# TO STUDY THE EFFECTIVENESS OF FARM BROADCASTS THROUGH RADIO IN DISSEMINATING AGRICULTURAL INFORMATION TO THE FARMERS OF TRIVANDRUM DISTRICT 



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DEPARTMENT OF AGRICULTURAL EXTENSION COLLEGE OF AGRICULTURE<br>VELLAYANI - TRIVANDRUM

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HY DHUNED PARETS

## DECLARATIOA

I heroby declare that this thesis entitied "To Study the Effectiveneza of Fam Broadcasts through Redio in Dissealinating Agricultural Infomation to the Faraery of Trivardrum District" is a bonailde recond of research woris done by me during the course of research and that the thecis has not previously formed the basis for the asori to me of any degree. diploma, associateship, Pellowship or other similar title, of any University or Society.

(9. MOHHILAL MEHRU)

## College of Agriculture, Vellayanz. April, 1900.

## CEETTRICATE

Certified that this thesis, entitied "To Study the Effectivenass of Fara Broadcasts through Redio in ilseminating Agricultural Infomation to the Farmers of Irivardrum District ${ }^{n}$ is a recond of researeh work cone independently by Shri.s. MOMILLAL NEARU, under my guidance and suparvision and that it has not previously formed the basis for the award of any degree, followithip, or ascociateship to him.
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INTRODUCTION

## INTTODUCTIOA

Agriculture, waich accounts for about 48 per cent of the national income provides employment for more then 70 per cent of India's population. The planned efforta to increase the agriculturel production in India have achiaved great heights to the tune of 130 million tonnes of food production in 1979, from just 72 milizion tomnes a decade ago. Though this inorease in production has been achleved, the fruitis of green revolution could not be harvested due to the inerease in population. To this effect Swaminathan (9977) cautioned that, "if we do not improve our crop yields, ours will be one of the most inesficient agricultural systems in the world by 1980's'. - It has given rise to the gituation wherein the diffuaion rate of inovations has to be tremendously increased anong the vast clientele and their acioption promoted throush a swift and systematic extension atrategy.

Leagans (1961) visumised commuication as the basic step in eifecting chonge in any aspect of client oystem. There can be no two opinions regarding the vital role of communteation media in extencion education. Research results show that nedia participation is on the increase in the rurel sldes, thanks to the planned developsent of infrastructure like roads and transport innis, fising literacy levels and the changing social
order. A swift and relentless effort, to meet the increasing need of the nation, tastes of people and vagaries of nature, is gotig on in our research wings. Hore and more specialized fields of investigation are coming up; research teciniques of hich somistications involving not merely precision but speed and economy are being evolved. With the result, flow of innovations is ever on the increase. Conversely, the woris load on the extension agency is rising at an increasing rate. The efficiency of the extension agency in mecting this tremendous task is enhanced by a juiscial mixture of ma3s media and interpersonal comanication channeis.

Among mass media chamels, Radio has become very popular with the people. In the last iffteen years, production of radio sets has increased nearly six times in the country and nubler of iicensed radio receiving sets has increased seven-fold (DAVP, 1976) from what it was fifteen years ago. The rapid increase in the numbor of radio bets is viewed as a key to the modemisation of egricuitural comunication by extension experts.

The mass media, chiefly radio, prepare the ground for introducing innovations and also for reinforcing extension mesegges. The interpersonal commication at village lovel suffers from the three limitations of slow spread, message distortion and Imited skills of viliage
level workers to comunicate compler messages. So the fan brondeast support is extended to ensure swift. Bhilsul and truthful tronamission of messaged, winich helps the people as well os viliage level worisers to get quick, correct and succinct information.

The Farm and home Unit of AIf was started in Trichur (Kerala State) in 1966 to carry sield based and problen oriented broadeasts to Larmers. Radio Rural Formas and Famers' Discusoion Groups were also subsequently started under the Formers Troining Centres in the State. The AIR has also steadily expanded the variety and the extent of its parm programes. Amongst the few are the morning farm nows service, started in 1967 and the 'Tarm School on the air' in 1974.

Neat for the stuay: -
Effective dissemination of agricultursl information Is a pre-requifite for roking fam broadcaet useful to the farmer - insteners in the area. With the edvancement in fam technology, farmers scel more and more information from aifferent sources of wilich mass media are more 1mportant. The information needs to be presented to the farmers in the mannar in which they prefer. The farmers' preference towards each progmme also differs since each programe has its own special character. Hence mode
and programe preferences are to be studited in order to Lmprove the efficacy of fasm broadcasts,

The radio lictening farmers vary in their personal and situational charoctoristics. It is, theresore; inperative to atudy the characteristics that are assoelated with theis mass nedia exposure behaviour, listening behaviour, comindeation behaviour, source utilization behaviour as well as their adoption behaviour with respect to the farm programes broadcast through radio. Such a study is likely to prove useful to extension workers, comunication specialists and the planners to know how far seado is a powerful medium and how lt actualy is being used by the farming commuty. The study will also throw light on the important personal and situational factors influencing the Isstening habit of the farmers.

## Objectiyes: -

1. To find out the preserence of the 2istenors on the dipyerent modes of farm broadcasts.
2. To Eind out the preference of the insteners on the programes put out through fam broadcasts.
3. To assess their preference on the duration and frequency of farm broadcasts.
4. To ind out the relationship botween masa media exposure behaviour, Iistening behaviour, consmication behaviour, source utlilization bohaviour and adoption behavious with the selected personal and situational varíablos of the listoners.
5. To atudy the relative influence of the personal and situational variables of the listeners on their mase media exposure behaviour, listening behaviour, comanication behaviour; source utilization behaviour and adoption behaviour of the Isteners of fam broadcasts.

## Limstationg: -

The atucky has been conifned more towards the methols of broodcasts as well as the listening habits of the Larmers. The study does not pertaini to any alrect impact that has been produced by the fam broadcasts. Nore or less the samping for the atudy has been purposive on selecting the racio listening faming comunity (charcha somitiy members) rather than randonised faraing popuation. The comion ifnitations of time and resources faced by any student are applicable to thits study 21 so . Yeb, sincere and dovoted care has been taken to make this study an objective and systematic as possible.

THEORETICAL ORIENTATION

## ThBORSTICAL ORIENTATION

The objective of this chapter is to discuss in broal outzines the conceptual freme of reforence used for this study. Nats wil2 providee a theoretieal base for the empirical investigation. The diacusaion will be useful to select relevant variables and to develop a set up hypotheses against which the empirical eviaenees can be interpreted.

## Farm Broadcasting: -

According to Chamber's Dictionary "Rodio" means a urpeless receiving set.

To Flybels and Unath (1978) broadcasting was originaliy a faming term that meant spreading seeds al2 over the fiela. In radio and televiaion, broadcasting means sending out programes through the air to everyone within the reach of a atation. Anyone who has the necessory equipment can ilsten to the programes sent out.

