was measured as the exposure of farmers to those communication sources through which they received information and outward exposure was measured in terms of their use of the information sources to pass on information to fellow farmers.

Channegowda (1977) identified the following dimensions of farmers' communication behaviour:

Comprehension

Recall behaviour

Information reinforcing behaviour

Credibility
 Symbolic adoption
 Attitude
 Information disseminating behaviour

Balasubramoniam and Menon (1978) measured communication behaviour of research personnels in terms of activities related to acquisition, processing, and dissemination of agricultural information.

Pandayaraj (1978) measured the communication behaviour of Junior Agricultural Officers of Kerala in terms of information input, information processing, information output and information feedback indices.

Kareem (1984) in his study conducted to measure the communication role and behaviour of contact farmers, followed the procedure adopted by Pandayaraj (1978) with slight modifications. He measured it as a composite of the specific activities such as information receipt or input, information processing, information communication or output and information feedback.

Sherief (1985) used the method adopted by Kareem (1984) for studying the pattern of receipt of technical information of non contact farmers (information input), information processing of non contact farmers, communication of technical information (information output) by non contact farmers and the pattern of information feedback of non contact farmers.

The above mentioned reviews indicate a diversity of quantification procedures followed by various research workers in studying the communication behaviour. The method followed by Sherief (1985) was used in the present study also, with necessary modifications.

The communication behaviour of tribal farmers was measured in terms of the following sub dimensions:

1. Information input
2. Information processing consisting of information decoding and information encoding.
3. Information output
4. Information feedback

1. Information input

Information input relates to all activities performed by an individual for the acquisition of scientific and technical information from various sources. The flow of technical information at the grass root level is taking place largely through word-of-mouth communication in a face-to-face interaction. Now-a-days mass media sources such as the radio, and newspapers also give much importance to the transmission of agricultural technology. Therefore, for the present study, it was decided to include both interpersonal sources as well as mass media sources in measuring the information input pattern of tribal farmers.

To measure the extent of information input, the tribal farmers were asked to indicate how often they received information regarding improved cultivation practices for tapioca from

sources listed for the study. Improved cultivation practices of tapioca only were taken into consideration in the study since the major crop in the area is tapioca.

Based on the pilot study, 12 different inter-personal and mass media sources were identified as listed below:

Village Extension Officer
 Training staff of Mitraniketan
 Junior Agricultural Officer
 Newspaper
 Instructors of Functional Literacy Programme
 Radio
 Agricultural Demonstrators
 Neighbours and relatives
 Tribal leader
 Tribal Extension Officer
 Block Development Officer
 Tribal Extension Worker

The response of each farmer was obtained on a three point continuum. The scoring procedure is given below:

<u>Sl.No.</u>	<u>Category of response</u>	<u>Score</u>
1.	Always	2
2.	Sometimes	1
3.	Never	0

The total information input score of each respondent was obtained by adding the scores obtained in respect of each source. The scores of all the respondents for each source were added for the purpose of ranking the sources.

2. Information processing

To measure the information processing pattern of respondents, two specific dimensions were considered. They were information decoding and information encoding.

(a) Information decoding

In the present study, information decoding was operationalized as the 'oftenness' of difficulty felt by the tribal farmers in understanding the technical messages (Appendix-II) related to tapioca cultivation practices. To measure this, the respondents were asked to indicate how often they found difficulty in understanding the technical messages related to the improved cultivation practices of tapioca. The responses were rated on a three point continuum ranging from 'always' to 'never'. The scores assigned were as follows:

<u>Sl.No.</u>	<u>Category of response</u>	<u>Score</u>
1.	Always	0
2.	Sometimes	1
3.	Never	2

The method of scoring was done in order to facilitate the respondents with efficient information

decoding abilities to score maximum. The information decoding score for each respondent was obtained by adding the scores corresponding to the pattern of response of the respondents to the five messages given for the purpose. The scores of all the respondents for each message were added for ranking the message.

(b) Information encoding

In the present study, information encoding was operationally defined as the 'oftenness' of difficulty felt by the tribal farmer in processing a technical information with regard to the improved cultivation practices of tapioca in a meaningful message of simple words.

The pattern of information encoding of the respondents was measured in the following manner. The respondents were asked to indicate how often they found difficulty in processing each of the selected message related to the improved cultivation aspects of tapioca. The responses were rated on a three point continuum ranging from 'always' to 'never'. The responses were scored as shown below.

<u>Sl.No.</u>	<u>Category of responses</u>	<u>Score</u>
1.	Always	0
2.	Sometimes	1
3.	Never	2

The information encoding score for each respondent was obtained by adding the scores corresponding to the pattern of response of the respondent to the five messages given for the purpose. The scores of all the respondents for each message were added for ranking the message.

3. Information output

In this study, the information output was operationalised as the extent of utilization of different interpersonal communication methods by the tribal farmer respondents for disseminating technical information related to tapioca cultivation to other tribal farmers.

To measure the information output, each respondent was asked to indicate how often he communicated the technical information related to the selected message to the tribal leader, other farmers within the settlement, and farmers outside his settlement. The respondents were also asked to indicate how frequently they used the different interpersonal communication methods for the purpose of communicating technical information related to tapioca cultivation to these communicatees. The interpersonal communication methods included in the study are given below:

1. Personal talk during casual meeting
2. Personal talk during farm visit
3. Personal talk during home visit
4. Group discussion during informal meeting
5. Personal talk during home call by fellow farmers

The responses as to whom the tribal farmers communicated the messages and with what frequency were obtained on a three point continuum ranging from 'always' to 'never'. The scoring pattern was as follows:-

<u>Sl.No.</u>	<u>Category of response</u>	<u>Score</u>
1.	Always	2
2.	Sometimes	1
3.	Never	0

The information output score for each respondent was obtained by adding the scores corresponding to the response pattern of the respondents on the two groups of items in the schedule. The scores obtained by all respondents for each category of communicatees and interpersonal communication methods were added separately for ranking them.

4. Information feedback

In the present study, information feed back was operationalized as the oftenness of receiving the opinions, feelings, doubts, ideas and thoughts on improved cultivation aspects of tapioca by the respondents from the fellow farmers who are the secondary communicatees in the system through different interpersonal communication methods and also oftenness of sending back communication to the various sources of information by the tribal farmers.

The procedure followed for measurement of information feed back is given below:

A. The respondents were asked to indicate how frequently they received information feed back from fellow farmers who are the secondary communicatees in the system through the different communication methods listed earlier and how frequently they received different types of information feed back. The types of information feed back are given below:

1. Communication of information related to technical aspects.
2. Communication of information regarding sanction of subsidy.
3. Communication of information regarding supply of inputs.

B. The respondents were also asked to indicate how frequently they sent back communication to the sources of information cited earlier which are the primary communicators in the system regarding the cultivation aspects of tapioca.

The responses were obtained on a three-point continuum ranging from "always" to "never". The responses were scored as follows:-

<u>Sl.No.</u>	<u>Category of response</u>	<u>Score</u>
1.	Always	2
2.	Sometimes	1
3.	Never	0

The information feed back score for each respondent was obtained by adding the scores corresponding to the

response pattern of the respondent. The scores obtained by the respondents for each method of information feed back, types of information feed back, and the feed back of the respondent towards different sources were added separately for ranking them.

Computation of scores for communication behaviour

The scores for communication behaviour were obtained by the method of weighted average. The total score obtained by the respondent for all the four components such as information input, information processing, information output and information feed back were found out first. Each total score was multiplied with a weight assigned to it and totalled. This total was divided by the sum of weights given for all the four components. This can be represented as:

Score for communication behaviour =

$$\frac{W_1 X_1 + W_2 X_2 + W_3 X_3 + W_4 X_4}{W_1 + W_2 + W_3 + W_4}$$

where X_1 = Total score obtained by the respondent for information input

X_2 = Total score obtained by the respondent for information processing

X_3 = Total score obtained by the respondent for information output

X_4 = Total score obtained by the respondent for information feed back

W_1 = Weight given for X_1

W_2 = Weight given for X_2

W_3 = Weight given for X_3

W_4 = Weight given for X_4 , the weights being the number of questions asked to the respondents based on which the scores were calculated.

Categorisation of the respondents on the basis of their communication behaviour scores.

The respondents were categorised into 'low', 'medium' and 'high' levels of communication behaviour based on the formula $\text{mean} \pm 2$ standard error of the mean which defines the 95 per cent confidence limits of the mean communication behaviour (Snedecor and Cochran, 1954.)

Categories of respondents on the basis of communication behaviour scores

Sl.No.	Levels of communication behaviour	Score range
1.	Low	Below the lower limit
2.	Medium	In between the lower and upper limits
3.	High	Above the upper limit

Measurement of the independent variables

The independent variables were selected on the basis of an extensive review of literature, discussion with experts

and on the basis of a pilot study conducted among the 'Kanikkars'. A list of 17 variables considered to be important based on the above procedures was sent to judges for their judgement with regard to their relevance with the dependent variable (Appendix-III). The judges were drawn from the field of Agricultural Extension of the Kerala Agricultural University, Department of Sociology of the Kerala University and also from the officers involved in tribal development. Only those variables judged by them as most relevant to the dependent variable were selected for detailed investigation. The variables thus selected were age, education, innovation proneness, attitude towards block extension agency, social participation, fatalism, information seeking behaviour and cosmopolitaness.

X₁ Age

Age was measured in number of years the respondent has completed, since his date of birth at the time of interview.

X₂ Education

Abraham (1974) defined education as the actual number of years in school and formal degree obtained.

The socio-economic status scale of Trivedi (1963) was followed to measure education. According to this, the tribal farmers were categorised as illiterate, can

read only, can read and write, primary, middle, high school and college level. The scoring procedure is as follows:

Sl.No.	Standard	Score
1.	Illiterate	(0)
2.	Read only	(1)
3.	Read and write	(2)
4.	Primary	(3)
5.	Middle	(4)
6.	High School	(5)
7.	College level	(6)

X₃ Innovation Proneness

Innovation proneness indicates the behaviour pattern of tribal farmers who have interest in and desire to seek changes in farming techniques and to introduce such changes into their operations when practical and feasible.

Moulik's (1965) self rating innovation proneness - scale was used to measure the innovation proneness of tribal farmers. The scale consisted of three sets of statements. Each set of statements contained three short statements with weights 3, 2 and 1 indicating high, medium and low degrees of innovation proneness.

After obtaining the respondents' 'most-least' choice for each of the three sets of statements, the

scoring was done by summing up the ratios of the weight of the most-like statement to the weight of 'least-like' statement. As there were three sets of statements for the innovation proneness scale, the sum of the ratios for the three sets was a respondent's self-rating score for innovation proneness.

X₄ Attitude towards Block extension agency

Thurstone (1946) defined attitude as a positive or negative affect associated with a psychological object.

In the present study, attitude towards Block extension agency was operationally defined as the degree of favourableness or unfavourableness of a tribal farmer towards the block extension agency.

The attitude scale developed by Sadamate (1978) was used in the present study also. This scale included ten statements, of which five statements were positive and the rest five negative. The responses were rated in a three point continuum viz. agree, undecided and disagree. The scoring procedure for positive statements was as given under.

Sl.No.	Response	Score
1.	Agree	(3)
2.	Undecided	(2)
3.	Disagree	(1)

For the negative statements, the scoring procedure was reversed.

X₅ Social participation

Social participation is operationally defined as the degree of involvement of the tribal farmer in social organisations as a member or as an office bearer and regularity in his attendance to meetings.

The procedure developed by Lokhande (1974) was used for the purpose of measurement of social participation. The scoring procedure was:

<u>Items</u>	<u>Scores</u>
No membership	(0)
Membership in one organisation	(1)
Membership in more than one organisation	(2)
Office bearer in one organisation	(3)
Office bearer in more than one organisation	(4)
Distinctive features (MLA, M.P. etc.)	(6)

Attendance to meeting either as a member or as an office bearer, was considered important. Scores for attending meetings 'regularly' 'occasionally' and 'never' were given 3, 2 and 1 respectively. To obtain the final score of a respondent the scores given as a member or office bearer were multiplied with scores given for attendance to meetings by virtue of his status as member or office bearer and added up.

X₆ Fatalism

Rogers (1962) defined fatalism as the degree to which an individual perceives a lack of ability to control his future.

In the present study, fatalism is operationally defined as a belief of the tribal farmer that human situations and acts were pre-determined by some supernatural power and can never or little be influenced by individual volition or by act of any one else.

To measure fatalism, the scale developed by Chadhopadhyay as followed by Verma (1970) was used. The scale consisted of five items. The first and second items were negative and the rest positive. The scoring was done as follows:

Response	SA	A	DA	SDA
Score for positive items	(4)	(3)	(2)	(1)
Score for negative items	(1)	(2)	(3)	(4)

X₇ Information seeking Behaviour

Information seeking behaviour was operationally defined as the extent to which the tribal farmers are seeking information from different communication sources.

To measure information seeking behaviour, the method used by Shailaja (1981) was used. From the pilot study conducted in the study area, 12 information sources were identified such as:

- Village Extension Officer
- Training Staff of Mitraniketan
- Junior Agricultural Officer
- News Paper
- Instructors of Functional Literacy Programme
- Radio
- Agricultural Demonstrators
- Neighbours/relatives
- Tribal leader
- Tribal Extension Officer
- Block Development Officer
- Tribal Extension Worker

The respondents were asked how frequently they seek information regarding improved cultivation practices about tapioca. The responses were rated on a three point continuum as always, sometimes and never to which scores assigned were 2, 1 and 0 respectively.

In order to find out the most important sources of information, the scores of all the respondents for each source were added up and the sources were ranked according to these total scores.

X₈ Cosmopolitaness

Rogers (1962) defined cosmopolitaness as the degree to which an individual's orientation is external to a particular social system.

In the present study, cosmopolitaness was operationally defined 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 own community.

This variable was measured using the scale developed by Desai (1981). The two dimensions of the variable are:

- (a) the frequency of visits to the nearest town in a month; and
- (b) the purpose of visit to the town in a month.

The scoring pattern was as follows:

- (a) Frequency of visit to the nearest town in a month

Sl.No.	Frequency of visit	Scores assigned
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)

(b) Purpose of visit to the town in a month

Sl.No.	Purpose of visit	Score assigned
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 cosmopolitaness for each respondent was found out by adding the scores of the above two dimensions of cosmopolitaness. Based on the mean score, the respondents were classified into two groups as follows:

Sl.No.	Level of cosmopolitaness	Score range
1.	Low	Below mean score
2.	High	Above mean score

D. Measurement of source credibility.

Berlo (1960) defined credibility as the degree to which the communicator is perceived as trustworthy and competent by the receiver.

In the present study, source credibility was operationalized as the degree to which a tribal farmer considers a farm information source as trustworthy, competent and reliable in adopting a new agricultural practice recommended by it.

In the pilot study, 12 important sources were identified and the credibility index was calculated using the most-least credibility index method developed by Sandhu (1973). The 12 sources identified were:

Village Extension Officer

Training staff of Mitraniketan

Junior Agricultural Officer

Newspaper

Instructors of Functional Literacy Programme

Radio

Agricultural Demonstrators

Neighbours and relatives

Tribal leader

Tribal Extension Officer

Block Development Officer

Tribal Extension Worker

Most-least credibility index method

Respondents were asked to indicate the extent of credibility (whether most credible or least credible) attached to each source. The relative credibility index was found out for each source using the following formula:

$$\text{Relative credibility index} = \frac{X}{Y} \times \frac{100}{N}$$

Where x = Number of persons who believed a source most credible

y = Number of persons who believed a source least credible

N = Total number of persons in the sample

The higher the index, the more the credibility.

E. Identification of Key communicators

Sociometric method originally developed by Moreno (1934) and interpreted by Katz (1957), Festinger (1949) Bjarstad (1956), Lindzey and Borgotta (1959) and Evans (1962) was used by researchers for identification of key communicators.

For identification of the key communicators, Kerlinger (1964) suggested a sociometric index (choice status index). The index indicated how well or how poorly an individual was chosen by his group members. It is expressed as:

$$CS_j = \frac{\sum C_j}{n-1}$$

where CS_j = the choice status of the person j

$\sum C_j$ = the sum of choices in column j

and n = the number of individuals present in the group.

The code numbers of the members were written in columns 'j' and rows 'i' and the scores obtained by the choice person were added and the choice status was worked out. The maximum possible score for this index is 1.00.

Since the sample for the present study is drawn from farmers of different settlements, many of the respondents may not know each other. So this method was not used in the present study.

The sociometric technique used in the study to identify the key communicators in the tribal areas was as follows:

Every respondent was asked to name three leaders in the descending order of preference, who are the persons in the village he contacts for information and/or advice on problems regarding agriculture. The first choice was assigned a weightage of three points, the second two and the third one point as suggested by Campbell (1960). After computing the individual scores assigned by the 110 respondents, the leaders who obtained maximum total scores were identified as key communicators.

F. Techniques of data collection

Interview schedule was used for data collection. A pilot study was conducted in the selected area before the finalisation of the schedule. To study

the cultural and anthropological characteristics of the tribe, participant observation, discussions with tribal leaders and review of anthropological books were made use of.

Construction of schedule

The interview schedule was pre-tested in a non-study area having identical conditions. After making suitable modifications, the schedule was finalised. The interview schedule is given in Appendix- IV.

Data collection:

Data collection was carried out by interviewing the respondents during July to September, 1985. The schedule was translated into Malayalam and read out to tribal farmer respondents.

G. Statistical Method used

The data for advanced statistical procedures were processed at the computer centre of the Kerala University, Trivandrum. For analysis of the data of this investigation, the following statistical tests and procedures were applied.

i. Percentages:

Percentages were calculated for finding out the distribution of the respondents according to their communication behaviour, and personal and socio-psychological characteristics.

ii. Simple correlation

Correlation coefficients were computed to find out the degree of association between the dependent variable and each of the independent variables under study.

iii. Stepwise Regression

Stepwise regression procedures were applied to select the best regression equation and to determine the reliable regression coefficients for predictive purposes (Draper and Smith, 1966).

These enabled to understand the relative effect of the independent variables in predicting the dependent variable and to eliminate the unimportant variables at each step.

RESULTS

CHAPTER IV

RESULTS

The results of the study in accordance with the objectives set earlier are presented in this chapter under the following sections.

- I. Communication behaviour of the tribal farmers in terms of the information input, processing, output and feed back pattern.
- II. The information seeking behaviour of the tribal farmers.
- III. Correlation between the independent variables and the dependent variable.
- IV. Personal and Socio-psychological characteristics of tribal farmers with respect to communication behaviour.
- V. Relative importance of the selected personal and Socio-psychological characteristics and their contribution in explaining the dependent variable.
- VI. Extent of credibility attached to various sources of information by the tribal farmers.
- VII. Identification of the key communicators among the tribal farmers.
- VIII. The cultural-anthropological characteristics of the selected tribe and leadership modes.

I. Communication behaviour of tribal farmers in terms of the information input, processing, output and feed back pattern.

The communication behaviour of a tribal farmer was measured in terms of the information input, processing, output and feed back pattern.

1. Information input

The results on the pattern of the receipt of technical information (information input) by the tribal farmers are presented in Table - 4.1.

Table - 4.1 Pattern of receipt of technical information by the tribal farmers.

Sl.No.	Sources	Score	Rank
1.	Village Extension Officer	96	VI
2.	Training staff of Mitraniketan	82	VII
3.	Junior Agricultural Officer	37	XI
4.	Newspaper	124	III
5.	Radio	160	II
6.	Instructors of Functional Literacy programme	46	X
7.	Agricultural Demonstrators	62	VIII
8.	Neighbours/Relatives	184	I
9.	Tribal leader	110	IV
10.	Tribal extension worker	106	V
11.	Block Development Officer	34	XII
12.	Tribal Extension Officer	61	IX

It could be observed from Table - 4.1 that 'neighbours and relatives' are the most important source of information with a score of 184 followed by radio, newspaper, tribal leader and Tribal Extension Worker with scores 160, 124, 110 and 106, respectively. Other sources were comparatively less important. They were village extension Officer (score - 96), Training staff of Mitraniketan (score - 82), Agricultural Demonstrators (score - 62), Tribal Extension Officer (score - 61), Instructors of functional Literacy Programme (score - 46), Junior Agricultural Officer (score - 37) and Block Development Officer (score - 34) in the descending order of frequency of contact.

2. Information Processing

The data on the information processing pattern of the technical messages on tapioca cultivation are presented in Table - 4.2 and 4.3. The table 4.2 shows the information encoding and 4.3 shows the information decoding pattern of the technical messages by the tribal farmers.

From Table - 4.2, it could be seen that the message "To control termites infesting planted setts, sprinkle BHC 10 per cent in the mounds prior to planting" (M_5) was the most difficult one to understand by the tribal farmers. As high as 85.46 per cent of the respondents observed it as always difficult. The message regarding fertilizer application (M_4) was found always difficult

Table - 4.2 Pattern of information processing by the tribal farmers:

information decoding

(N = 110)

No.	Message	Oftenness of difficulty felt in understanding					
		Always		Sometimes		Never	
		Fre- quency	Per- centage	Fre- quency	Per- centage	Fre- quency	Per- centage
M ₁	Plant improved varieties of tapioca	64	58.18	33	30.00	13	11.82
M ₂	Select mature, healthy stem cuttings free from diseases and pests as planting material having 15-20 cm length.	16	14.55	20	18.18	74	67.27
M ₃	A spacing of 90 x 90 cm is given for branching types and 75 x 75 cm for non-branching type as M-4.	22	20	24	21.82	64	58.18
M ₄	Apply N and K ₂ O in three split doses ie, 1/3 as basal + 1/3 two months after planting + 1/3 three months after planting.	82	74.55	9	8.18	19	17.27
M ₅	To control termites infesting planted setts, sprinkle BHC 10% in the mounds prior to planting.	94	85.46	8	7.27	8	7.27

Table - 4.3 Pattern of information processing by the tribal farmers:
information encoding.

(N = 110)

No.	Message	Oftenness of difficulty felt in processing					
		Always		Sometimes		Never	
		Fre- quency	Per- centage	Fre- quency	Per- centage	Fre- quency	Per- centage
M ₁	Plant improved varieties of tapioca	68	61.82	30	27.27	12	10.91
M ₂	Select mature, healthy stem cuttings free from diseases and pests as planting material having 15-20cm length.	17	15.45	21	19.10	72	65.45
M ₃	A spacing of 90 x 90 cm is given for branching types and 75 x 75 cm for non-branching type as M.4.	20	18.18	23	20.91	67	60.91
M ₄	Apply N and K ₂ O in three-split doses ie, 1/3 as basal + 1/3 two months after planting + 1/3 three months after planting.	86	78.18	12	10.91	12	10.91
M ₅	To control termites infesting planted setts, sprinkle BHC 10% in the mounds prior to planting.	96	87.26	10	9.10	4	3.64

to decode by 74.55 per cent of the farmers while 58.18 per cent found message regarding improved varieties (M_1) as always difficult. However, only 14.55 per cent and 20 per cent respectively found the messages regarding selection and spacing in planting of setts (M_2 and M_3) as always difficult.

Table - 4.3 revealed that the message regarding the control of termite (M_5) was observed as always difficult to convert to simple meaningful message by 87.26 per cent of the respondents. The message regarding fertilizer application (M_4) was found always difficult to encode by 78.18 per cent. The message regarding improved variety was difficult for 61.82 percent. However, only 15.45 and 18.18 percent of respondents observed difficult always to encode the messages M_2 and M_3 respectively.

It is evident from the Tables - 4.2 and 4.3 that the information decoding and encoding by the tribal farmers were poor.

3. Information output

The two aspects studied under information output were the frequency of communication with different categories of farmers by the tribal farmers and the extent of use of inter-personal communication methods by the tribal farmers for communication of information on improved tapioca cultivation practices.

The scores obtained by all respondents for each category of communicatees and the ranking of the communicatees is presented in Table 4.4.

It is evident from the Table 4.4 that tribal farmers communicated technical information to 'other farmers within the settlement', more than to the other two categories. 'Tribal leader' and 'farmers outside the settlement' occupied the second and third positions respectively as communicatees.

Table - 4.4 Ranking of communicatees to whom the tribal farmers communicate the technical information.

Sl.No.	Category of communicatee	Score	Rank
1.	Tribal leader	102	II
2.	Other farmers within the settlement	172	I
3.	Farmers outside his settlement	95	III

Data regarding the extent of use of interpersonal communication methods by the tribal farmers are presented in Table 4.5.

From the Table 4.5, it is evident that 'personal talk during home visit' was the most important occasion during which the tribal farmers communicated the technical

information. This was followed by 'personal talk during home call by fellow farmers', 'personal talk during farm visit' and 'personal talk during casual meeting', in the descending order. 'Group discussion during informal meeting' was the least used method of information communication.

Table - 4.5 Ranking of communication methods based on the total scores.

Sl.No.	Communication methods	Score	Rank
1.	Personal talk during casual meeting	104	IV
2.	Personal talk during farm visit	109	III
3.	Personal talk during home visit	143	I
4.	Group discussion during informal meeting	53	V
5.	Personal talk during home call by fellow farmers.	139	II

4. Information Feed back

This aspect was studied on the following lines:

- (i) The frequency of information feed back received by the tribal farmers from fellow farmers through the different communication methods.

- (ii) The types of information feed back and
- (iii) The frequency of information feed back to the sources of information.

The Table - 4.6 shows the ranking of different communication methods through which communication is sent back based on the total scores of all the respondents for each method.

Table - 4.6 Ranking of communication methods based on the frequency of feed back.

Sl.No.	Communication methods	Score	Rank
1.	Personal talk during casual meeting	107	IV
2.	Personal talk during farm visit	112	III
3.	Personal talk during home visit	156	I
4.	Group discussion during informal meeting	58	V
5.	Personal talk during home call by fellow farmers	143	II

The Table - 4.6 revealed that 'personal talk during home visit' was the most important method of information feed back, followed by 'personal talk during home call by fellow farmers', 'personal talk during farm visit' and 'personal talk during casual meeting'.

'Personal talk during informal meeting' was the least important method of feed back.

The ranking of types of information feed back has been presented in Table - 4.7.

Table - 4.7 Ranking of types of information feed back.

Sl.No.	Types of information feed back	Score	Rank
1.	Communication of information related to technical aspects	64	III
2.	Communication of information regarding sanction of subsidies etc.	154	I
3.	Communication of information regarding supply of inputs	142	II

It could be seen from Table - 4.7 that the most important type of information feed back received by the farmers was 'communication of information regarding sanction of subsidies etc', closely followed by 'communication of information regarding supply of inputs'. The least important type of feed back was 'communication of information related to technical aspects'.

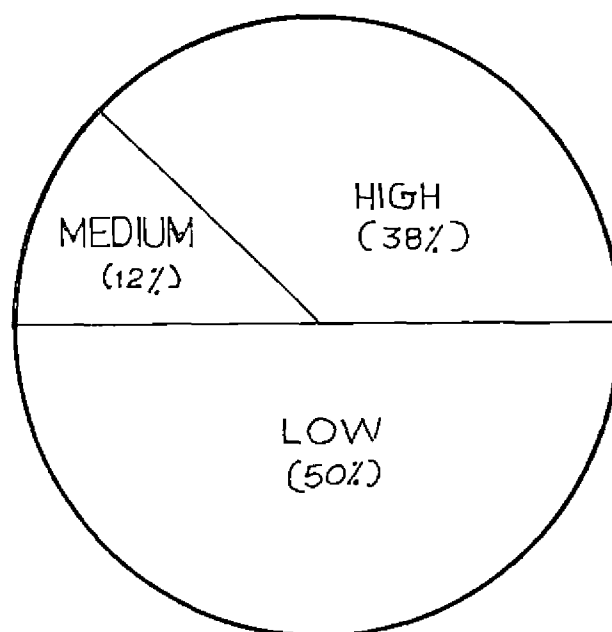
The ranking of the information sources based on the frequency of feed back received from the farmer respondents is presented in Table - 4.8.

Table - 4.8 Ranking of information sources based on the frequency of feed back received

Sl.No.	Information sources	Scores	Rank
1.	Village Extension Officer	62	III
2.	Training Staff of Mitraniketan	24	VIII
3.	Junior Agricultural Officer	16	X
4.	Newspaper	0	XI
5.	Instructors of Functional Literacy Programme	18	IX
6.	Radio	0	XI
7.	Agricultural Demonstrators	32	VI
8.	Neighbours and relatives	106	I
9.	Tribal leader	92	III
10.	Tribal Extension Officer	42	V
11.	Block Development Officer	26	VII
12.	Tribal Extension worker	94	II

From Table - 4.8, it could be observed that 'Neighbours and relatives' was the source which received feed back most frequently followed by 'Tribal Extension worker' and 'Tribal leader'. The feed back received by the sources 'village extension officer', 'Tribal Extension Officer', 'Agricultural

Fig. 3 DISTRIBUTION OF TRIBAL FARMERS
ACCORDING TO THEIR COMMUNICATION
BEHAVIOUR



Demonstrators' 'Block Development Officer', 'Training Staff of Mitraniketan', 'Instructors of Functional Literacy Programme', and 'Junior Agricultural Officer' was comparatively low as evident from the low scores they have obtained. The feed back received by 'radio' and 'newspaper' was nil.

The communication behaviour score was found out by the method of weighted average. The tribal farmers were categorised into three groups having 'low', 'medium' and 'high' communication behaviour, based on mean communication behaviour score and S.E. The distribution of respondents along their communication behaviour is given in Table - 4.9. A tribal farmer with a communication behaviour score below 9.98 was considered to have 'low' communication behaviour whereas one having a communication behaviour score above 11.31 was considered to have 'high' communication behaviour. A tribal farmer having score in between 9.98 and 11.31 was considered to have 'medium' communication behaviour.