According to Encyclopedia Britannica (1974) radio broadeasting is radio transmiscion intended for general public reception. In its commonest form, it may be deacribed as the systomatic diffusion of entertaiment information, educational and other features

## individually or in groups, with appropriate receiving apparatuc.

Fam broadcasting means sending out programmes relatod mainiy to agriculture and its allied bronches of activities. Different broadcasting stations select convenient times overyday for such progromes intended chiefly to the agriculturists under different nonenclature. The purpose of this programe is not only disceminating infomation to the famors but also In a way, instizatint them to Learn advanced scientipic spproach in the zield of agriculture and aloo adoption of new techniques. In Remela state the main farm broadeasts are 'Karahika Mekhala Varthakal'. 'Vayalum
 through which information in the field of famine is being broadeast.

In 'Karshika Meknala Varthaikal', the farmers are given iniomation regarding farm information and services of offerea by the govermantol agencies. 'Vayalum Veedum' programme is ained at giving information chiefly to paddy culttivators. The farmers are provided With detailed information regarinig the new paddy varieties, their cultivation proctices and performance. 'Karghina Rangam' provices fnormation and experiences of farmers connected with various items of agriculture
adopted in the state. The programe gives mome attention to new avenues of agricultural development tiat can be profitably adopted in Kerala. 'Radio Grama Rengam' Informs and educates the rural folk on the social and cuitural developments taking place around them. Farmers baing the prominent comuntty within the rural poputation they are provided with information in all activitien of human life. Honce information regarding public health, faming, family plaming, animal husbandry, home science etc. are broadcast through this programe.

I Erongoating Variables:-
The gualtty of broadcasts depends mainzy on the mode, nature, duration and the frequency of radio broadeests.

1. Hode of Broadcasts: -

According to Chamber's Dictionary (1976) Mmode" means way or manner of acting, doing, happening or axisting.

Singh and Sandhu (1971) reported that in order of preference the modes of presentation were discuassion, lecture, features and dramas, interview with farmers, question and answers, viens and reviews, poetical dynyopitu and farm news. Singi (1972) in his stuxiy on

11stemers and non-listeners of sara programe in Bihar found 54 per cent of the listeners wanted ferm programes to be delivered through discussion mode of delivery and 23 per cent were in favour of intorview mode and only 12 per cent wanted Iccture or stralght tolk type of presentation.

Shakya (1973) while conducting a study on radio owning young and adult farmers in Nepal revealed that anong the modes of presentation of the farc radio progromes, discusbion mode socured the Eirst rank, dramatic mode was second and straight taís or lecture was the least 11 ked mode by both the young and adult formers.

Alangear (4970) in his study on the impact of Farm Broadcast on the larmers of Coimbatore taluk in Tamil ladu revenled that among the sevoral techniques adopted in Fara Broadcast of the AIR Trichs, dialogue, interview with the progressive farmer, announcement and Porecasts, question and answers including quiz programe, farm news and success stories were the six techniques preferrod by the famers.

Crile et a1. (1945) obscrved that a large majority of iarmers preforred the intorview style of presentation to the straight talk. Ilanson (1946) in his research
stury found that the interview type of prosentation wos the first choice, the second beini one person talling to the Ilsteners. Rnight (1973) observed that interview wdil Parmers, question and answer, dialogue, interview with scientist, straight tall, discussion, announcencnt and documentary were the order of listoners preference in respect of form broadeasts. Sabarathmom and Rajaram (1975 a) obsorved that intorview witil farmers was ranted Pirst ay the respondents, followed by taliks by famers and dialogues.

In a study on Rodio fumbl Form, Farthaborathy (1571) found that amone the several techniques acopted in the farm broadcasts talks by speciallats has protorred as the fluct choice followed by dialotue, success stories narrated by the farrer, intorvie: with progressive famers and villupattu (folk song) in the dosconang order.

Jalinal and Srinivasomurthy (1974) found that dramatic presentetion and interview were prefersed by Iisteners.

Fresentiy, the usual methods one cound see in such broadcasts are straight talk to the farmors by subject matter specicilst, the rarration of cultivation of ano crop by samer, an interviev or dialogue and answerting questions put forward by farmers. Sometimes some major topic is found to be discussed by persomels or exports

In this field. Each method has its own impact on popularising sarring and its methodo.

Accordingly, for the propose of this study nodo of broadcast has been operationally defined as the maner or form in which a farm programe is broadcant through madio.
2. Nature of Broadcastas -

According to Chamber's Dictionary (1976) "nature" means the qualities of anything wish make it what it 1s.
fianson (1946) in his study fourd that timely farm advice, weathes and market reports and the oxperience of local people were the preferred subjects.

Schaitz (1943) stated that famers were interested In hearing about any new idea or development conceming any phase of farming. However, they pariticularly liked to hear moxket and weather reports and information on IIvestock, crops, soil conservation, machinery and labour gaving devices.

Kinght (1965) in his study on Redio Rural Forums In Tamin Nodu found that the "topic for the day" broadcast during the radio rural form days had been preferred and viewed as very useful by 66 per cont and weflil by 29 per cent and scme what userul by 5 per cent of the respondents, thile none claimed it to be weless.

Singh and Sandiu (1971) from the rosults of their stuly reported thet the five most Inked programe items were crop cultivation, daily faming hints, weather forceasts, manlet reports and plant protection measures.

For the purpose of this study nature of broadcast has been operationally definod as different typos of Som programes put through rado. The farm programes included are Karshika flokhala Varthakal, farshtica Rangan, Vayalum Veadum and Radio inrama Rangam.

## 3. Trequenoy of Broadcasts:-

icconding to Chamber's Dictionary (1976) "Erequency" means repeated occurence of anything.

Shakya (1973) found that his respoments fevoured to have the frequency of thince per week in rospect of farm broadeasta.

For the purpose of this study frequoncy of broadcast has been operutionally defined as the number of times a particular programe is broadeast per week through redio.
4. Duration of Broadcaets:-

According to Chamer's Dictionary (1976) "duration" means continuance in time.

Singh (1972) reported that 60 por cent of his listener - respondents desired an increase of 10 to 30
minutes over the existing 30 minutes duration. Shakya (1973) found that this responcents Lavoured 20 minutes duration and freguency of tirice a week in respect of fam broadcasts.

Bodrimarayenan (1977) reported that 50 per cent of hin fam broadcast listenere listen to the entire fatin broadcast at night. Among the rest about 43 per cent listen to most part of tho programe, while a few 7 per cent listen only for some time.

For the purpose of this study duration of broadeast has been operationaliy defined as the extent of time taken for broadcasting a programe through radic.

## II Listening Mabit Variables:-

## 1. Behaviour:-

According to Encyclopedia Britarnsca "behaviour" 10 the externally apparent activity of a whole organisn. Holman (1973) cetines behaviour as the totality of infra and extro organismic actions and interactions of an organism with its physical and social environment. Dandekar (1976) derined behaviour as the expression of one's experience. It includes not only motor activities like jumping, ruming or writing but also such activities which give us knowledge and emotional activities.

Accordins to Skinner (1952) behaviour is all forms of processes, adjustments, activities and experiences of the organism.