Table - 4.9 Distribution of respondents along their communication behaviour

(N = 110)

Communication behaviour score	Category	Frequency	Percentage
Below 9.98	Low	55	50.00
Between 9.98 and 11.31	Medium	13	11.82
Above 11.31	High	42	38.18
Total		110	100.00

$$\bar{X} = 10.645$$

$$SE = 0.665$$

From the Table 4.9, it is evident that 50 per cent of the respondents had only 'low' communication behaviour, while 38.18 per cent had 'high' communication behaviour. Only 11.82 per cent had 'medium' communication behaviour. The result is depicted in Figure 3.

II. The information seeking behaviour of tribal farmers.

The distribution of the respondents along their information seeking behaviour scores has been given in the Table 5.1. The tribal farmers were categorised into three viz. 'low', 'medium' and 'high' information seekers based on mean and standard error. A tribal farmer with an information seeking behaviour score below 7.49 was considered to have a 'low' level of information seeking behaviour, whereas one whose score is above 8.96 was considered to have a 'high' level of information seeking behaviour. A tribal farmer having score in between 7.49 and 8.96 was considered to have a 'medium' level of information seeking behaviour.

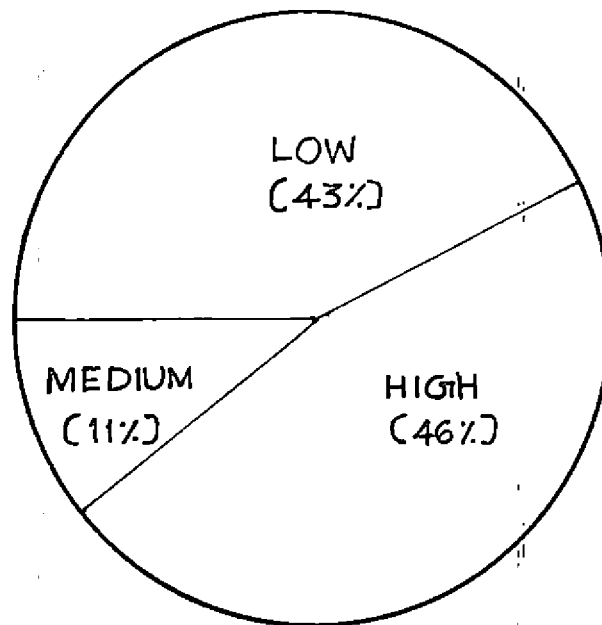
Table - 5.1 Distribution of respondents along their information seeking behaviour

(N = 110)			
Information seeking behaviour score	Category	Frequency	Percentage
Below 7.49	Low	47	42.73
Between 7.49 and 8.96	Medium	12	10.91
Above 8.96	High	51	46.36
Total		110	100.00

$$\bar{x} = 8.227$$

$$SE = 0.733$$

FIG. 4 DISTRIBUTION OF THE TRIBAL FARMERS
ACCORDING TO THEIR INFORMATION
SEEKING BEHAVIOUR



An appraisal of the table 5.1 revealed that 42.73 per cent of the respondents had a 'low' level of information seeking behaviour, whereas 46.36 per cent had a 'high' level of information seeking behaviour. Only 10.91 per cent had a 'medium' level of information seeking behaviour.

The result is depicted in Figure 4.

The ranking of the information sources based on the total scores assigned by all the respondents had been presented in Table 5.2.

Table - 5.2 Ranking of information sources based on total score from all respondents.

(N = 110)

Sl.No.	Sources	Score	Rank
1.	Village Extension Officer	96	VI
2.	Training Staff of Mitraniketan	82	VII
3.	Junior Agricultural Officer	37	XI
4.	Newspaper	124	III
5.	Radio	160	II
6.	Instructors of Functional Literacy programme	46	X
7.	Agricultural Demonstrators	62	VIII
8.	Neighbours and relatives	184	I
9.	Tribal leader	110	IV
10.	Tribal Extension Worker	106	V
11.	Block Development Officer	34	XII
12.	Tribal Extension Officer	61	IX

Table 5.2 revealed that 'Neighbours and relatives' was the most important information source followed by 'radio' and 'newspaper'. Other sources such as tribal leader and Tribal Extension Worker were also important whereas other sources such as Village Extension Officer, Training Staff of Mitraniketan, Agricultural Demonstrators, Tribal Extension Officer, Instructors of Functional Literacy Programme, Junior Agricultural Officer and Block Development Officer were comparatively less important as evident from the low scores.

III. Correlation between the independent variables and dependent variable

Correlation analysis was done to find out the intensity of the association between the independent variables and the dependent variable, viz. communication behaviour. The result of correlation analysis is presented in Table 6.

Table - 6 Correlation between communication behaviour and the independent variables.

Independent variables	Correlation coefficient
X ₁ Age	- 0.6646**
X ₂ Education	0.6647*
X ₃ Innovation proneness	0.5969**
X ₄ Attitude towards block extension agency	0.8149*

Independent variables	Correlation coefficient
X ₅ Social participation	0.3636**
X ₆ Fatalism	-0.0131
X ₇ Information seeking behaviour	0.8621*
X ₈ Cosmopolitaness	0.2508**

* Significant at 5 per cent level of probability

** Significant at 1 per cent level of probability

The results given in the Table-6 indicated that age was significantly but negatively correlated with the communication behaviour at one per cent level of probability. Education, attitude towards block extension agency and information seeking behaviour had positive and significant correlation with communication behaviour, at five per cent level of probability. Innovation proneness, social participation, and cosmopolitaness showed positive and significant correlation with communication behaviour at one per cent level of probability. Fatalism did not show any significant correlation with communication behaviour.

IV. Personal and Socio-psychological characteristics of farmers with respect to communication behaviour

Age:

The respondents were grouped into various age groups viz. 20 to 29 years, 30 to 39 years, 40 to 49

Table - 7 Age-wise distribution of respondents with respect to their communication behaviour

Age group	Communication Behaviour						Total	
	Low		Medium		High		Fre- quency	Per- centage
	Fre- quency	Per- centage	Fre- quency	Per- centage	Fre- quency	Per- centage		
20-29 years	1	6.67	-	-	14	93.33	15	100
30-39 years	4	15.38	9	34.62	13	50.00	26	100
40-49 years	16	59.26	4	14.81	7	25.93	27	100
50-59 years	20	74.07	-	-	7	25.93	27	100
60 years and above	14	93.33	-	-	1	6.67	15	100
Total	55		13		42		110	

years, 50 to 59 years and 60 years and above. The distribution of the respondents along their age and communication behaviour is presented in Table - 7.

Among the 15 respondents categorised under the age group 20-29 years, 93.33 per cent had 'high' communication behaviour whereas only 6.67 per cent had 'low' communication behaviour, none having 'medium' communication behaviour. The age group 30-39 years included 26 respondents and out of that 50 per cent had 'high' communication behaviour, while 15.38 per cent had 'low' communication behaviour and 34.62 had 'medium' communication behaviour. Out of the 27 respondents under the age group 40 to 49 years, 25.93 per cent showed 'high' communication behaviour, 14.81 per cent 'medium' communication behaviour and 59.26 per cent had 'low' communication behaviour. In the age group 50 to 59 years, only 25.93 per cent of the 27 respondents had 'high' communication behaviour whereas 74.07 per cent had 'low' communication behaviour, none showing 'medium' communication behaviour. In the oldest age group viz. 60 years and above 6.67 per cent showed 'high' communication behaviour, while 93.33 per cent showed 'low' communication behaviour, none showing 'medium' communication behaviour.

Of the 15 respondents each in the youngest and the oldest group, 93.33 per cent of the respondents were having 'high' communication behaviour in the former group while so much percentage were having 'low' communication

behaviour in the latter group. From the table - 7 it was realized that as age increases, the communication behaviour decreases.

Education:

The total respondents were categorised into seven groups as given in table-8. The group 'illiterate' included 29 respondents of which only 10.34 per cent showed 'high' communication behaviour while 89.66 per cent showed 'low' communication behaviour, none showing 'medium' communication behaviour. The 'read only' group included only five respondents and all of them had only 'low' communication behaviour. Out of the 12 respondents under the 'read and write' group, only 5.88 per cent had 'high' communication behaviour, while 70.59 had 'low' communication behaviour and 23.53 per cent had 'medium' communication behaviour. Among the 25 respondents under the 'primary' group, 48.00 per cent had 'high' communication behaviour, 24.00 per cent had 'medium' communication behaviour and 28.00 per cent had 'low' communication behaviour. In the middle group, there were 15 respondents, of which 53.33 per cent had 'high' communication behaviour, 20.00 per cent had 'medium' communication behaviour and 26.67 per cent had 'low' communication behaviour. The 'high school' group had 16 respondents, of which 93.75 per cent showed 'high' communication behaviour while only 6.25 per cent showed 'low' communication behaviour, none showing 'medium' communication behaviour. The 'College level' group included only three respondents, all of them

Table - 8 Distribution of respondents based on education with respect to their communication behaviour.

(N = 110)

Category	Score	Communication behaviour							
		Low		Medium		High		Total	
		Fre- quency	Per- centage	Fre- quency	Per- centage	Fre- quency	Per- centage	Fre- quency	Per- centage
Illiterate	(0)	26	89.66	-	-	3	10.34	29	100
Read only	(1)	5	100.00	-	-	-	-	5	100
Read and write	(2)	12	70.59	4	23.53	1	5.88	17	100
Primary	(3)	7	28.00	6	24.00	12	48.00	25	100
Middle	(4)	4	26.67	3	20.00	8	53.33	15	100
High School	(5)	1	6.25	-	-	15	93.75	16	100
College level	(6)	-	-	-	-	3	100.00	3	100

showing 'high' communication behaviour.

An appraisal of Table-8 revealed that the communication behaviour steadily increased as educational level increased.

Innovation proneness

The sample was grouped into two based on innovation proneness. The mean innovation proneness score was 2.156. A tribal farmer has 'low' innovation proneness if he obtained a score below 2.156 and 'high' innovation proneness if he obtained a score above 2.156. The distribution of respondents along innovation proneness and communication behaviour is presented in Table-9.

Table -9 Distribution of respondents based on innovation proneness with respect to their communication behaviour.

Innovation Category proneness score	Communication behaviour						Total		
	Low		Medium		High				
	Fre- quen- cy	Per- cen- tage	Fre- quen- cy	Per- cen- tage	Fre- quen- cy	Per- cen- tage	Fre- quen- cy	Per- cen- tage	
Below 2.156	Low	47	60.26	11	14.10	20	25.64	78	100
Above 2.156	High	6	18.75	3	9.37	23	71.88	32	100
$\bar{X} = 2.156$								Total 110	

Out of 78 respondents included in the 'low' innovation proneness group, 60.26 per cent showed 'low' communication behaviour whereas only 25.64 per cent showed 'high' communication behaviour and 14.10 per cent showed 'medium' communication behaviour.

Among the 32 respondents included under 'high' innovation proneness group, 71.88 per cent showed 'high' communication behaviour, while only 18.75 per cent and 9.37 per cent showed 'low' and 'medium' communication behaviour respectively.

From the table it is evident that communication behaviour increased as innovation proneness increased.

Attitude towards block extension agency

The respondents were categorised into two viz. those having favourable attitude towards block extension agency and those having unfavourable attitude towards block extension agency. A tribal farmer having an attitude score below 12.427 was included in the latter group and a tribal farmer having an attitude score above 12.427 was included in the former group. The distribution of respondents along their attitude towards block extension agency with respect to their communication behaviour is presented in Table-10.

Out of the 59 respondents who had 'unfavourable' attitude towards block extension agency, only 16.95 per cent had 'high' communication behaviour, while 67.80 per cent was having 'low' communication behaviour and

Table - 10 Distribution of respondents according to their attitude towards the block extension agency with respect to their communication behaviour.

(N = 110)

Attitude score	Category	Communication behaviour						Total	
		Low		Medium		High			
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Below 12.427	Unfavourable	40	67.80	9	15.25	10	16.95	59	100
Above 12.427	Favourable	15	29.41	6	11.77	30	58.82	51	100

$$\bar{X} = 12.427$$

15.25 per cent having 'medium' communication behaviour. Among the 51 respondents who had 'low' communication behaviour, 58.82 per cent had 'high' communication behaviour, 11.77 per cent had 'medium' communication behaviour and 29.41 per cent had 'low' communication behaviour.

An appraisal of the table revealed an upward trend in communication behaviour along with the 'favourableness' of attitude towards block extension agency.

Social participation

Based on social participation, the respondents were grouped into two such as those having 'low' social participation and those having 'high' social participation. All the respondents having social participation score below 2.936 were included in the 'low' social participation group and those having social participation score above 2.936 were included in the 'high' social participation group. Their distribution along social participation and communication behaviour is presented in Table - 11.

The 'low' social participation group included 51 respondents, of which 31.37 showed 'high' communication behaviour, 13.73 per cent 'medium' communication behaviour and 54.90 per cent 'low' communication behaviour. Among the 59 respondents under 'high' social participation group 45.96 per cent showed 'high' communication behaviour, 11.86 per cent 'medium' communication behaviour and 42.38 per cent 'low' communication behaviour.

Table - 11 Distribution of respondents based on social participation with respect to their communication behaviour.

(N = 110)

Social Partici- pation score	Category	Communication behaviour						Total	
		Low		Medium		High		Fre- quen- cy	Per- cen- tage
		Fre- quency	Per- centage	Fre- quency	Per- centage	Fre- quency	Per- centage		
Below 2.936	Low	28	54.90	7	13.73	16	31.37	51	100
Above 2.936	High	25	42.38	7	11.86	27	45.76	59	100

$$\bar{X} = 2.936$$

Thus from the table, it was observed that respondents with 'high' social participation showed 'high' communication behaviour too.

Fatalism

The sample was divided into two such as those having 'low' fatalism and those having 'high' fatalism. A tribal farmer was considered to have 'low' fatalism if he had a score below 12.245 and high fatalism if he had a score above 12.245. The distribution of the respondents along their fatalism and communication behaviour is presented in Table - 12.

Among the 53 respondents in the 'low' fatalism group, 45.28 per cent showed 'high' communication behaviour, 13.21 per cent showed 'medium' communication behaviour and 41.51 per cent showed 'low' communication behaviour.

The 'high' fatalism group included 57 respondents out of which 35 per cent showed 'high' communication behaviour, 12.28 per cent showed 'medium' communication behaviour and 52.63 per cent showed 'low' communication behaviour.

From the table, it could be seen that the respondents were almost evenly distributed among the two groups showing not much influence of fatalism on communication behaviour.

Table - 12 Distribution of respondents based on fatalism with respect
to their communication behaviour.

(N = 110)

Fatalism Score	Category	Communication behaviour						Total	
		Low		Medium		High		Fre- quency	Per- centage
		Fre- quency	Per- centage	Fre- quency	Per- centage	Fre- quency	Per- centage		
Below 12.245	Low	22	41.51	7	13.21	24	45.28	53	100
Above 12.245	High	30	52.63	7	12.28	20	35.00	57	100

$$\bar{X} = 12.245$$

Information seeking behaviour

The total respondents were divided into two groups having 'low' information seeking behaviour and 'high' information seeking behaviour coming below and above the mean score of 8.227. The distribution of respondents along their information seeking behaviour and communication behaviour is presented in Table - 13.

The 'low' information seeking behaviour group included 62 respondents of which only 9.68 per cent showed 'high' communication behaviour while 79.03 per cent showed 'low' communication behaviour and 11.29 per cent showed 'medium' communication behaviour. Out of the 48 respondents coming under the 'high' information seeking behaviour group, 77.08 per cent showed 'high' communication behaviour while only 6.25 per cent showed 'low' communication behaviour and 16.67 per cent showed 'medium' communication behaviour.

The table revealed a steady progress in communication behaviour along with information seeking behaviour showing an influence of the latter on the former.

Cosmopolitaness

The sample was divided into 'low' cosmopolite group and 'high' cosmopolite group based on mean score for cosmopolitaness. Those who had score below 5.073 were included under 'low' cosmopolite group while those who had score above 5.073 were included under 'high' cosmopolite

Table - 13 Distribution of respondents based on the information seeking behaviour with respect to their communication behaviour.

(N = 110)

Information seeking behaviour score	Cate- gory	Communication behaviour						Total	
		Low		Medium		High		Fre- quen- cy	Per- cen- tage
		Fre- quency	Per- centage	Fre- quency	Per- centage	Fre- quency	Per- centage		
Below 8.227	Low	49	79.03	7	11.29	6	9.68	62	100
Above 8.227	High	3	6.25	8	16.67	37	77.08	48	100

$$\bar{X} = 8.227$$

Table - 14 Distribution of respondents with respect to their cosmopolitanness and communication behaviour.

(N = 110)

Cosmopolitanness score	Category	Communication behaviour						Total	
		Low		Medium		High		Frequency	Percentage
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage		
Below 5.073	Low	33	58.93	5	8.93	18	32.14	56	100
Above 5.073	High	21	38.89	8	14.81	25	46.30	54	100

$$\bar{X} = 5.073$$

group. The respondents were distributed along their cosmopolitanism and communication behaviour as presented in Table -14.

The 'low' cosmopolite group included 56 respondents of which 32.14 showed 'high' cosmopolitanism, 8.93 'medium' cosmopolitanism and 58.93 per cent 'low' cosmopolitanism.

The high cosmopolite group included 54 respondents of which 46.30 per cent showed 'high' communication behaviour, 14.81 per cent 'medium' communication behaviour and 38.89 showed 'low' communication behaviour.

From the table it is evident that the communication behaviour increased among with cosmopolitanism.

V. Relative importance of the selected personal and socio-psychological characteristics and their contribution in explaining the dependent variable.

Simple correlation was useful only to find the association between the variables. Hence, an attempt was made to know the relative importance of the different independent variables in explaining the dependent variable viz. communication behaviour. The technique of stepwise regression analysis was found to be useful to know the relative effect of independent variables in predicting the dependent variable and elimination of unimportant variables at each step.

By doing this, it was also possible to know how the addition of variables behaved in explaining the variation of the dependent variable at each stage.

Stepwise Regression Analysis of the Communication Behaviour with the Independent variables.

The results of the regression analysis are presented in Table -15.1 and 15.2.

From Table - 15.1, it could be observed that information seeking behaviour (X_7) was the most important variable in explaining the variation in the communication behaviour, as more than 74 per cent of the variation could be explained by this single variable. A perusal of the table revealed that the predictive power of the regression equation increased with each additional step. Step number 4 which included four variables gave the maximum R^2 value with an F value of 136.56 which indicated that the predictive power was highest at this step. Eightythree per cent of the variation was explained by all these four variables.

All the eight variables taken for the stepwise regression analysis jointly explained 84.22 per cent of the variation in communication behaviour whereas the four variables taken up to the cutting point alone contributed to 83 per cent of the variation. In other words, contribution of variables other than the four variables was not significant in predicting the dependent variable.

At the 4th step, the F - value 136.56 was found to

Table - 15.1 Result of the stepwise regression analysis showing all the significant steps of the communication behaviour with the independent variables.

(N = 110)

Step number	Variables included in the regression analysis	M.C.C	M.C.C. adjusted to DF	DF	F Ratio	R ²	R ² (adjusted)
1	X ₇	0.8621	0.8621	1,108	312.61	0.7432	0.7432
2	X ₇ , X ₄	0.9076	0.9076	2,107	249.99	0.8237	0.8237
3	X ₇ , X ₄ , X ₂	0.9139	0.9122	3,106	179.15	0.8352	0.8321
4	X ₇ , X ₄ , X ₂ , X ₅	0.9158	<u>0.9134</u>	4,105	136.56	0.8387	0.8343
5	X ₇ , X ₄ , X ₂ , X ₅ , X ₈	0.9163	0.9130	5,104	108.92	0.8396	0.8336
6	X ₇ , X ₄ , X ₂ , X ₅ , X ₈ , X ₆	0.9171	0.9130	6,103	90.98	0.8411	0.8336
7	X ₇ , X ₄ , X ₂ , X ₅ , X ₈ , X ₆ , X ₃	0.9175	0.9125	7,102	77.59	0.8418	0.8327
8	X ₇ , X ₄ , X ₂ , X ₅ , X ₈ , X ₆ , X ₃ , X ₁₁	0.9177	0.9118	8,101	67.39	0.8422	0.8314

R² (adjusted) = 0.8343

R² at the end of 8th step = 0.8422

F = 136.56

Table - 15.2 Results of the stepwise regression analysis showing the final significant step (step No.4) with all significant variables included in the study of the communication behaviour (N = 110)

Variable No.	Name of the variable	Regression Coefficient (b)	S.E. of b	't' values
X ₇	Information seeking behaviour	0.478906**	0.052392	9.141
X ₄	Attitude towards block extension agency	0.235451**	0.043456	5.418
X ₂	Education	0.252956*	0.098080	2.579
X ₅	Social participation	0.0742314	0.047053	1.513

* Significant at 5 per cent level of probability

** Significant at 1 per cent level of probability.

be significant. Though the regression equation with all the four variables included was significant in prediction as indicated by the F - value, only coefficients of certain variables were found to be significant by their 't' values. The table indicated that the variables information seeking behaviour, attitude towards block extension agency, and education were individually significant in the prediction.

The regression equation given below was significant in predicting the communication behaviour of tribal farmers.

$$Y = 2.9540 + 0.4789^{**} X_7 + 0.2355^{**} X_4 + 0.2535^{*} X_2 + 0.0742 X_5$$

From the above regression equation, it was evident that 83 per cent of the variation in communication behaviour was explained by X_7 , X_4 , X_2 and X_5 .

All the regression coefficients except for X_5 were found to be significant. The partial regression coefficients indicated that a unit increase in information seeking behaviour would result in an increase of 0.4789 units of communication behaviour, ceteris paribus. With a unit increase in attitude towards block extension agency, 0.2355 unit increase is resulted in communication behaviour, other factors being kept constant. A unit increase in education would increase the communication behaviour by 0.2535 units, ceteris paribus.

VI. Extent of credibility attached to various sources of information by the tribal farmers.

In order to find out the extent of credibility attached to different sources of information by the tribal farmers, the relative credibility index was found out for each source. The results are presented in Table - 16.

Table - 16 Relative credibility index for various sources of information.

Sl. No.	Source of information	Relative credibility index	Rank
1.	Village Extension Officer	2.42	IV
2.	Training staff of Mitraniketan	0.82	VI
3.	Junior Agricultural Officer	0.34	X
4.	Newspaper	3.26	II
5.	Instructors of functional literacy programme	0.31	XI
6.	Radio	7.42	I
7.	Agricultural Demonstrators	0.76	VII
8.	Neighbours and relatives	7.42	I
9.	Tribal leader	2.94	III
10.	Tribal Extension Officer	0.65	VIII
11.	Block Development Officer	0.44	XI
12.	Tribal Extension Worker	2.22	V

The table revealed that the 'radio' and 'neighbours and relatives' were the two most credible sources with the highest relative credibility index of 7.42 each. These sources were followed by 'newspaper' with index 3.26, 'tribal leader' with 2.94, 'Village Extension Officer' with 2.42, and 'Tribal Extension Worker' with 2.22. 'Training staff of Mitraniketan', 'Agricultural Demonstrators', 'Tribal Extension Officer' and 'Block Development Officer' were considered to have less credibility with index of 0.82, 0.76, 0.65 and 0.44 respectively. Junior Agricultural Officer received an index of 0.34 while Instructors of Functional Literacy Programme gained an index of only 0.31.

It was evident from these results that 'radio' and 'neighbours and relatives' were the two most credible sources of information with regard to agricultural communication among tribal farmers. 'Junior Agricultural Officer' and 'Instructors of Functional Literacy Programme' were least credible sources for agricultural communication.

VII. Identification of key communicators among the tribal farmers

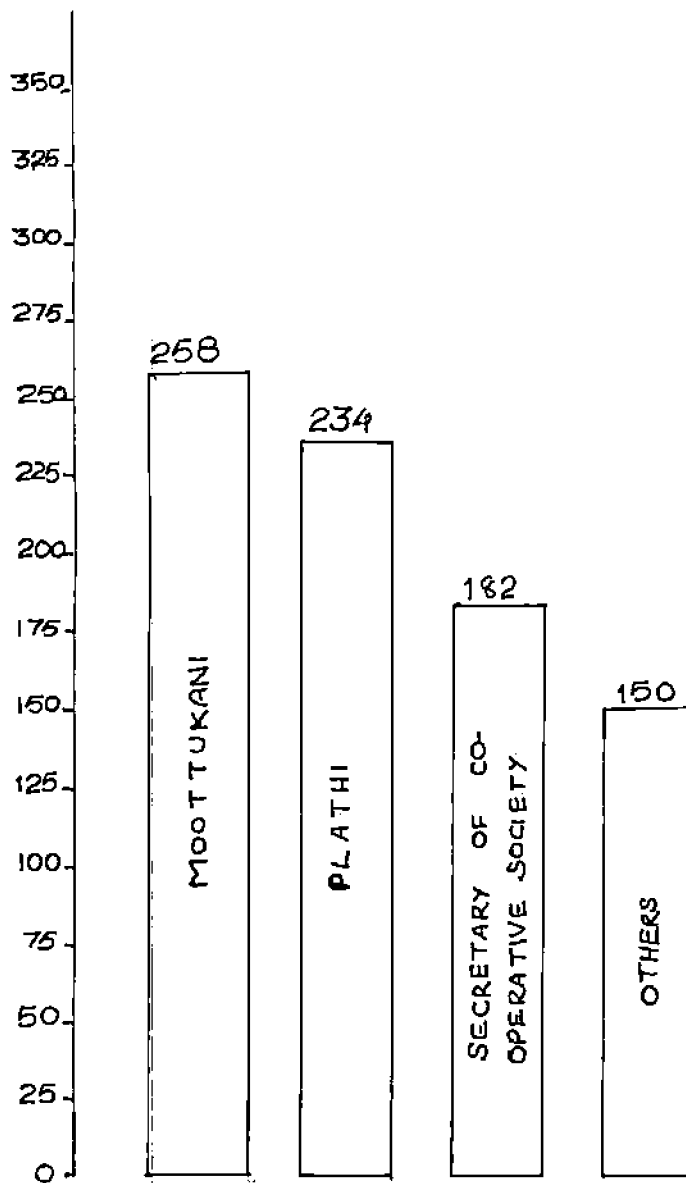
Using sociometric technique, the respondents were asked to name three leaders in the descending order of preference they contact for getting agricultural information.

Table - 17 Ranking of key communicators based on the preferences of respondents. (N = 110)

Category of key communicators	Preferences								Total	Rank
	I Preference		II Preference		III Preference		Total			
	Fre- quency	Per- cen- age	Fre- quen- cy	Per- cen- tage	Fre- quen- cy	Per- cen- tage	Fre- quen- cy	Per- centage		
Moottukani	62 (score = 186)	56.36	24 (score = 48)	21.82	24 (score = 24)	21.82	110	100	258	I
Plathi	34 (score = 102)	30.91	56 (score = 112)	50.91	20 (score = 20)	18.18	110	100	234	II
Secretary of Co-operative Society	20 (score = 60)	18.18	32 (score = 64)	29.09	58 (score = 58)	52.73	110	100	182	III
Others	12 (score = 36)	10.91	16 (score = 32)	14.55	82 (score = 82)	74.54	110	100	150	IV

FIG 5

RANKING OF KEY COMMUNICATORS



CATEGORIES OF KEY COMMUNICATORS

The first choice was assigned a weightage of three points, the second two points and the third one point. Individual scores for 110 respondents were computed for each category of key communicator. The results have been presented in the Table - 17.

The Moottukani received a score of 258, followed by 'Plathi' with 234, Secretary of Co-operative Society with 182, and Others with 150. These four categories were ranked as first, second, third and fourth respectively in the order of preference. Result is shown in Figure 5.

VIII. The cultural - anthropological characteristics of the selected tribe and the leadership modes

'Kanikkars' are a prominent group of hill tribes with their own individuality and identity in South Travancore. In Trivandrum District, they mainly inhabit a chain of forests in Ponnudi, Vithura, Kallar, Nedumangad, Aryanad, Agustianmudi, Aruvikkara, Cherucode, Kuttamala, Chettiampara, Chulliamala etc., in the Nedumangad and Neyyattinkara taluks. In Quilon District, they are found in Kulathupuzha, Madathara and Kalayapuram areas. Kanikkars are also found in the forests of Thirunelveli and Kanyakumari Districts in Tamil Nadu. The forests which they inhabit are intersected by numerous water courses, the most notable of which are the Paraliar, the Kothayar, the Neyyar, the Karamanayar, the

Vamanapuram and the Kallada rivers. Though some of the tribals are financially well off, most of them live in poverty and deprivation.

Origin and History

Kanikkars believe themselves to be the oldest tribe of Kerala. They hold many beliefs regarding their origin and transmit them through Folk songs, generation after generation. A legend states that when Aryans came to Kerala, they understood that Kanikkars were the owners of land and gave them the name 'Kanikkars' meaning landlords. Tradition has it that, when the sage Agastya was at Agastyakudam, the ancestors of the tribe presented the sage with a medicinal herb (malayare) used in performing ablutions in fire. The sage, therefore, called them Malayararyans. Even to this day, Kanikkars invoke Agastya to bring confusion to their enemies. It was later when they submitted to a ruling chief, and made presents of honey, cardamom and ivory that they came to be known as Kanikkars (Iyer, 1937).

According to Thurston (1909) "the word 'Kanikkars' means hereditary proprietor of land". Kanikkars of Kottur sing a song about their past history. According to this song, there were 72 Kani hamlets under three chieftains, Virappan Aryan of Viranellikotta, Sithangan Aryan of Chennalur kotta, and Adichan Aryan of Alanthara kotta.