Brever (1952) termed behavicur as total responses, motor or giandular, which an organism makes to any gituation with which it is raced. Combs and Snyeg (1953) pointed out that all the behavieur, without exception, is completely determired by and pertinent to the parceptial pleld of behaving organism.

Parsons and Shijs (1965) pointed out that behaviour 1s oriented towards attaining ends or goals and other anticipated state of affairs, take place in situations by means of normatively regulated expenditure of effort or motivation.

## 2. Habit:-

As per tho Encyclopedia Britamica "habit" is a customary or automatic way of acting, usually as a result of frequent usoge rather than of inborn origin. Woiman (1973) stated that habit is an acquired act that 18 practiced regulariy and with a minimu of voluntary control. Othersise habit aeans the tendency for a given stimulus to evoke a specific response on occasions subsequant to the original resction.

Bhatia (1969) stated habitual actions as the final stage of the learning process. It is that noie of behaviour which through repetition has become so perfected that it noither requires nor undergoes any further adaptation. According to him habits may be said to have three characteristics namely, they are acquired through repetition; they are semi-mechanical and automatic, that is, they co not require any effort ond attention once they are acquired and they can be perfomed oniy under similar circuastances. Dandekar (1976) also deifned habit as a mechanical response. Further he otated that habit start as a matural response to some stimulus, constant repetition of the stimulus tends to rub it of its feeling tonc and render it more and nore mechanical.

In general, behaviour is necessitated on3y when such behaviour, leads the individual to the fulitiment of a need. Behaviour emerges from the interplay of all needs. Thus needs can overlap ond interact, to result in the performance of a behaviour.

The study of habit as well as the modipication of habit requires a close observation of the pattern of bohaviour which holps the individual to acquire a particular habit. similariy, if that pattorn of habit is any how modified that is also as a result of another set of newer pattems of behoviour. Hence the study of habit is also
in a way study of behaviour. So the most prominont physiological activity or expression visible on a living organism is the behaviour produced by a stimulus.

Thus in this strudy the depondent varlables, nanely, Mass Media Exposure Behaviour, Listening Behaviour; Comunteation Dohaviour, Bource Utilization Behaviour and Adoption Behaviour have been considered to be the habitual behavioural sequences of the listeners of the Farm Ercadeaste.

## A. Dependent Variables:-

1. Hass Hedia Exposure Behaviour: -

Accorcing to Schmam (1960) "mass" as the great body of the people of a ration, as constructed to some special body like a particuiar clasa. Lazargield and Hendall (1948) opined that the term 'mass' is truly applicable to the medium of radio, for it - more than other nedia - reaches all groups of the popuzation unsformly *

According to Wolman (1973) mass medis of comunfication means the instrusents of commundeation which disseminate infomation to large number of people at once such as newspaper, television and radio.

According to tright (1975) mass comunteation is
a apecial kind of social connunication involvine distinctive operating conditions, primary among waich are the nature of audience, of the communication experitence and of the comunicator. According to tubbs and Moss (1977) the opportumitles for Peed back are soverely limited, especialiy when conpared with two person or amall group commication. The events of nases comanication involve media - radio, television, newspaper, books, filu and so on.

Rogers and Shoemaker (1971) stated that mass media channels are those means of transmitting messoges that Involve a mass nediun such as radio, television, R11m, nevspaper, magazines and the like which enables a source of one or a feu individuals to reach an audience of many.

Rogers and Svenning (1969) delined mass meala exposure as the degree of exposure to mass communcation chamels which inciude newspaper, magazines, iling redio and television. The degree of exposure to each medium was measured in terms of the number of radio programes listoned per week, newspoper read per week, film seen per year and so on. Badrinarayanan (1977) defined mass nedia exposure as the degree to which afferent mass nedia sourcos were utilized by the respondent. It was measured based on the frequency of exposure as adopted by singh (1972) with sifght modifications. Singh and Sandhu (1971)
measured the mass media exposure as developed by Sharkariaha(1969). The respondents were categorised into three groups as 10w, mediva and high.

Hofer (1942) stated thet irrespective of casual relationships and of the conditions or circumetances that Intervene between exposury to naw lieas and the active use of then, number of sources used or contacts with information sources was positively related to adopilion rates.

Roy et 21. (1969) amd Rogers and Svenning (1969) have found that there will be a relationship between mass redia exposure behaviour and adoption. Sandhu (1970) has Iound that listeners were significantiy superior in their mase tadic exposure than non-11stevers. Singh (1972) also reported the sane finding.

Shatya (1973) has also recorded a signipicant positive association between mass media exposure and fam broadcast listening bohaviour. According to Rogers and Svening (1969) the exposure to mass media on the part of pasants leads them down the road to modemization.

All these fomer studies show that mags media exposure 43 fully efiective if it in done in the proper way every where and not as an experimental process. For this sufficient time has to be provided in the progrome
of radio station Sor Farm Broadcasting. Sufficient number of radio sets nuat be put up in the agricultural areas where matnzy farmens reside. Even if the farmers are not intentional2y 2 istening to the broadcast at Iirst, the increaso in the frequency of such farm broadcants will certainly bring thom under its incluence and they become regular listenerg and the effect of such broadcasting can be seen in the form of enhanced acoption of innovations by them.

For the purpose of this atuiy mess media exposure behaviour is operationally derined as the extent of utilization of mass nedia sources mamely, radio, newspaper, magazines, film, exhibition and vielts to demonstration plote.

## 2. Listenting Behaviour: -

Berker (1979) stated "listening" as the selective process of attending to, hearing, understanding ond remenoertng aurol symbols. Here attention means the art of attending. The second element in the act of Inotening Ls hearing: the physlological process of recelving aural athuly. Underatanding - Bometimes referred to as auding is the process by which the communtotee aselgns a meeting to the aural stinuli he or she recelves. Rewembering, the final elewent in the ilstening process. Involvea the storage of Anformation for later retrieval.

Knight (1973) has taken two components of the 3istening bohaviour for his study. They were rogularity with which programees were 15 setred and period of 11stening to the Fam Broadcasts. Bie defined Iistening behzviour as hearing with or without close attention, nevertholess making conscious offort to hear.

Singh and Sundhu (1971) reported that 40.77 per cent of formers were $7.10 t e n d n g$ regularly, 28.85 per cent several days a week, 8.46 per cent once a week, 16,15 per cent less than once a waek while 5.77 per cent had seldorn or never listened to them. Singh (1972) Found that 44 per cent of Iisteners Ilstened to farm programes every day in a week, 39 per cent Instened to then often and 17 per cent listened twice a week.

Knight (1973) found that majority of the farm broaccast Iisteners ( 45.64 per cent) Instened to the programae daily and also found that a great majority (82.83 per cent) Isstened to agricultural programme for 20 to 30 minutes (total duration 30 minutes) in a day.

Sabarathnam and Rajaran (1975 b) found that the age of the radio liotening farmers xanged from the lowest of 20 years to the maximum of 60 years with a mean of 39.97 and a standard deviation of 8.47 and a majority (72.23 per cent) of the respondents belanged to midale
age group. They further found that 38.34 per cent had primary education and 24.45 per cent vere oniy able to read and urite.

Jalthal and Srinivagamurthy (1974) revealed that the radio owners generaliy had 10 to medsu educational standerd and read the nemspapers but had not participated in extension activitien and regular listening to farm broadcast was associated with the educationsl level of the radio owning farmer.

Sabarathnom and Rajaran (1975 b) found that a majowity ( 67.76 per cont) of the Iisteners were small land holders. Only 19.35 per cent of respondents had 5 to 10 acres of land. Nore than 10 acres of land wae possessed by nearly 14 per cent of the listeners, They further found that 75 per cont hed membership in only one village organisation thereas 16.66 per cent of respondents were mambers of two village organisations.

Singh and Sandhu (1971) reported thet 65.50 per cent and 69.62 per cent of the famers were in the habit of discussing the contents of the programe after listening with femily nembers and others respectivoly. However, only 58.14 per cent and 64.23 per cent were discussing from regularly to occasionally with their Lamily members ond other farmers respectively.

Singh (1972) in his study found that 84 per cent used to discuss the content of the topic broadcast with others after listening it, 16 per cent did not dizcuss at all. Out of the 84 per cent listeners oniy 24.52 par cent discussed with others regularly, 67.14 per cent did occasionally and 6.33 per cent rarely. In regard to the persons with whom the content of the broadcast was diccussed. lie Iurcher stated that, that 84.52 per cent used to discues the topic with neighbourg, 42.85 per cent with family members and 4.76 per cent with block extension workers.

Knight and Singh (1975) fourd that majority of the Sarm broadcast listoners ( 54.6 per cent) do not discuss at all after listening to the farn broadcast, while only very few ( 10.1 per cent) discuss with family memers regularly.

For the purpose of this study listening bohaviour has been operationally deftnad as, 'a process of heartug with preparedness and expectation, involving regular and attentive Ilstoning leading to make a decision about the programe'.

## 3. Conmunication Behaviour: -

Schramen (1960) stated that "commumication". comes irom the Latin word 'commis', meaning 'comon'. When
we comunicato we era trying to establinh a 'comonness' with semoone.

Fliegel (1956) operationally derined communicetion behaviour as information contact. Berlo (1960) used the term compuication behaviour to indicate commication in a personal context of the receiver. He also stated that comantcation behaviour explains how, why, when, with whom and with what consequences man behaves.

Hobbs (1960) operationaliy cefined comanication behaviour as cosmopoliteness of information sources. Rogers (1960) defined commitation behaviour as the degreo to which an individual is wiling to neek information and advice.

Hurthy and Jingh (1974) conceptumized comunication behaviour as a composite measure of avereness of technologically competent information sources, comprehension, attitudinal chonge and adoption of the referent (high yielding vapiety of paddy IR 8).

The terw, comminication behaviour was used by Schrom (1960) reporting the study of radio audience. He Identified the behavioural ccaponents of the effects of comunication in questions lise: what does a given commuication do to the people? By what persons, under what conditions it is likely to be attended to? By whom

It is likely to be uncerstoodr (understanding and comprehension) \& By won favourably received? wat attitudes or action will it lead to? (attitude and action). fle obaerved that, questions like this are in the aind of a communcator then he constructs and nende a message and they are in the mirds of scholans and critice when they think about communcation.

Nemcomb ot az. (1965) considered comunication Dehaviour manisested in sensitivity to information (amareness), the mental acceptance of the information, pronotion of understonding of the message (urderstanding and oomprehengión) and appropitate action (adoption).

Nesziger and milte (1966) also related commuication bahaviour to modifications in knowledge, attitures and overt action 10110 oring attention givon to a message.

Hovland et al. (1953) analyaed comunieation effonts or responsiveness to comamication as: attention to the veribal content of the commaication, comprehension and acceptancc. Mares (1966) bumarized the precoding behavious of conaunication speech as: intensive behaviour, encodinz behaviour and transmitting receiving behaviour. When the message has been recelved, the decoding behaviour, Interpretive beheviour leading to responses Ithe action, thought, commication and storage of information may occur.
$\checkmark$
Effective comunication requires that the message is not only received but also understood.

For the purpose of this study, comunication behaviour has been operationally defined as comprehension of the amareness, understanding and interpretation of the knowledge with attitudinal change leading to its acceptance by the irdividual.
4. Source Utilization Behaviour:-

Natr (1969) stated that behaviour of an individual will be a function of the sources of information. An Individual gains knowledge through information from different sources. The influence of differont sources of information varies. The preference and selectivity of sources of infomation wil2 vivy with aifferent somers. Past studies by copp (1958), Lionberger (1960) and Singh and The (1965) have found relationship between sources of information and adoption of various practices. Hair (1969) studied three types of information sources. They were mass media use, interpersonal - cosmopolite source use and interpersonal - localite sources use.

Rat (1965) observed that adopters of the new Ldeas had favourable attitude tomards government programe and also said that greator the number of information sources sought, greater was the extent of adoption.

Dhaliwal and Sohal (1965) concluded that frequency of contact with extension agency was sienificantiy related to the adoption of agricultural practices.

Singh and Sha (1965) concluded that the noninstitutiomalised sources of information were rated high over institutionalised sources in the indtial stages of adoption, where as the institutionalised sourceo of infomation were mitad high over non-institutionalised sources in the advanced stages of adoption.

Shankarlah and Singh (1967) opined that once the farmer is associated with the higher credible sources such as agricultural scientists, extension workers and progressive farmers, inis knowledge on improved methods will increase significantly irrespective of his farm size, cconomic status and formal education. Fadheria and Fatel (1975) concluded that the majority of the respondents obtained information about improved farm practices for the selceted crops from the village level workers and the next inportant sources of inforration were netghours and reZatives.

Ryan and Gross (1950) stated that neighbours were mafor sources of original knowledge about hybrid seeds. Wilkening (1952) and Barsh and Coleman (1955) stated that high dependence on relatives and friends as sources of information is usually negatively associated with the
adoption of new ferm practices. hogers (1958) in his study on the faportance of personal influence on adoption found that the personal sources, such as individual contact with the neighbours, proved effective in the adoption process. Supe (1969) foum that tho village level worker was the most sought out source of information sollowed by frionds and neighbours.

Lalshmana and Satyonarayana (1967) viewed that for effective agnicultural developnent through the adoption of inovations the sources of Information inke the goverment agency and mass media have to be strenghened to play a much bicger part in future. Champawat and Intodia (1970) observed that result denonstration acted as a useful sources of information. Patel and Singh (1970) revealed that the formal sources of information were extenalvely used by both adopters as well as non-adopters. The infomal sources of information were sound to be lese conspicious, where as sources of mass communication were found to be effective to 63.33 per cent of adoption and 36.67 per cent of non-adoption.