They paid a visit to Attingal Raja on his demand and presented him with honey, ivory, tigerskin, leopard skin, bamboo seeds and other things to him. The latter was so much pleased that he conferred on Virappan Aryan the title of "Veera Marthandan Aryan" and authorised him to collect tax from the Kanikkars of the 72 hamlets. Virappan decided to celebrate his installation ceremony as chief of the Kanikkars and invited Adipandi, Nadupandi and Thalapandi chiefs to grace the occasion. Adipandi demanded that Virappan's sister be given to him in marriage as a reward for gracing the occasion with his presence. Provoked by this insulting demand, Virappan decided to divert the waters of Kothayar, the Paraliar, the Manimuthar, and the Chembarunthar from flowing into Pandian territory, by constructing dams. But some water still trickled down to Adipandi. According to the song, the medicine man 'Plathi' told Virappan that, if the dam was besmeared with the blood of his sister, Karimpandi, no water would flow to Adipandi. He did so and the water ceased to trickle down eastwards. This brought famine to Adipandi. The Pandiyan chief sought relief from Attingal Raja and Mathutti Pillai was sent with an elephant to break the dams. When Mathutti Pillai proceeded disregarding the dissuasions of Veera Marthandan, the latter killed his elephant with an arrow discharged from his bow. Fearing disgrace, Mathutti Pillai committed suicide.

Enraged by this tragic event, Adipandi declared war against the Kanikkars. The latter were defeated and their Chieftain committed suicide. Some of the Kanikkars fled to Travancore and they are said in the song to be the earliest Kani settlers in the country (Iyer, 1937).

Kanikkars maintained good relationship with the Maharajas of Travancore. It is believed that they gave protection to Raja Marthanda Varma when he approached them as refugee during his struggle against "Ettuveettill Pillamar". After conquering Travancore, the latter presented the Kanikkars with 36,000 acres of tax free land in Neyyattinkara taluk as a reward for their help during his struggle. Later Kanikkars are believed to have migrated to Nedumangad taluk also (Damodaran, 1974).

Habitat

Kanikkars prefer to live in isolation and hence they put up their villages only in interior areas where there is water supply. The villages are separated by a mile or so and are very difficult to get access. Huts are built of bamboo and are usually distributed according to the nature of the slope. The roof is thatched with leaves of reeds which are also used for walling. The floor of the hut is on a level with the ground. The huts are of varying sizes with a broad verandah. The hut is covered with grime and soot which help to keep off mosquitoes. In some areas, there is partial mud walling. Now-a-days, tree houses have become

very scarce, a few seen in the interior part of the forest. In some areas, bachelors are provided with a bachelor hall which is a taboo to females. Unmarried girls remain in a hut vacated for them.

Mats are the main furniture in the huts. Cots made of bamboo reeds and wooden benches are also seen, of late. Earthen vessels are mainly used for cooking, but some of the tribes have changed over to brass and aluminium vessels. Saucers, jugs, plates and other utensils are now used by them. Each hut has a mortar hewn out of a large block of wood, the top of which is scooped out into a shallow trough with sides about 3" thick all around. Kerosene lamps are used by them even now owing to want of electricity.

The anthropometry of Kanikkars

Kanikkars have been subject to extraneous influences and have, therefore, received an infusion of foreign blood and new ideas from the more civilized people with whom they have come into contact (Iyer, 1936). Owing to the admixture of foreign blood, they are now approaching a composite type of civilized humanity. In spite of this fact, they possess some general physical characters. Their skin colour varies from light to dark brown (Luiz, 1972). They have long head, curly hair, receding forehead, prognathous face with an average cephalic index of 74.2. The nose is platyrrhine (flat) with an average nasal index of 89.6 (Iyer, 1936). Their body has low stature, and the colour of their eyes is dark brown.

The costume varies from seminakedness to modern clothes. They speak Malayalam with a Tamil accent.

Internal structure and leadership modes

Kanikkars have the most elaborate division of exogamous phratries (Clans). The Kanikkars of Kallar, Vithura and Aryana recognize two main phratries, 'Muttillom' and 'Menillom'. The Muttillom phratry includes Mannatillom, Vellayillom, Thumbara illom, Thalayat illom, Kottapara illom, Melukonath and Kurumilloms. The Menillom phratry includes Meenanga illom, Pothottillom, Patika illom, Paramala illom, Erumbiyat illom, and Kythode illom. According to a legend, these clans received the names after the different parts of the carcass of an elephant that lay dead in the jungle and taken away by different groups of people.

Regarding the leadership modes, Kanikkars have the institution of headman who is popularly called "Moottukani". Leadership modes are different from what is found in Attappadi tribal area where the Mooppan, Bhandari, Mannookaran and Kuruthalai are the prominent leaders. "Moottukani" is the most important and influential person among the Kanikkars. He possesses the qualities of a good leader as enumerated by Tead (1935). He co-ordinates and directs every activity in a particular region coming under his jurisdiction with a strongly developed sense of a dominant purpose and direction. He involves himself in all issues

arising among his followers with enthusiasm and sincerity.

Moottukani holds an important position in different ceremonies. It is under his spiritual guidance the marriage ceremony, birth ceremony, death ceremony, agricultural ceremonies and hunting ceremonies are conducted. By his friendly and affectionate approach and executive nature, he gets the things done by his followers.

The media communication is not so prevalent in the tribal areas. Grape vine (informal) communication is in vogue. In this context, Moottukani plays an important role as key communicator. Due to his relatively high cosmopolitaness and social participation, he comes in contact with outsiders and gets information about the outside world. This information is transmitted among his followers by informal communication, since they feel a sense of solidity, of honesty, and of reliability.

Formerly, the office of the Moottukani was hereditary and devolved on the nephew. Of late, the selection of leader has become more democratic and the tribals elect one who has the initiative and leadership capacity as their leader.

The second important man among Kanikkars is the 'Plathi' (medicine man) who practices both medicine and black magic. He also holds an important position in various ceremonies and as key communicator. His importance is getting reduced as people become more enlightened and less fatalistic.

Marriage customs

The law of exogamy governs all marriages. It is said that clan classifications were principally made to give a better system of life and to prevent endogamous marriages (Luiz, 1972). The system of tracing kinship through the mother (matrilineal) is characteristic of Kanikkars. Marriage within the clan is prohibited because all members of a clan are of one blood. Children belong to the mother's clan and since it is different from that of her brother's children, marriage is possible between cross cousins. But marriage between children of two brothers or of two sisters is forbidden.

The system of marriage is mainly of the nature of a contract. Relationship can be sundered at the will of either party. The months of August, November and March are auspicious for marriage.

Marriage is performed either before or after puberty. When a boy attains marriageable age, four elders approach the girl's father with a proposal for marriage. If agreement is reached, betel, araca nut and tobacco are distributed among the boy's party. The marriage is celebrated in day time in the boy's hut. On the marriage day, the bridegroom's sister goes to the bride's hut with a pair of new clothes, some betel and nut, and accompanies the marriage procession from the bride's hut to the bridegroom's hut the same day.

The bride sits in the marriage booth and the bridegroom's mother hands over a necklace of beads to his sister, who ties it around the neck of the bride. Betel and arācanut are distributed to all present. In olden days, a present of 5½ "panams" was made to the bride by the bridegroom, if she had come to age. If not, he used to pay 7½ "panams". The bride's father receives four "chakrams". The assembled guests are treated to a feast and the couple eat from the same leaf. Though they remain in the same hut, they sleep separately in the night. After seven days, the villagers are treated to a feast and the couple pay a visit to the uncle's hut. After returning to their hut, they are allowed to lead independent life after six months or a year, as their parents decide.

Kanikkars are generally monogamous. Where polygamy is practised, a man marries the sister of his first wife. The underlying idea of polygamy is to beget children if the previous wives are sterile. A man may marry the wife of his deceased brother and should look after the children and property.

Adultery is viewed with great abhorrence and severe punishments are given. When a woman is found to be the adulterer, she is questioned by her 'nathune' (husband's sister). She manages to get the name of the offender, who is brought before the assembly and questioned on the matter. When he admits the offence, he is flogged with tamarind

twigs and is fined. But this system of punishment has almost disappeared now.

Divorce is effected in cases of incompatibility between the man and wife. The matter is talked over in the presence of the parents of the husband and wife and the headman. If they cannot lead an agreeable relationship, the bond is broken. The wife takes away all her property.

Puberty customs

When a girl attains puberty, she is kept in a separate shed, away from her parents' hut, which is a taboo for men. Girls of the same age may keep company. Food is served by her mother or sister. Pollution lasts for six days. On the seventh day, she returns home with her sisters and 'nathune' after bath. The plathi chants a mantram giving the holy ash with which she puts on a mark on the forehead. This is done so that evil spirits may not do any harm to her.

Pregnancy Rites

During the seventh month of pregnancy, a ceremony called "Vayathu pongal" is performed. Rice is cooked in seven pots placed on seven hearths and the pregnant woman should salute each of them. Then all the women partake of the cooked rice. This is also known as "Vayaru pongal".

The pregnant woman is lodged in a seclusion-shed towards child birth and old women experienced in midwifery attend on her and aid in the delivery. The father is not allowed to go near the child or mother up to a fortnight after delivery. The pollution lasts for two weeks to one month. A male baby is named after his uncle or maternal grandfather and a female baby after her aunt or maternal grand mother.

Inheritance

The inheritance is established among Kanikkars in a peculiar way. On the seventh day of death, the deceased man's property is divided equally between his nephew and his son. In case there is no nephew, the property devolves on his sons. If there is no son, it devolves on the niece. In her absence, it goes to his brothers and sisters.

A childless man adopts a niece or nephew. A niece is preferred for the future of the family, as any children born of her belongs to his own clan. The adopted child succeeds to the property.

Worship

The Kanikkars have a glorious collection of superstitions and legends. They worship all the Hindu deities and 101 ancestor spirits. They believe in life after death and rebirth. A young Kani is invariably taught quite a lot of the history of the tribe.

Funeral ceremony

People of the north of the river Kothayar, bury the dead; the dead body is not cremated. The Mottukani takes the initiative in the funeral ceremony. The wife of the deceased take part in the funeral. She goes to the burial ground with a vessel of rice gruel, a spoon and a sieve. As soon as the corpse is lowered into the grave, she places the vessel near the feet. Pollution lasts for fifteen days. On the tenth and the eleventh day, 'chat' mantra is chanted. Kanikkars belonging to the south of Kothayar burn their dead. A pit of size 6' x 2' x 2' is dug. It is packed with billets of fuel, over which the corpse is laid with the head to the north. Fuel billets are again placed over it and are set on fire. On the third day, the bones are collected and covered with earth in the pit. On the fifteenth day 'pulakuli' feast is conducted. They Bereaved pray for the peace of soul of the departed.

Agriculture

Previously, Kanikkars were practising shifting cultivation. Thurston (1909) remarked that "the jungle Kanikkars have no permanent abode, but shift from one part of the forest to another". But they have almost given up this practice mainly due to the rigorous rules introduced by the forest department, prohibiting their freedom to move from one place to another within the forest

area (Tribal sub plan of Kerala, 1979). A few are still practising shifting cultivation within the holding. They now cultivate upland rice, tubers and vegetables. They also collect tubers and roots locally called Kavala (Dioscoria oppositifolia), Nendran, Neendi etc. and other minor forest produces like honey, nellikka (Goosberry), wild cardamom, Kuva leaves etc. from the forest.

Communal Agricultural ceremonies.

Since Kanikkars were nomadic agriculturists, they were not assured of a steady supply of food. So they made offerings to their deities either to please, attract and conciliate or to avert and cancel the harm which the gods have the power to inflict. The relevant ancestral ceremonies and beliefs connected with agriculture as reported by Iyer (1937) are cited below:

Public ceremonies are conducted at the time of jungle clearing, breaking of the soil, and harvesting. When they start jungle clearing about the end of Vrischigom (November-December) on Friday at Sunrise, Kuva leaves (Curcuma angustifolia) are laid for different deities and the medicine man places a handful of paddy in all these leaves. Further down are placed bill-hooks and a measure of paddy on leaves by the Headman. The men observe continence for three days before starting jungle clearing. Women do not take part in the ceremony. The following prayer is then chanted;

"Oh Muthi, Kodalikavu Mutha, may there be no disease among us. May you shield us from any cut or wound".

All the audience stand in rapt attention. The Headman takes a handful of paddy and distributes a few grains among those present. They look at them intently and throw them on the leaves. Each man then takes his bill-hook. The Headman clears a part of the jungle first. He is then followed by the rest. The Headman cuts seven reeds and if no water or dirt is found inside the reeds, it is believed to be an auspicious sign for cultivating the area. If there happens to be any dirt or water, they select another locality. When they return after clearing the forest, prayer is offered to the 52 devates to the effect that they cleared the jungle, and they desire to get enough food for their subsistence. One of them becomes inspired, and says that they shall suffer no damage, if they work. When he comes to himself, the men partake heartily of food they have brought with them and go home. They do no more work for the day.

During the month of Meenom (March-April) the ceremony of throwing rice for Muthi starts. Four stakes are driven into the ground, and two thattis of reed are put up one above the other. On the thatti at the top are placed raw rice, coconut and a ball of rice powder. Frankincense is burnt and the following prayer is offered;

"Oh Muthiyamma, Uadyamutha, Kodalikavu Muthas of the hamlet, may we be enabled to live on paddy, the produce of our labour. May no wild elephant, wild boar, and other animals cause any damage to our crops, and may you guard us from these animals".

Then they broadcast the paddy seeds. Women not in their mensus and girls can attend the function. Great harm will be done, if an unclean woman attends the function.

At the time of harvest, another offering is given to Muthi and Uadyamuthan with the difference that there is no rice powder. The prayer is to the effect that they may get all the paddy through the good grace of the Gods. Sheaves of corn are carried in head loads by the Headman and others and a "putharikoduthi" (offering of first fruits) is given. Paddy sheaves are threshed and the paddy is fried and made into beaten rice. All assemble early next morning and pray:

"Oh God, may you give us abundance of corn and riches". At the time of harvest, if there is any death pollution the harvest is delayed till the pollution ceases, as otherwise wild animals will attack them or destroy their crops.

Harvesting is done by women and is completed by the end of chingom (August - September) and the paddy is kept inside the hut. The Headman intimates that corn should

be threshed and offered to the God. Each man contributes his share and paddy is hulled and offerings are made to the Sun, Sasta, 52 devatas, Muthi, Muthan, and Kodalichavu. Prayers are then offered to the following effect:

"We are going to thresh corn. Show us enough paddy, pray do not harm us". Each man then dries his paddy and bundles it up in Kuva leaves. He then suspends it from the rafters of the hut.