Nathur et 是. (1974) studled the medie utilization pettern of the reapondents against the background of decision making for adoption. The media were categorised as interpersonal media and mass nedia. In the interpersonal media neighbours, irlends and relatives.
block personnel, IARI personnel and panchayat members were included. In the mass media radio, posters, newspapars and krishi vigdan mela were included. They found out that use of mass media was much less than that of interpersonal media. Radio seems to be the nost used media in the decision moking process but, only in the Initial stages. Nanjaiyan et al. (1977) observed that for the selection of variety and season, nelghbours and friends were the most utilized sources $80110 w 0 d$ by radio where as in the case of the practice of seed rate and spocing, radio ranked first.

For the purpose of this gtudy source utilizetion behoviour has been operationally defined as the extent of utilization of information sources availablo.

## 5. Alontion Beravicur: -

Fogers (1962) defined adoption process as the mental process through which an individuel processes from first hearing about an innovation to its final adoption. Rogers and Shoemaker (1971) defined acioption as a decision to continue fuil wse of an innovation as the best course of ection.

According to wilkening (1951) adoption of an innovation is a process composed of learning, dectaing and acting over a period of time. The adoption of
decision to act has a series of actions and thought clecisions, Copp et al. (1958) expressed adoption as an activity of the farmer taking place over a pariod of time.

Wilkening (1952) and Bose and Dasgupta (1962) have daveloped varying adoption models to explain the process of adoption. However, almost all the nodels give stops nowely awareness, interest, evaluation, trial and adoption. Ryan and Gross (1950) recognised three stages in the adoption process as awareness, trial and adoption. Here adoption was taken as hundred ger cont use of a new iciea.

The moiel advocated by Singh (1969) under Indian condition consists of seven stages. The stages are need, awareness, interest, deliberation, trial, evaluation and adoption.

Adoption behaviour, according to Ramsey et al. (1959) Involves two components: behavioural which Involves the actual use of the practice and cogntive which includes obtaining lnowlesige and oritical evaluation of the practices in terms of the indiviaual situations.

According to Singh and Singh (9970) adoption behaviour of a farmer is a spectal kind of action and is the function of the situation in which he lives, his socio
psychological system and his exposure to disferent sources of Information. According to Chattopadhyaya (1963) adoption is the stage in the acoption process where decision making is complete regarding the use of a practice and actions with regard to such dectsion comence. According to pilial (1978) adoption is defined in terns of the overt behsyiour of farmers.

Research vorkers have Lientified a number of variables associated with adoption behaviour. Education, farm size, social participation, age etc. Were foumd to heve relationship with the adoption behaviour of farmers.

Adoption behaviour is operationally defined as the extont of utilization of programe content of a broancact pertaining to a farm practice based on the valuos and Goals esteblished by the individual. For the purpose of the present study, the effectiveness of farm broadcast was stuiled in temen of the influance or the mal radio mogratmes on the adoption tehaviour of the instenors of farm broadcest.

## B. Independent VarLables:

## 1. Age:-

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

Sandhu (1970) reported that radio commanded a universal audience in terms of age. But majority of Somors tho wore decibion makers in the familieg were in the age group of 31 to 50. Alemgeer (1970) concluded that farm broadeast listening was independent of age. Singh (1972) found that Insteners and non-Iisteners difered sichiacontly in age. Listeners were of lesser age group than non-1isteners. Shokya (1973) Eound no relationsho betoen age and farm broadcast listening behaviour. Knight and Singh (1975) reported that majority of fave broadcast listeners Instened to the agricultural programe at night irrespective of the age.
whlening (1962) found negative association between age and adoption behaviour. Hees and hilier (1954) and Conp (1950) have atatod that elderiy famers semed to be leas inclimed to adopt new Parm practices than younger ones. Fandit (1964): Choudhary (1955) and Jaiswal and Singh (1963) revealed that farmers of mitdle ago wero better adepters than youngor or older famors. Rai (1965) and Rajentra (1968) observed that age was not pound to play an inportant role in acioption. Shankarieh (1965), Ferumal and Duratswamy (1972) and Eehera and 3ohoo (1975) observed that age of the farmers did not seen to have any association with adoption.

For the purpose of this study age was operationelly
defined as the number of years an individual has completed since his birth to at the time of the study.
2. Ehucation:-

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

Woiman (1973) meant education as progressive changes of a person affecting knowzedge, attitudes and behavicur as a result of Lormal inctitution and otedy and he further stated that it may be a development of a person resulting from experience rather than from maturation.

Formal caucation helps the Individual to thow the worla better and he $2 s$ prone to seek for infornation which will increase his knowledga. Beal and Sibley (1967) have pointed out that, the individuals ability to read and write and the amount of fomal education he possees will affect the manner in which the individual gather data and relate himself to his enviroment.

Alangeer (1970), Sandhu (1970), Singh (1972) and Jalinal and Srinivasanurthy (1974) found that educetion positively and significantly influenced farm radio 2istening behaviour, Sanorathnam and Majaram (1975 b) observed that mafority of radio Iistoners were educated upto primary lovel.

Rogers and Capener (1900) observed that farm operators who made greater use of extension agent were more educated. Frasad and Sinha (1971) revealed that the farmers' education had signiricant relationship with the use of information sources at the innal decision to adopt or not.

Several ressarchers have shown that the educational level of Individuals was positively essociated with their adoption behaviour. Wilkening (1952), LLonberger (1960), Reddy (1962), Fandit (1964), Dhaliwal and Sohal (1965), Rai (1965), Choudhary and Mohareja (1966), Rajendra (1968) and Fatel and Singh (1970) also observed that farmers with higher educetion aecegted haproved practices more readily than farmers with Iower education. Subrameniyam and Lekshmana (1973) revealed that adoption increased with rise in educational Ievel.

Singh and Singh (1970) expressed that educational status of the family signipicantiy contributed to explain the adoption behaviour. Grewal and Sohel (1971) stated that the higher educational level of farmers and their fardiy members coupled with much richer provious experience, contributed significantly in the adoption behaviour,

For the purpose of this study education was operationally defined as the ability to read and watte or the extent of formal education possessed.

## 3. Occupation:-

According to Chamber's Dictiocary, occupation mean that which occupies or takes up ene's attention.

According to llebster's Hew Intornational Dietionary occupation means one's principal businoss, vocation or that which occuplee or engages the time and attention.

Alamgeer (1970) found that full time agriculturists and part time agriculturists aid not differ significontiy, while they were exposed to wasc media. Das and Saritar (1970) observed direct reletionghip between primary occupation and adoption behaviour of farsers.

For the purpose of this study, main occugation was operationelly cerined as the vocation in which a respondent sponds major part of his tirse and attention.
4. Radio ormership:-

Jallhas and Srinivasimurthy (1974) found that majority of the radio owning farmers were exposed to newspaper. Dhallwal and Sohal (1965) observed that educational level wea positively correlated with
possession of radio. Alangeer (1970) found that radio omership was algnfficantly related with forn broadcast listening behaviour.

Dhallwal and Sohal (1965) also observed that 84 per cent of radio set onners covered in their study reported about adoption of innovations after possession of a radio set.

In this study, radio omership was operationally decined as the possession of radio set.

## 5. Earm size:-

Innd is the primary regources in farming, In this study the farm size war identifiod on the bacis of ownership of holdings.
fumerous studies were conducted on the relationehip of fam size with the adoption behaviour. Studiee by Fandit (1964), fai (1965), Thakur (1966), Rao (1968) and thar (1969) have revealed that size of holding hod a positive relationship with adoption. Patel and Singh (1970) observed thet with larger size of holding, the acceptance of new practices was greator than otherwise. Rogers and Capener (1950) have sound that farmers with Large farm size were more frequently exposed to extendion agencies.

Subramaniyam and Lekshmanna (1973) observed that farm size had positive and highly sienificont relationship with adoption.

For the purpose of this study how much area of cuitivabla land possessed by the person with wiom interviek sought is taken into consideration.
6. Crops groum:-

Alamgecr (1970) found that more percentage of garden Iand farmers listened to farm broadcasts than elther wet land or ery land ryots. This he attributces to the lact that they cultivated a variety of crops throughout the year. Sling (1972) also recordod sienificant positive relationchip of cropping intensity with Larm broadcast 2istening.

The chlel orops being paddy, tapioca, coconut and banana the sarmers engaged in one or more of these crops has been subjected to interview.

## 7. Social participation:-

According to Rogery and Shoemaker (1971) participation is the degree to which members of social syatem are involved in the cectsion meking process. Hember satisfaction with and acceptance of collective innovation decision is positively rolated to the degree
of participation in the decision by members of a sociel system.

Participation in social activities does not start or atop at any apecific age in the life of an individual. However, the intensity of social participation appears to influence the decision aaking of the individual. Hembership in formal organisations help farmors to come Into contect with different individuals, agencies and information sources. By this the individuals are ilisely to be more progressive and receptive to new ideas and practices.

Sandhu (1970) found that radio owning Parmers had low social participation and medive exposure to mass nedia. Singh (1972) observed positive relationship between social participation and radio ilstening behaviour. Shakya (1973) stated that radso owning adult farmers had a high level of social participation and listening behaviour.

Roy ct 31. (1963) zound no relationship between social participation and mass media use. Jalinal and Srinivasonurthy (1974) found that the radio owning farmers had medium educational standard and read newspapers. Rahin (1960), Reddy (1962), Gupta (1965) and Nair (1969) reported that social participation had significant positive association with adoption of improved farm
practices. Das and Sarkar (1970) and Kasim and Mahboob (1974) stated that social participation influenced the adoption of farming practices.

For the purpose of this study, social participation was operationally defined as participation of farmers in the various organizations and institutions.
8. Discussion:-

According to Chamber's Dictionary (1976) discussion means debate or examination in detail.

Sandhu (1970) reported that 61 per cent of the respondents discussed the content after instendgg with family members or other farmers, but only about 37 per cent were doing it regularly. The purpose of discussion was to clear doubt, evaluate ideas, share information and arrange inputs.

Alamgeer (1970) observed that only 46 per cent discussed about what they heard in farm broadcast programe. Singh (1972) also found that 84 per cent of his respondents discussed the contents of farm broadcasts with family members and friends. But regular discussion was not common. Sandhi and Singh (1972) revealed that 66.16 per cent of radio owning farmers were in the habit of discussing the content after Ifatening, 47.78 per cent discussed to clear doubts, 33.50 per cent evaluated ideas
and 33.41 per cent shared information aiter 11stening the fara broadcast.

Shakya (1973) observed that 61 per cent of the Iisteners discussed the content of farm broadcast programes after hearing. But about 17 per cent alone were doing it regularly.

Parthasarathy (1971) reported that radio rural form members established themselves as effective instruments in the procees of education. Ramakrishnan (1974) also reported that farmers discussion group members were disseminating agricultural innovations received through the All India Redio to other fellow members of the locality.

Discussion has been taken as pre as well as post istening varieble in this study. This variable has chosen since the organisation and functioning of the charcha samithies envisages pre and post discussion on the topic or programe broadcast through radio.

## Hypotheses

Based on the theoretical orientation and the revier of literature the following hypotheses were formulated to test the relationship of depemdent variables with independent variables.

## I. Mass Media Exposure Behaviour:

Hypotheses: I : 9 : There w111 be a positive and significont relationship between age and mass media exposure behaviour of the Ilsteners of farm broadcast.

I : 2 : There will be a positive and significant relationship between educational levol and mass media exposure behaviour of the 11steners of farn broadcast.

I : 3 : There will be a positive and significant relationship between occupation and mass media exposure behaviour of the Instoners of fam broadcast.

I: 4 : There will be a positive and significant relationship between farm size and mass media exposure
behaviour of the listeners of farn broadcast.

I: 5: There will be a positive and signielicant relationship between crops grown and mass media exposure behaviour of the listeners of form broadcast.

I: 6: There will be a positive and significont relationship between radio ownership and mags media exposure behaviour of the liateners of farm broadcast.

I : 7: There will be a positive and significant relationship between social participation and mass media exposure behaviour of the listeners of fara broadcast.

I : 8 : There will be a positive and signiricant relationship between discussion and mass media exposure behaviour of the listeners of farm brosdcast.
II. Liotening Behaviour:

Hypotheses: II : 1 : There will be a positive and significant relationship between
age and listening behaviour of the IIsteners of farm broadcast.

II : 2 : There will be a positive and significant relationship between educational level and listening behaviour of the listeners of Sarn broadcast.

II : 3 : There will be a positive and significont relationship between occupation and Iistening behaviour of the listeners of farm broadcast.

II : 4 : There will be a positive and significant relationship between farn size and listening behaviour of the listeners of farm broadcast.

II : 5 : There will be a positive and significant relationship between crops grown and listening behaviour of the listeners of farm broadcast.

II : 6 : There will be a positive and significant relationship between radio ownership and listening behaviour of the listeners of farm broadcast.


III : 3 : There will be a positive and significant relationship between occupation and comanication behaviour of the IIsteners of Parm broadcast.

III : 4 : There will be a positive and significant relationship between farm size and comunication behaviour of the listeners of farm broadcast.

III : 5 : There till be a positive and significant relationship between crops grown and conmunication behaviour of the listeners of fam broadcast.

III : 6 : There will be a positive and significant relationship between radio ownership and cocmunication behaviour of the listeners of fara broadcast.

III : 7: There will be a positivo and significant relationship between social participation and commuication behaviour of the listeners of farm broadenst.

III : B : There will be a positive asd significant relationship between discussion and comumication behaviour of the listeners of farm broadcast.

III : 9 : There will be a positive and significant relationship between mass media exposure behaviour and comunsication behaviour of the 3isteners of farm broadcast.

III :10 : There will be a positive and significant relationship between listening behaviour and comanication behaviour of the Iisteners of farm broadcast.
IV. Source utilization Behaviour:

Hypothosis: IV : 1 : There will be a positive and significont relotionship between oge and source utizization behaviour of the Isstencre of Sarm broadcast.