After 10th of Kanni (September - October) comes the grandest of offerings called "Puppada Koduthi". At the instance of the Headman, all the villagers bring bunches of plantain to him. They are left for three days, when a pit of 10 feet square and 3 feet deep is dug. Billets of fuel are then burnt in the pit, and when they are burnt out, maruthi leaves are placed over the embers. The plantains are then placed over the leaves and again covered with maruthi leaves and earth. They are smoked for three days through a hole. On the fourth day, the Headman calls the people to make the offering. There is feasting that evening, followed by singing. Offerings of paddy are given to different deities and three goats are sacrificed. The following prayer is then offered:

"We have little to offer. Pray accept our small offering as a large one, and protect our children".

Fruits are then distributed, and the goat's flesh is divided equally among all. They then return home.

The final koduthi (offering) comes on the fifth of vrischingom (about 20th of November), which is known as "puppada varikoduthi". Each man contributes one measure of paddy. The paddy thus collected is hulled and the rice is converted into paste. At sunrise, they go to the sacred spot and set fire to all the dry leaves that are lying about. The following prayer is then chanted:

"Oh, God, we make this offering after removing the sweepings of flowers, pray accept it without demur and be well disposed to us". The paste is then fried and distributed to all. This completes the ceremonies relating to agriculture.

Ceremonies connected with hunting

Kanikkars propitiate the hunting spirits such as Sankaramalla Muthan, Pulichavu of Ariya Muthan and Patanayaka muthan before they go hunting in Medom (April - May). The medicine man who observes continence for three days conducts the ceremony. A fowl is killed and offerings of beaten rice and arrack are made at sunrise with the prayer that they may have a successful hunt. Hunters go in a group of ten or fifteen persons.

When the hunt is successful, the skin of the animal is peeled off first. The heart and lungs are roasted and cut into slices and placed on leaves. They are intended as offerings to Madan, Pulichavu and others. All bathe and chant the following prayer facing east:

"When we go to the jungle, pray let us have easy game. If we do not get any, we shall conclude that there are no muthans". It is said that as an answer to this prayer, they get another game in a week. The flesh is divided among all the village folk.

Beliefs

The Kanikkars regard the Sun as female and worship occasionally on Fridays. They consider the Moon as male and make offerings to him on full moon days. Kanikkars believe that the earth rests on one of the horns of an ox. When the ox feels restive, on account of the heaviness of the earth, the earth is shifted to the other horn which causes earth-quakes.

Kanikkars think that the serpent is the parent of the Moon. They believe that the Moon once refused to give pan to the serpent with the result that the serpent occasionally shrouds the Moon with its hood. This is said to be the cause of lunar eclipse. The solar eclipse is similarly accounted for. They believe that thunder is the blow of Rakshasa (demon). Lightning is the flash at the time of the blow. The rainbow is said to be a bow of a Rakshasa (Iyer, 1937).

Industries

Kanikkars have no marketable industry worth the name. Each family makes its own baskets from bamboo splits intended to carry paddy, tubers and plantains and weaves mats for furniture.

Musical instruments

The musical instrument of the Kanikkar is the 'Kokra', which is used in all religions ceremonies. It is a tube nine inches long, made of sheet iron, serrated at the joining and opposite side. A man holds it in his left hand and draws an iron pin over the serrated edges to and fro quickly. The sound thus produced suits chat songs.

Treatment of diseases

The plathi (medicine-man) is supposed to be the repository of all medical knowledge. He cures ailments by medicine or exorcising evil spirits. Now-a-days people go to hospitals to get treatment.

The old customs and ceremonies are getting wiped out from the memories of Kanikkars population. Many of the Kanikkars, especially youngsters have a tendency to lead more of a civilized life than an age old and tradition bound life. The researcher observed a radical change in the cultural characteristics of the Kanikkars from those reported by Thurston (1909) and Iyer (1937).

DISCUSSION

CHAPTER V
DISCUSSION

The results obtained in this study are discussed and interpreted in this chapter under the following sections.

- I. Communication behaviour of tribal farmers in terms of the information input, processing, output and feed back pattern.
- II. The information seeking behaviour of the tribal farmers
- III. Relationship between the independent variables and the communication behaviour
- IV. Relative importance of the selected personal and socio-psychological characteristics and their contribution in explaining the communication behaviour
- V. Extent of credibility attached to various sources of information by the tribal farmers
- VI. Identification of key communicators among the tribal farmers
- I. Communication behaviour of tribal farmers in terms of the information input, processing, output and feed back

In the present study, the majority of the farmers had only low communication behaviour. Out of the four

components of the communication behaviour, viz., information input, processing, output and feed back, the information input was found to be high as evident from high information seeking behaviour. But the contribution from the other components might be less resulting in low communication behaviour. The information processing might be insufficient due to misunderstanding, partial understanding or improper interpretation of the informations received. From the tables 4.2 and 4.3 it could be observed that the message regarding the control of termite (M5) was the most difficult one to understand and convert to simple meaningful message. Majority of the tribal farmers perceived the messages regarding improved varieties of tapioca (M1) and fertiliser application (M5) as always difficult to decode and encode. Even though the message M2 and M3 was perceived easy by majority of farmers, it could be seen that in general, information decoding and encoding by the tribal farmers were relatively poor. This in turn might have lead to insufficient information output. Moreover, the informations are mainly conveyed to other farmers in the settlement through personal talk during home visit or home call by fellow farmers, (Tables 4.4 and 4.5). This might not have helped them to present a clear picture about the practicability of the information regarding improved techniques of tapioca cultivation. It is only logical to think that the information clearly understood and correctly interpreted will be disseminated to others properly.

The information sources for the tribal people were: radio, newspapers, village extension officer, Tribal extension officer, Tribal extension worker, Agricultural demonstrators, Junior Agricultural officers, Instructors of functional literacy programme, training staff of Mintraniketan, Tribal leader and neighbours and relatives.

Out of the above sources of information, feed back towards radio and newspaper was practically nil, which is evident from Table - 4.5. Feed back towards the cosmopolite sources such as Village Extension Officer, Tribal Extension Officer, Agricultural Demonstrators, Junior Agricultural Officer and training staff of Mitraniketan, was very much limited as these change agents visited the tribal areas only rarely. Hence such feed back was delayed also. Tribal Extension Workers belonged to the same tribal community and paid frequent visits in tribal areas so that feed back towards them was adequate. Feed back towards the personal localite sources of information such as tribal leaders (Moottukani and Plathi) and neighbours and relatives was immediate and adequate.

Out of the five communication methods through which feed back was obtained, personal talk during home visit and personal talk during home call by fellow farmers were the two important methods (Table 4.6). During personal talk, it is only natural that the importance of the technical informations would be lost. Similarly out of the three

types of information feedback, the 'communication of information regarding sanction of subsidy etc.' and the 'communication of information regarding supply of inputs' occupied first and second positions while the 'communication of information related to technical aspects' was only the least frequent feedback (Table 4.7).

Considering all the different sources of information it could be inferred that feed back in the communication system in the tribal area was not adequate. This could be a possible reason for the low level of communication behaviour of the tribal people.

Another reason might be the unfavourable attitude towards block extension agency shown by the majority of the farmers. This prevents them from seeking information from the block which in turn affects all other components of the communication behaviour. This view is supported by Gnanasekaran (1978) who observed that the attitude towards extension agency and information seeking behaviour were positively correlated.

Training and visit system plays an important role in extension work in Kerala. But it is in a nascent stage and contact farmers are not properly identified (Karim, 1984). The location of contact farmers among tribals is a difficult task since most of them live in remote areas isolated from the main stream of life. That might have contributed to low communication behaviour among them.

Since Kanikkars live in forest areas, their social participation compared to non-tribal people is less. This might be another reason for their low communication behaviour. The report of Singh (1970) that "lack of social participation by the tribals was one of the shortcomings of tribal development block scheme" and the report of Sadamate (1978) that "social participation was reported to be negatively and significantly related to technological gap" support this view.

The differences in the group structure in different settlements might also have contributed for low communication behaviour as Katz and Lazarsfeld (1955) rightly remarked, "Differences in the degree of mutual attraction among individuals, differences in the degree of their interdependence, difference in status, and differences in such things as propinquity or group size will make for significant differences in the rate of contact and communication and often too, in the content of what is communicated".

Above all, strong faith in traditional way of cultivation might be a reason for low communication behaviour of the tribal farmers.

II. The information seeking behaviour of the tribal farmers.

The data given in Table 5.1 revealed that majority of the tribal farmers in the study area had high level of information seeking behaviour.

One reason for the high level of information seeking behaviour might be the exposure to mass media, mainly the radio as evident from Table - 5.2. In the present study, more than 50 per cent of the respondents possessed radio. The radio has tremendous impact on tribal people who stay in places not connected by road. The timing of the agricultural programmes broadcast through radio might be convenient for the tribal farmers. It might also be a credible medium for them. That might be the logical reason for the emergence of radio as one of the important sources of information. According to Ambastha (1974) radio emerged as the most utilized source by small farmers. Ranganathan (1976) found that radio was utilized by cent per cent paddy growers. Agarwal and Kulkarni (1976) in their study on marginal farmers concluded that mass media communication such as radio broadcast, screening of agricultural films and other visual graphic communication media have shown promising results. Thus exposure to radio might be the most important reason for higher information seeking behaviour.

Though subscribers to newspapers are less than five per cent, newspaper also holds an important position as a credible mass media. Many researchers have reported the information of radio and newspaper as important sources of information. Ravi (1979) reported that newspapers and radio were used by more number of farmers than other mass media sources. Sherief (1985) reported

that among the mass media sources 'newspaper' emerged as an important source of information for non contact farmers.

Personal-localite sources play a significant role in contributing to higher information seeking behaviour. Tribal people form a cohesive group. As Back (1952) rightly concluded, when people are more attached to each other, they exert greater influence over each other's opinions and more over, are more effective in their influencing. Thus cohesiveness increase information seeking behaviour too. According to Prasad and Sinha (1970), relatives, family members and farm neighbours played significant role information seeking behaviour. Mathur et al. (1974) also reported that the farmers have shown greater dependence on inter-personal-localite sources such as relatives, neighbours and friends. In the present study also neighbours and relatives were found to the most important sources of information.

Another reason for higher information seeking behaviour might be the contact of tribal farmer with tribal leader and Tribal Extension Worker who are also important sources of information as observed from Table - 5.2. Both these sources have comparatively higher cosmopolitaness and social participation which enable them to acquire more knowledge from outside world. Since they are homophilous in nature, the transmission of information is easy for them.

Even though the majority (46 per cent) of the tribal farmers belonged to the high level group of information

seeking behaviour, about 43 per cent of the farmers were in the low level group in this attribute. This is due to the reason that many of the Kanikkars live in interior areas not accessible to roads as well as cosmopolite sources. From Table- 5.2 it could be observed that the cosmopolite sources such as Village Extension Officer, Training Staff of Mitraniketan, Agricultural Demonstrators, Tribal Extension Officer, Instructors of Functional Literacy Programme, Junior Agricultural Officer and Block Development Officers were comparatively less important sources of information. Inaccessibility to the dwellings of tribal farmers might be the reason for the same. Heterophily might be another reason. Contact with cosmopolite sources like extension agency is important in seeking information. The reports of Somasundaram (1976) and Panneerselvam (1978) support this view. The isolation of the tribal farmers from outsiders and their limited interaction with cosmopolite sources are responsible for the low level of information seeking behaviour of a sizeable group of the community.

The conservative nature of the senior tribal people might be another barrier for seeking new agricultural information.

III. Relationship between the Independent variables and Communication Behaviour.

The results presented in Table - 6 indicated that age was found to have a significant but negative relationship

with communication behaviour. It could be seen that age was a discriminating factor in influencing the communication behaviour. Generally young farmers have a tendency to adopt new agricultural techniques than old farmers. Young age is generally a characteristic of innovators who show more risk taking capacity and are more venturesome (Rogers and Shoemaker 1971). They also get more chance of exposure to the latest information due to their higher cosmopolitaness and social participation. The young farmers also show more innovation proneness whereas old farmers, being more conservative and tradition-bound, are less prone to change. This result was in conformity with that of Murthy and Singh (1974), Batara (1983) and Sherief (1985).

Education was found to have a significant and positive relationship with communication behaviour. Kanikkars enjoy more educational facilities compared to other tribals of Kerala and education might have helped them a great deal in understanding and communicating new ideas. Moreover, education might have enabled them to expose themselves to mass media, various organizations and agencies and to acquire more information regarding modern agricultural practices. Reports of Singh and Sahay (1970), Singh (1970), Sundaraswamy, (1971), Ramachandran (1974), Sandhu and Darbarilal (1976) and Rao and Reddy (1980) were in conformity with the result.

Innovation proneness was found to have positive and significant relationship with communication behaviour. The farmers who are prone to change might show the characteristics of innovators as enumerated by Rogers and Shoemaker (1971) viz. venturesomeness, risk bearing capacity, higher education, more social participation and empathy. These might have been the reasons why they adopt innovations, and disseminate among others. Moulik (1965) and Bhilegaonker (1976) established positive relationship between innovation proneness and adoption of farm practices.

Attitude towards block extension agency showed a positive and significant relationship with communication behaviour. The favourable attitude towards block extension agency influences them to approach block officials for getting agricultural information and various types of assistance. The results of the studies conducted by Gnanasekharan (1978), Sadamate (1978) and Ravi (1979) were also in conformity with the result in the present study.

Social participation was found to have significant and positive relationship with communication behaviour. It is natural that as a result of social participation, the tribal farmers establish more contacts with other people, which have resulted in acquiring new knowledge about agriculture, reducing the technological gap as observed by Sadamate (1978). Thus it could be understood that as social participation increased, the knowledge about modern

agricultural practices improved, resulting in high level of communication behaviour among the tribal farmers.

Fatalism showed no association with communication behaviour. The belief in pre-destined human situations make the tribal farmers more conservative. Even though the tribal population of Kerala in general are fatalistic, the Kanikkars are comparatively different as revealed from the study. The insignificant relationship of this factor is mainly due to the influence of outsiders who have frequent contacts with the tribal people. This is especially so in most of the Kanikkar settlements which are situated within two or three kilometers from the main road from Kallar to Ponmudi. The influence of frequent interaction with cosmopolite sources, of late, has resulted in narrowing down the fatalism, the Kanikkars originally had.

The table - 6 revealed that information seeking behaviour showed a positive and significant association with communication behaviour. Tribal farmers seek information about modern agricultural practices from the radio and the newspaper to some extent, and from personal-localite sources such as neighbours and relatives, tribal leader etc. Of late, tribal farmers have become more cosmopolite and hence they seek information from other agencies and officials also. The higher the social participation, the more the chance of getting improved knowledge about modern agricultural practices. That might have helped them to exchange views and

communicate their knowledge to others. Opinion leaders due to their higher exposure, seek information from outside agencies (Shailaja, 1981). The key communicators might have disseminated information in their system. Thus higher information seeking behaviour always tend to improve the communication behaviour too.

Cosmopolitaness was also found to have positive and significant association with communication behaviour. This association might be due to the fact that the tribal people who interact with others during their visit to nearest town or market places receive more information from them and communicate it to other farmers of their system. Since they act as personal-localite sources, other farmers accept the informations from these tribal farmers without much hesitation. As a result, the communication behaviour is improved. In the circumstance, it could be inferred that the higher the cosmopolitaness, the more is the communication behaviour.