IV : 2 : There will be a pogitive and significant relationship between educational level and source utilization behaviour of the Iisteners of farin broadcast.

IV : 3 : Therc will be a positive and significant relationship between occupation and source utilization behaviour of the listeners of farm broadcast.

IV : 4 : There will be a positive and significant relationship between farm size and scurce utilization behaviour of the listeners of Sam broadcast.

IV : 5 : There will be a positive and significont relationship between crops grown and source utilization behaviour of the listeners of farm broadcast.

IV : 6 : There will be a positive and atgnificant relationship between sadio ownership and source utilization behaviour of the 2isteners of farm broadcast.

IV : 7: There will be a positulve and significant relationship between eociel participation and source utilization behaviour of tho listeners of farm broadcast.


## V. Achoption Behavioux:

hypotheses: $v: 1$ : There will be a positive and algnisicent relationship between age and adoption bchaviour of the listeners of farm broadcast.
V : 2 : There will be a positive and significant relationship between educational level and adoption behaviour of the listeners of Lerm broadcast.
V 3 : There will be a positive and significant relationshlp between cccupation and adoption behaviour of the listeners of farm broadcast.
V : 4 : There will be a positive and significent relationship between farm size and adoption behaviour of the iisteners of farm broadcast.
V : 5 : There will be a positive and significant relationship between crops grown and adoption behaviour of the listeners of farm broadcant.
v: 6: There will be a positive and significant relationship between radio ownership and adoption behaviour of the 1isteners of farm broadcast.
V:7: There will be a positive and significsnt relationship between social participation and adoption behaviour of the Iisteners of fam broadcast.
V : 8 : There will be a positive and significant relationship between discussion and adoption behaviour of the Iisteners of farm broadcast.
V:9: There will be a positive and significant relationship between mass media exposure behaviour and adoption behaviour of the IIsteners of farm broadcast.
V :10 : There will be a positive and significant relationship between Ilatening behaviour and adoption behaviour of the iisteners of farm broadcast.
V :11 : There will be a positive and significant relationship between comunication behaviour and adoption behavious of the listeners of farm broadcast.
V :12 : There will be a positive and significant relationship between source utilization behoviour and adoption behaviour of the listeners of farm broadcast.

## METHODOLOGY

## METHODOLOGY

This chapter deals with the methodology used for this study. The procedure followed for the selection of the area, sample farmers and the cmpirical measures of the variables have been deacribed in this chapter. The chapter also describes the procedure Lollowed for collecting the data and the statistical measures used for measuring the variables.

## Selection of the area:-

This study was conitned to three N.E.S. blocks of Trivandrum district. The blocks selected were Neduangad, Vellanad and Varkala. The distribution of charcha samithies organised by the Farmers Training Centre Trivendrum in each block was also obtained. Fased on the probabilyty proportional to the size (total number of charcha samith1es) the above mentioned blocks were selected.

## Selection of respondents:-

Since the study pertained to farm broadcasting the members of charcha esmithies were selected as the respondents who possessed radio sets supplied by the Farmers Training Centro for Iistening fam programe. Five charcha samithies from each block were selected
by sinple randon sampling technigue. From each sanithy ten respondento were randomly selected. Thus, one huncred and iffty radio listoners belonging to the charcha samithiea were included in this study.

## Enprical measures:-

The variables selected for this study were based on tho reviek of 2lterature. The hypotheses were ceveloped to study the relationship between personal and situational characteristics and the mass media exposure bohnviour, listoning bohoviour, commanication behaviour, source utilization behaviour and acoption behaviour of the Iisteners of farm broadcast.
A. MEASURETENG OE EDEDNETA VARTABLES:-

1. Hass Ledsa Exposure Behaviour:-

Natr (1969) and Faidu (1978) measured mass media use in terms of six media namely newspoper, radio, film, demonstration, posters and magazines. The responges vere collected uncer four cotegories as more often, often, sometimes and never and the scores are 3, 2, 1 and 0 respectively, Badrinaroyanan (1977) measured the mass media exposure based on the erequency of exposure as suggested by Singh (1972) with slight moafication.

Rogers and Svenning (1969) reporiod a composite
mass media exposure index. ilespondents' indications of clegree of exposure to each mediun in terms of number of redio progremes listened to per week and so on, were combined into a mass media exposure index.

In this study the media included were radio, nowapapers, magozines, films, exhibition and visit to demonstration plots. Dosed on the pilot study eleven radio programes ware included and the responses were made under catogories as daily, occasionally, rarely and never and with scores 3, 2, 1 and 0 respectively. The number of newspaperg included in this study ware ntne. Hence also the responses were scored according to the above nethod. Based on the pilot study, only four woekly magazines and three monthly magezines were included. The responses were made under four categories namely, weohly, occaciondily, rarely and nover and the scores were 3, 2, 1 and 0 respectively for weekly magezines. For monthly magazines the rosponses made were in the categorier, an monthly, occasiorally, rarely and never and the scored given as 3, 2, 1 and 0 respectively. The films, exhibition and visit to cemonstration plots were Erouped into one. The responses were made under four categories, namely, nore than $8 \leq x$ per year, four to six per year, one to three per year and nil for which the acores ascigned were $3,2,1$ and 0 respectively.

The total scores were considered as the index for measurement of the mass media exposure behaviour of the Ilsteners of farm broadcast.

## 2. Listening Behavious:-

According to Singh and Sandhu (1971) hearing and attention are the two major components of listening. They operationally defined listening behaviour as regularity with which the farmers hear the four fam progromes together with the extent of atrention paid to the programe. For determining the extent of regularity with which a farmer was hearing the farm radio programes, he was asked to check in respect of each type of programe if he was instening to them (i) regularly, (ii) several days a week (iii) once a week (iv) less than once a week and (v) seldom or never. The scores assigned to the above categories were 7, 4, 3, 2 and 0 respectively.

Knight and Singh (1975) measured listeining behaviour in torms of regularity and duration of listening. Responseg to regularity in ilstening were cotegorized as daily, torc than twice a week, twice a week, once a week, rarely and not at all and scores 5, 4, 3, 2, 1 and 0 were given, respectively. Responses to the duration of listening to the programine fully for 30 minutes, for about 20 minutes, for about 10 minutes, for about 5 minutes and
scores of 4; 3, 2 and 1 were given respectively.

According to Badrinarayanan (1977) regularity, duration and intensity are the three major comonents of Sam broadcast Iistening behaviour. Responses to Intensity in isstening behaviour were ontegorized as taising notes, ailently issten, eat aress of engaged in silent works and reading chatting (least attention) and scowes of $4,3,2$ and 1 wore given respectively.

In this study, the Listaning beheviour was mossured in terms of preparedness, expoctations, hearing, zttention, regularity, duration and intensity, To measure this components a get of statements were given and the reaponses were made unaer categories as mostly, sonetimes, rarety and never. The goores assigned were 3, 2. 1 and 0 respectively.