From the above discussion, the hypothesis put forth in the case of age, education, innovation proneness, attitude towards block extension agency, social participation, information seeking behaviour and cosmopolitaness were accepted. But the hypothesis put forth in the case of fatalism was rejected, as no significant association could be noticed from the results given in Table - 6.

IV. Relative importance of the selected personal and socio-psychological characteristics and their contribution in explaining the communication behaviour.

The eight variables viz. age, education, innovation proneness, attitude towards block extension agency, social participation, fatalism, information seeking behaviour, and cosmopolitanism taken for the study had jointly explained 84.22 per cent of the variation in communication behaviour. Out of these eight variables, four variables namely, information seeking behaviour, attitude towards block extension agency, education and social participation alone contributed to 83 per cent of the variation. In other words, the contribution of variables other than these four variables was not significant in predicting the communication behaviour of tribal farmers.

The results of stepwise regression analysis shown in Table - 15.2 revealed that though the four variables were collectively significant in prediction as indicated by the 'F' values, only coefficients of the variables, information seeking behaviour, attitude towards extension agency and education were individually significant in prediction by their 't' values.

Information seeking behaviour indicates the progressiveness. The tribal farmers who have more of this

quality expose themselves to outside world and try to acquire more knowledge about modern agriculture. This knowledge is preserved by them and is transmitted to other farmers in the social system. Therefore, it is logical to assume that farmers with high information seeking behaviour show high communication behaviour too.

Since the tribal farmers get many benefits from the government through the Block, it is but natural that they develop a favourable attitude towards Block extension agency. This results in frequent contacts with the Block officials which in turn result in gain in knowledge about the improved agricultural practices. They disseminate this knowledge to other farmers in their system. Therefore, communication behaviour increases with more favourable attitude towards the Block extension agency.

The chances for getting formal education is comparatively more at present due to the educational policy of the government for tribals. They enjoy concessions such as tribal schools, tribal hostels, free tuition and scholarships. The formal education naturally widens the horizons of knowledge which in turn increases the dissemination of the same to others. It is only logical to think that a man with higher educational status, naturally improves his communication behaviour.

Social participation is equally important for the interaction between people and exchange news and views. They gain knowledge as well as disseminate it through

interaction. Therefore, it could be assumed that tribal farmers with high social participation showed high level of communication behaviour.

Based on the above discussions, it could be noted that information seeking behaviour, attitude towards block extension agency, education and social participation were mainly responsible for the contribution towards communication behaviour of tribal farmers.

Information seeking behaviour alone contributed to 74 per cent increase in communication behaviour and hence this variable emerged as the most important in prediction.

In the light of the above findings, it could be inferred that providing more facilities in the tribal areas for sharpening the information seeking behaviour would be very much beneficial. Providing more radio sets, starting a community radio listening centre and improving the circulation of daily newspapers in the tribal area would be useful. As a step to improve the circulation of newspaper, the pre-requisite of providing adult education and functional literacy classes in the area is necessary. Mitraniketan and KANFED may be able to do something to improve the literacy status in the area.

V. Extent of credibility attached to various sources of information by the tribal farmers

In the present study, neighbours and relatives and the radio were ranked as the most credible sources of

information by the tribal farmers.

The respondents might be considering the personal localite sources as trustworthy. In interpersonal communication, mutual attractions (friendship and cohesiveness) play an important role (Katz and Lazarsfeld, 1955). As a traditional community, the tribals have close interaction leading to group cohesiveness. Moreover, mutual obligations in the tribal social system might be more. The close interaction among the tribal farmers, leads to the sharing of experience resulting in an enhanced mutual obligation and trustworthiness which helps the communication of new ideas and new practices. The reports of Chole and Rahudkar (1978) and Karippai (1981) supported the result.

Another equally important source of information was radio. The daily broadcast of programmes designed for farmers by the stations of Akashvani in Kerala has become very popular and considerably helped in exposing the farmers to new techniques in agriculture. The timings of programmes might also have helped the farmers to attend them. The low cost transistor sets available in the market might also have contributed to the popularity of this medium which in turn helped the farmers to attend the agricultural programmes. These might be the reasons for considering the radio as most trustworthy. Perumal (1979) and Ravi (1979) also reported the radio as the most credible source

of information which is in conformity with the result in the present study.

The literacy level of Kerala State is the highest in the country (Census of India, 1981). Of late, Kanikkars also enjoy relatively more educational facilities as compared to other tribal farmers, and this might be the logical reason for the increased use of the print media. In the present study, even though the subscribers are only few, newspaper emerged as the second important credible source of information among the tribal farmers. Most of the leading Malayalam dailies publish farm news and features regularly and some of the literate tribal farmers, especially the young, are reading them regularly. Moreover, being a print medium, it also enables its preservation for future use. These might be the reasons for its credibility. In the studies conducted by Karippai (1981) and Sherief (1985), newspaper was reported to be an important medium utilized by rural people.

The next important credible source was the tribal leader. Among Kanikkars, the Headman is considered to be very influential (Iyer, 1937). He has relatively high exposure to cosmopolite sources. He is considered as a credible source by the tribal people because he has the characteristics of an opinion leader as enumerated by Shailaja (1981) viz. high cosmopolitaness, extension agency contact and social participation. Since he is a homophilous source, tribal people attach credibility to him.

Next in the order were Village Extension Officer and Tribal Extension Worker. The Village Extension Officer more frequently visits the area than other change agents and has relatively more rapport with the tribal people and hence he emerged as a credible source. The tribal extension worker hails from the same community and has been considered as credible. According to Singh and Sahay (1970) the most credible source among small farmers was Village Level Workers. Talukadar (1976) reported that the Block staff were most credible among small farmers.

The least credible sources were Training Staff of Mitraniketan, Agricultural Demonstrators, Tribal Extension Officer and Block Development Officer. These extension personnels approach the tribal farmers only rarely due to their involvement in other works outside the tribal areas and also due to the difficulties in reaching the settlements. Another reason might be the reluctance of tribal farmers to approach them to seek agro-informations due to the heterophily gap. This might have forced the tribal farmers to consider them as least credible. Karippai (1981) also concluded that the Extension personnel received only a low level utilization.

VI. Identification of key communicators among the tribal farmers.

The results presented in Table - 17 revealed that there were three important categories of key communicators among the tribal farmers viz. "Moottukani" "Plathi" and "Secretary of Co-operative society" in the order of preference.

The tribal farmers attach much importance to "Moottukani" as a source of information since he is believed to be the most important man with leadership capacity. He is the most influential among the "Kanikkars" (Iyer, 1937). In other tribal areas, such as Attappadi Valley, the "Mooppan" who is the head man is the most influential and important person in the settlement. "The communication pattern", Says Bales (1952) "tends to 'centralize' in other words, around a leader through whom most of the communication flows". Among Kanikkars, the communication pattern tends to 'centralise' around 'Moottukani'. He also possesses the characteristics of opinion leaders as enumerated by Rogers and Shoemaker (1971), such as external communication, accessibility, social status and innovativeness. Hence he emerged as a key communicator.

Second in the order of preference was 'Plathi'. He is the medicine man who may perform black magic too. He cures diseases and is supposed to drive away evil spirits. He also plays an important role in agricultural ceremonies, marriage ceremony, puberty customs, death ceremony and hunting ceremony (Iyer, 1937). Thus he holds an important position in the social system and it is but natural that he emerged as a key communicator next to Moottukani.

Of late, Secretary of Co-operative society has gained importance as a key communicator. The Girijan

Co-operative society plays an important role in the economic upliftment of the tribal farmers and the service rendered by the secretary is significant. Hence he has secured a respectable position among the tribal farmers. He also hails from the same community. These might be the reasons for considering him as a key communicator.

The category 'others' included family members, friends, neighbours and relatives. As compared to Mottukani, Plathi and Secretary of Co-operative society, their importance as key communicators was very much less.

SUMMARY

CHAPTER VI

SUMMARY

Despite a multitude of developmental efforts, tribals still remain in the low socio-economic stratum constituting the poorest section in our country. Modern agricultural technology has not been fully diffused among the tribals resulting in their continued dependence in subsistence farming. Unless the technological gap is filled by proper communication between tribals and the outside world, one cannot expect them to prosper with respect to their socio-economic condition. The present study was an attempt to understand the communication behaviour of the tribal farmers.

The specific objectives of the study were:

- (i) To study the communication behaviour in terms of information input, processing, output, and feed back pattern of the tribal farmers.
- (ii) To study the information seeking behaviour of the tribal farmers.
- (iii) To find out the relationship between personal and socio-psychological characteristics of tribal farmers and the communication behaviour.
- (iv) To study the extent of credibility attached to various sources of information by the tribal farmers.
- (v) To identify the key communicators among the tribal farmers.

- (vi) To study the cultural-anthropological characteristics and leadership modes.

The study was carried out in the Nedumangad taluk of Trivandrum district which accounts for maximum Kanikkar population of the State. From the 20 villages of the taluk, six villages having maximum tribal population were selected for the study. From these villages, further selection of respondents was done by simple random sampling. One hundred and ten farmers constituted the sample. Age, education, innovation proneness, attitude towards block extension agency, social participation, fatalism, information seeking behaviour and cosmopolitaness were the independent variables and the communication behaviour was the dependent variable. An attempt to identify key communicators and to investigate the cultural-anthropological characteristics and leadership modes of tribal farmers was also made. Regarding the measurement of variables, age was measured as the number of years the respondent had completed since his date of birth at the time of interview. For measuring education, the socio-economic status scale of Trivedi (1963) was used. Using Moulik's (1965) self-rating innovation proneness scale, innovation proneness of the respondent was measured. Attitude towards block extension agency was measured using the attitude scale developed by Sadamate (1978). With the help of the scale developed by Lokhande (1974), social participation was measured. Fatalism was measured using the scale developed by Chadhopadhyay as used by Verma (1970).

To measure information seeking behaviour, the method used by Shailaja (1981) was used. Cosmopolitanness was measured using the schedule developed by Desai (1981).

For the measurement of the dependent variable, communication behaviour, the procedure followed by Sherief (1985) with suitable modification was used. Key communicators were identified using sociometric test. The credibility attached to various information sources was measured using the relative credibility index developed by Sandhu (1973).

The data were collected by interviewing the respondents using the interview schedule developed for the purpose. Group discussions and participant observations were also used to elicit information. The data were subjected to correlation analysis and stepwise regression analysis.

The salient findings of the study were summarised and presented below:

1. The study revealed that the majority of the tribal farmers had only low level of communication behaviour.

2. 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'.

3. In both the cases of information decoding and encoding, the majority of tribal farmers experienced difficulty always with regard to the messages about control of termite (M_5), about fertilizer application (M_4) and about improved variety of tapioca (M_1).

4. Regarding information output, the majority of the farmers communicated information to 'other farmers of the settlement' while 'personal talk during home visit'.

5. Feed back was highest about the 'information regarding sanction of subsidies etc.', at the time of 'personal talk during home visit'. Feed back to the mass media such as radio and newspaper was nil. Feed back to cosmopolite sources was relatively less while that to personal-localite sources was comparatively high.

6. The study revealed that the majority (46 per cent) of the tribal farmers had high information seeking behaviour whereas 42 per cent had low information seeking behaviour.

7. 'Neighbours and relatives' were the most important information sources followed by the 'radio' and the 'newspaper'. Tribal leader and Tribal Extension Worker were the sources next in the order of importance. However, other sources such as Village Extension Officer, Training Staff of Mitraniketan, Agricultural Demonstrators, Tribal Extension Officer, Instructors of Functional Literacy Programme, Junior Agricultural Officer, and Block Development Officer received only lower ranks as information sources.

8. Correlation studies revealed that age was significantly but negatively correlated with communication behaviour whereas education, innovation proneness, attitude towards Block extension agency, social participation, information seeking behaviour, and cosmopolitaness were positively and significantly correlated. Fatalism did not show any association with communication behaviour.

9. Stepwise regression analysis revealed that all the eight independent variables (age, education, innovation proneness, attitude towards Block extension agency, social participation, fatalism, information seeking behaviour and cosmopolitaness) selected for the study, jointly explained 84.22 per cent of the variation in communication behaviour. The four variables, namely, information seeking behaviour, attitude towards block extension agency, education, and social participation fitted in the regression equation alone contributed to 83 per cent of the variation. Information seeking behaviour emerged as the most important variable in the prediction of the communication behaviour, as this alone contributed to 74 per cent of the variation.

10. The key communicators identified among the tribal farmers were Moottukani, Plathi and Secretary of Co-operative Society in the order of preference.

11. Regarding their cultural-anthropological characteristics, the Kanikkars have receding forehead, flaring nostrils, prognathous jaw with skin colour varying from brown

to dark. They speak Malayalam with a slight Tamil accent. The clothing varies from semi-nakedness to modern clothes. Though the old practice of shifting cultivation is restricted by the regulations of Forest Department, it is found within the holding. The Kanikkars had a glorious collection of superstitions and legends which have undergone decay, of late. The agricultural ceremonies include different types of 'koduthis' (offerings) like 'Putharikoduthi' (offering of the first fruits) and 'Puppada koduthi'. The songs related to agriculture had been wiped out from the memories of the tribal farmers. They have separate ceremonies during different occasions such as birth, death, at puberty, and hunting. Regarding the leadership, 'Moottukani' is the leader, assisted by 'Plathi' (medicine man) who occupies the second position. Of late, Secretary of Co-operative Society who is also a tribesman has secured importance among tribals. A radical change in the cultural and anthropological characteristics of the Kanikkars of Nedumangad from those reported by early anthropologists was observed by the researcher.

In conclusion, it can be said that, even though Kanikkars are more progressive than the other tribal communities of Kerala, they are still less progressive compared to the non-tribals of the State. For their socio-economic upliftment, the improvement in the farming system is imperative. It is possible only through systematic education and dedicated extension efforts.

Suggestions for future research

A comprehensive study to develop an appropriate communication strategy for the diffusion of innovations may be conducted in the less progressive tribal areas of Kerala.

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* Originals not seen.

APPENDICES

APPENDIX I

List of Scheduled Tribes of Kerala

1. Adiyar
2. Arandan
3. Eravallan
4. Hill Pulaya
5. Irular, Irulan
6. Kadar
7. Kammara
8. Kanikkaran, Kanikkar
9. Kattunaickan
10. Kochu Velan
11. Konda Kapus
12. Konda reddy
13. Koraga
14. Kota
15. Kudiya, Melakudi
16. Kurichian
17. Kurumans
18. Kurumbans
19. Malamalasar
20. Mala Aryan
21. Mala Pandaram
22. Mala Vedan
23. Mala Kuravan
24. Malasar

25. Malayan
26. Malayarayar
27. Mannan
28. Marati (in Hosdurg and Kasaragode taluk of Cannanore district)
29. Muthuvan, Mudugar, Muduvan.
30. Palleyan
31. Palliyan
32. Paniyan
33. Pulayan
34. Ulladan (Hill dwellors)
35. Uraly

Source: Census of India, 1981. Series - I part,

II B (iii)

APPENDIX II

Technical messages on improved tapioca cultivation selected for the study of communication behaviour of tribal farmer.

- M₁. Plant improved varieties of tapioca
- M₂. Select mature, healthy stem cuttings free from diseases or pests as planting material having 15-20 cm. length.
- M₃. A spacing of 90 x 90 cm is given for branching type and 75 x 75 cm. for non-branching type as M-4.
- M₄. Apply N and K₂O in three split doses, ie, 1/3 as basal + 1/3 two months after planting +1/3 three months after planting.
- M₅. To control termites infesting planted setts, sprinkle BHC 10% in the mounds prior to planting.

Source: Package of Practices Recommendations, 1982,
Kerala Agricultural University.

APPENDIX -- III

From

Dr. G. Balakrishna Pillai,
Associate Professor,
Department of Agrl. Extension.

To

Dr./Sri.
Department of

Sir,

Sub:- P.G. programme - Research work of Sri. K. Subramoniam -
Judgement of the relevance of variables.

...

Sri. K. Subramoniam, an M.Sc. (Ag) student in Agrl. Extension is doing research on "Communication behaviour of Tribal Farmers - A system Analysis" in Trivandrum District. He has selected a few variables after a detailed review of research literature and a pilot study.

I request you to be kind enough to judge the variables in the enclosed continuum as on their relevance for the study. Give an 'X' mark on the column of your preference:

Sl. No.	Name of the variable	Most relevant	Relevant	Least relevant
1.	Educational status			
2.	Cosmopolitaness			
3.	Fatalism			

Sl. No.	Name of the variable	Most relevant	Relevant	Least relevant
4.	Attitude towards extension agencies.			
5.	Innovativeness			
6.	Level of aspiration			
7.	Exposure to mass media			
8.	Social participation			
9.	Source credibility			
10.	Homophily-Heterophily			
11.	Leadership quality			
12.	Ethnocentrism			
13.	Empathy			
14.	Extent of Adoption			
15.	Socio-economic status			
16.	Indebtedness			
17.	Age			

Kindly return the statements after making your valuable judgement to Sri. Subramoniam, researcher.

G. BALAKRISHNA PILLAI.

Vellayani,

2..3..1985.

APPENDIX - IV

COMMUNICATION BEHAVIOUR OF TRIBAL FARMERS - A SYSTEM ANALYSISInterview Schedule

Respondent No.

Date

1. General

1. Name of the respondent :
2. Address :
3. Age : Young Middle Old age
(<30 years) (30-50 (50 years)
years)
4. Tribe :
5. Settlement :
6. Panchayat :
7. Block :
8. Taluk :
9. Major crops :

2. Communication Behaviour

- A. Please indicate how often did you get the information on
tapioca cultivation from the following sources.

Sl. No.	Information sources	Always (2)	Sometimes (1)	Never (0)
---------	---------------------	---------------	------------------	--------------

1. Village Extension Officer
2. Training staff of Mitraniketan
3. Junior Agricultural Officer
4. Newspaper
5. Radio
6. Instructors of Functional Literacy programme
7. Agricultural Demonstrators
8. Neighbours/relatives
9. Tribal leader
10. Tribal Extension worker
11. Block Development Officer
12. Tribal Extension Officer

B. Information Processing

(i) Information Decoding

Please indicate how often you find difficulty in understanding the technical message related to tapioca cultivation practices.

Sl. No.	Information sources	Always (2)	Sometimes (1)	Never (0)
1.	Village Extension Officer			
2.	Training staff of Mitraniketan			
3.	Junior Agricultural Officer			
4.	Newspaper			
5.	Radio			
6.	Instructors of Functional Literacy programme			
7.	Agricultural Demonstrators			
8.	Neighbours/relatives			
9.	Tribal leader			
10.	Tribal Extension worker			
11.	Block Development Officer			
12.	Tribal Extension Officer			

B. Information Processing

(i) Information Decoding

Please indicate how often you find difficulty in understanding the technical message related to tapioca cultivation practices.

Sl. No.	Items	Always (0)	Sometimes (1)	Never (2)
1.	Plant improved varieties of tapioca			
2.	Select mature, healthy stem cuttings free from diseases or pests as planting material having 15-20 cm. length			
3.	A spacing of 90 x 90 cm is given for branching type and 75 x 75 cm for non-branching type as M-4.			
4.	Apply N and K ₂ O in three split doses, ie, 1/3 as basal + 1/3 two months after planting + 1/3 three months after planting			
5.	To control termites infesting planted setts, sprinkle EHC 10% in the mounds prior to planting			

(ii) Information encoding

Please indicate how often you find difficulty in converting the following information into meaningful message of simple words:

Sl. No.	Items	Always (0)	Sometimes (1)	Never (2)
1.	Plant improved varieties of tapioca.			
2.	Select mature, healthy stem cuttings free from diseases and pests as planting material having 15-20 cm length.			

Sl. No.	Items	Always (0)	Sometimes (1)	Never (2)
3.	A spacing of 90 x 90 cm is given for branching types and 75 x 75 cm for non-branching type as M-4.			
4.	Apply N and K ₂ O in three split doses ie. $\frac{1}{3}$ as basal + $\frac{1}{3}$ two months after planting + $\frac{1}{3}$ three months after planting.			
5.	To control termites infesting planted setts, sprinkle BHC 10% in the mounds prior to planting.			

C. Information output

(i) Please indicate how often you communicate the technical information about tapioca cultivation to the following categories of communicatees.

Sl. No.	Category of Communicatees	Always (2)	Sometimes (1)	Never (0)
1.	Tribal leader			
2.	Other farmers within the settlement			
3.	Farmers outside your settlement			

(ii) Please indicate how often did you use the following methods for communicating technical information on tapioca cultivation to other farmers.

Sl. No.	Communication methods	Always (2)	Sometimes (1)	Never (0)
---------	-----------------------	------------	---------------	-----------

1. Personal talk during casual meeting
2. Personal talk during farm visit
3. Personal talk during home visit
4. Group discussion during informal meeting.
5. Personal talk during home call by fellow farmers.

D. Information Feed back

(i) Please indicate how often you receive opinions, feelings, doubts, ideas and thoughts about tapioca cultivation from fellow farmers.

Sl. No.	Method of information feed back	Always (2)	Sometimes (1)	Never (0)
---------	---------------------------------	------------	---------------	-----------

1. Personal talk during casual meeting
2. Personal talk during farm visit
3. Personal talk during home visit
4. Group discussion during informal meeting
5. Personal talk during home call by fellow farmers.

(ii) What are the types of communication you receive from farmers?

Sl. No.	Types of information feed back	Always (2)	Sometimes (1)	Never (0)
---------	--------------------------------	---------------	------------------	--------------

1. Communication of information related to technical aspects.
2. Communication of information regarding sanction of subsidies etc.
3. Communication of information regarding supply of inputs

(iii) Please indicate how often you send back your opinion, feelings, doubts, ideas and thoughts about tapioca cultivation to the following information sources?

Sl. No.	Information sources	Always (2)	Sometimes (1)	Never (0)
---------	---------------------	---------------	------------------	--------------

1. Village Extension Officer
2. Training staff of Mitraniketan.
3. Junior Agricultural Officer
4. Newspaper
5. Instructors of Functional Literacy Programme
6. Radio
7. Agricultural Demonstrators
8. Neighbours and relatives
9. Tribal leader
10. Tribal Extension Officer
11. Block Development Officer
12. Tribal Extension Worker

3. EDUCATION

Please indicate the level of education

Sl. No.	Category	Score	Response
1.	Illiterate	(0)	
2.	Read only	(1)	
3.	Read and write	(2)	
4.	Primary	(3)	
5.	Middle	(4)	
6.	High School	(5)	
7.	College level	(6)	

4. Source-Credibility

Please indicate which of the following sources are considered as most credible and least credible by you, in influencing you, to adopt improved cultivation practices of tapioca.

Sl. No.	Source	Most credible	Least credible
1.	Village Extension Officer		
2.	Training staff of Mitraniketan		
3.	Junior Agricultural Officer		
4.	Newspaper		
5.	Instructors of Functional Literacy Programme.		

Sl. No.	Source	Most credible	Least credible
6.	Radio		
7.	Agricultural Demonstrators		
8.	Neighbours and relatives		
9.	Tribal leader		
10.	Tribal Extension Officer		
11.	Block Development Officer		
12.	Tribal Extension Worker		

5. Innovation proneness

Sl. No.	Statements	Most like	Least like
A. a)	I try to keep myself up-to-date with information on new farm practices, but that does not mean that I try out all the new methods on my farms (2)		
b)	I feel restless till I try out a new farm practice, I have heard about (3)		
c)	They talk of many new farm practices these days but who knows if they are better than the old ones (1)		
B. a)	From time to time I have heard of several new farm practices and I have tried out most of them in the last few years (3)		
b)	I usually wait to see what results my neighbours obtain before I try out the new farm practices (2)		

Sl. No.	Statements	Most like	like
	c) Somehow I believe that the traditional ways of farming are the best (1)		

- C. a) I am cautious about trying a new practice (2)
- b) Afterall our forefathers were wise in their farming practices and I do not see any reason for changing these old methods (1)
- c) Often new practices are not successful, however, if they are promising I would surely like to adopt them (3)

6. Attitude towards Block extension agency

Sl. No.	Statements	Agree (3)	Undecided (2)	Disagree (1)
- 1	Block extension agency doesn't consider participation of tribals in extension activities			
+ 2	Block extension agency people are good and I always seek help from them.			
+ 3	Block extension agency has made a great contribution towards the overall developments of our area.			
+ 4	I always discuss my farm problems with Block extension agency people.			
- 5	Block extension agency generally care for the big farmers.			

Sl. No.	Statements	Agree (3)	Undecided (2)	Disagree (1)
- 6	I do not have much personal interest in the Block extension people.			
- 7	Block extension people do not have an enthusiasm for tribal development.			
+ 8	One should have more contacts with Block extension agency.			
+ 9	Block extension agency encourages tribal farmers to participate in developmental programme.			
-10	Block extension agency hardly bothers the problems of tribal farmers.			

7. Social participation

Please indicate whether you are a member or office bearer in the following organisations and if so, how frequently you attend the meeting.

Sl. No.	As Member	As Office bearer	Attend meeting		
			Regu- larly (3)	Occa- siona- lly. (2)	Never (1)
1.					
2.					
3.					
4.					
5.					
6.					

8. Fatalism

Sl. No.	Statements	SA	A	D	SDA
- a	Those who say that they have seen ghosts either distort the truth or tell a lie.				
- b	It is better to disbelieve in what is not proved or tested but when tested, it is to be relied on.				
+ c	A basic human tragedy is that man proposes, God disposes.				
+ d	Mantras have far-reaching effects if one can chant and recite accurately right mantras on right occasion, he can produce miraculous effect.				
+ e	Every event in a man's life has already been settled and determined by his fate.				

9. Information seeking Behaviour

Please indicate how frequently you seek information from the following sources about the improved agricultural practices for tapioca.

Sl. No.	Sources	Always (2)	Sometimes (1)	Never (0)
1.	Village Extension Officer			
2.	Training staff of Mitraniketan			
3.	Junior Agricultural Officer			
4.	Newspaper			
5.	Instructors of Functional Literacy programme.			

Sl. No.	Sources	Always (2)	Sometimes (1)	Never (0)
6.	Radio			
7.	Agricultural demonstrators			
8.	Neighbours and relatives			
9.	Tribal leader			
10.	Tribal Extension Officer			
11.	Block Development Officer			
12.	Tribal Extension Worker			

10. Cosmopolitaness

Please indicate how frequently did you visit the nearest town and the purpose of your visit also.

(a) Frequency of visit to nearest town

Sl. No.	Particulars	Score	Response
1.	Two or more times a week	(5)	
2.	Once a week	(4)	
3.	Once in 15 days	(3)	
4.	Once in a month	(2)	
5.	Occasionally	(1)	
6.	Never	(0)	

(b) Purpose of visit

Sl. No.	Particulars	Score	Response
1.	All visits relating to agriculture	(5)	
2.	Some relating to agriculture	(4)	
3.	Personal or domestic matters	(3)	
4.	Entertainments	(2)	
5.	Other purpose	(1)	
6.	No response	(0)	

11. Sociometry

If you need information and/or advice regarding Agricultural problems, who are the persons in the village you seek information and/or advice first according to the importance?

- 1st choice
- 2nd choice
- 3rd choice

- 12. Do you subscribe newspaper? Yes/No
- 13. If not, do you read a newspaper from neighbours? Yes/No
- 14. Do you possess a radio set? Yes/No
- 15. Who is the change agent visiting your tribal areas most frequently?

COMMUNICATION BEHAVIOUR OF TRIBAL FARMERS—A SYSTEM ANALYSIS

By

SUBRAMONIAM K.

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

1986

ABSTRACT

The research was conducted in Nedumangad taluk of Trivandrum District to study the communication behaviour of tribal farmers.

Data were collected from 110 'Kanikkars' from six villages of the taluk based on the method of probability proportionate to size. Farmers were interviewed individually, using the schedule developed for the purpose. Group discussions and participant observations were also made use of for the investigation.

The study revealed the following:

Majority of the tribal farmers had only low level of communication behaviour.

The information input of tribal farmers was relatively high. They received information from mass media such as the radio and newspaper and personal localite sources such as neighbours and relatives.

Majority of the farmers communicated information to other farmers of the settlement while 'personal talk during home visit'.

Feed back to the mass media was nil. Feed back to cosmopolite sources was relatively less, while that to personal localite sources was comparatively high. Highest

feed back was about the information regarding the sanction of subsidies etc.

'Neighbours and relatives' were the most important sources of information to the tribal farmers followed by radio and newspaper. Tribal leader and Tribal Extension Worker were the next sources in the order of preference.

Age was found to be negatively correlated with communication behaviour. Education, innovation proneness, attitude towards block extension agency, social participation, information seeking behaviour and cosmopolitaness were positively associated with communication behaviour, whereas fatalism had no correlation.

Step wise regression analysis revealed that information seeking behaviour, attitude towards Block extension agency, education and social participation explained 83.00 per cent variation in communication behaviour, while all the independent variables together contributed only to 84.22 per cent of change in communication behaviour. Information seeking behaviour emerged as the most important variable in predicting the communication behaviour by contributing to 74.00 per cent of the variation.

The 'radio' and the 'neighbours and relatives' emerged as the most credible sources of information whereas 'Junior Agricultural Officer' and 'Instructors of Functional Literacy Programme' were the least credible

sources for agricultural communication.

The important key communicators in the area were 'Mottukani', 'Plathi' and Secretary of co-operative Society in the order of preference.

Regarding the cultural characteristics, a radical change was observed among the 'Kanikkars' as against the reports of the early anthropologists.