The total scores were considered as the Index for measurenent of listening behaviour of the Ilsteners of farm 3roadcast.
3. Communication Behavioury -

F1Lege2 (1956) oporationalized comunication behaviour as Information contact. Rogers (1958) operationalized conmunication behaviour as commaication competence.

Murthy and Singh (1974) developed index of comuntcation behavsour which involved four coaponents mamely awareness, comprehension, attitude and adoption.

For the puryose of this study comunication behaviour was measured in terms of ewareness. understanding, interpretation and attitudinal ohange. Awareness was measured as suggested by Wurthy and Singh (1974) With silight modifications, To measure ewareness the respondents were asked to state what sources of information wero generally known to them. The sources of information included were friends, neighbours and relatives, salesman of farm inputs, rado ferm broadcast, farm magazines, research journals, Information boards, Kerala Agricultural Dniversity Fubifcations, fam information bureau publications, extension functionaries, mass media and scientists. Depending upon their competency level of the sources the scores were given. The scorea assigned were 1, 1, 2, 3, 3, 3, 4, 4, 4, 4 and 5 respectively. For measuring other components of comunication behaviour a set of otatements were given and the responses were made under categories as costiy, some times, rarely and nover and the scores assigned were 3, 2, 1 and 0 respectively.

The total scores were considored as the index for measurenent of the comunication behaviour of the

Iisteners of farm broadcast.
4. Source Utilization Dehaviour:-
bilkening (1962) while neasuring use of information sources listed the sources of information for agricultural technology and grouped them Inta categorles, The tiree categorles were mass media, intar-personal cosmopolite and inter-persomal localite sources.

Hair (1969) listed all the possible sources of information for agricultural technology and each respondent was asted to indicate as to how often he gets information regarding agricultural technology from each of the listed sources. Responses were categorised at most often, often, some times and never and the scores 3. 2, 1 and 0 were given respectively. The same scale was used in this study.

The total scores were considered as the index for measurement of the source utilization behaviour of the listeners of farm broadcast.
5. Scoption Behaviour:-

Several methods have been used to quantily the adoption behaviour by various research wozkers. Notable anong those who utilized a scale for measuring adoption
were :117loning (1952), Duncan and Kreetlow (1954), Marah and Coleman (1955), Fliegel (1956), Emery and Ceser (1958), Ramsey et [3. (1959), Bose and Dargupta (1962), Chattopadhyay (1963), Beal and Sibley (1967) and Supe (1969).

Wilkoning (1952) used on index for measuring the adoption of improved farm practices. The index of adoption used was the percentage of practices adopted to the total number of practices applicable for that operator. Eecause of the differential nature of practices, he suceested differential reights in the adoption Inciex.

Duncan and Kreetlon (1954) used a 25 item index of farm practice adoption, adopted from the index developed by liflkening (1552). Each respondent was Eiven a score based on the number of practices he had adopted from the list of 25 .

Marsh and Coleman (1955) also used a practice adoption score computed as the percentage of applicable practices adopted.

Chattopadhyaya (1963) hae constructed an adoption quotiont to reasure farm practices adoption. Wie fook Into consideration the different variables like potentiality, extent, werehtage and time in developing the adoption quotient with a formula as follows.

$$
\begin{array}{ll}
\text { Adoption Guotient }=\frac{j=1 \mathrm{YJWJ}}{\mathrm{~N}} \times 100 \\
\mathrm{j}=\mathrm{Wj} \\
\mathrm{tp}-\mathrm{Hi} \\
\text { Were } Y J & 1 \\
& \frac{1}{t p-t I}
\end{array}
$$

| $N$ | $=$ Number of proctices which the indivicual has the potentiality to adopt. |
| :---: | :---: |
| Wj | $=$ Welghtage to be given to ( $j^{\text {th }}$ ) practice based on its difeiculty of adoption determined from a Iist of afferential veights for the practices. |
| $t p=t i$ | $=$ Sumation over each season from ti to tp. |
| tp | - Pime of invastigation |
| ti | $=$ Tine of introduction of ( $i^{\text {th }}$ ) practice. |
| ef | $=$ Extent of adoption of any particular ( $j^{\text {th }}$ ) practice in a particular season. |
| pi | - Potentiality of any perticular ( $\mathrm{g}^{\text {th }}$ ) practice in that season. |

Adoption of paddy, coconut, tapioce and banana In this study wore measured by the adoption quotient developed by Jaiswal and Dave (1972) with slight nodifications. The data regarding the extent of adoption
of the selected practices in paddy, coconut, tapioca and banana have been taken as the bum total of adoption of various cultivation practices. The practices included were area, seed rate, spacing, use of NFF fertilizers and plant protection chemicals.

The formula for calculation of adoption quotient used in this study was

$$
\text { Adoption Quotient }=\frac{\sum \mathrm{e} / \mathrm{p}}{\mathrm{n}} \times 100
$$

where
$\sum$ - is the sumption,
e - extent of adoption of each practice,
p . potentiality of adoption of each practice and
$N$ - total number of practices.

## I. Potentiality of adoption:-

Potentiality of adoption of package of practices for any one of the above mentioned crop or more than one was conceived as the maximum degree to which a farmer can extent its adoption, if he so wishes, depending on the maximum utilization of the resources he commands or can command.

## 1. Extent of holding:-

Cultivator was asked to indicate his arpa moder each crops respectively paddy, coconut, tapioca and banana. This area in acres was taken as the potentiality sor the use of High Yielding Varieties of crops.
2. Seed rate:-

The quantity of seed required as per the recommonded rate for covering the area which the faswer has put under either High Yielding Varlethea or local varicties was taken es the potentiality.
3. Spacing:-

The spacing in centinatres was token as the potentiality for use of spacing recomended for either High Yielding Varieties or local varieties.
4. Fertilizers:-

The actual recommended dose of fertilizers in terms of FI trogen, Fhoaphorous and Fotash were taken here as the potentiality.

## 5. Plant protection:

The actual recomended dose of pasticide or fungicide $1 s$ taken here as the potentiallty.

## 11. Extent of adoption:-

Extent of adoption is the degree to which a farmer has actualily adopted a practice. when the extent of adoption equals the potentiality, adoption is maximum, when the extent is nil acoption is nil.

1. Extent of holding:-

The area in which the farmer has cuitivated High Yielding Varieties has been taken as extent of adoption.
2. Seed rate:-

The quantity of seeds or seelings or cuttings or suckers used has been taken as the extont of adoption.

## 3. Spacing:-

Actual spacing adopted by the farmer has been taken as the extent of adoption.

## 4. Eertizizers:-

The quantity of fertilizers used in terns of Fititrogen, Phospherous and protection has been taken as the extent of adoption.
5. Plant protection:-

The amount of pesticide or fungicide used has been taken as the extent of adoption.

The total adoption quotient scores were considered as the index for measurement of the adoption behaviour of the listeners of farm broadcast.
B. TIEASUREMENT OF INDERENDENT VARTABLES:-

1. Age:-

Age of the respondent was calculated as the number of years completed since his birth at tho time of interview.
2. Efucation:-

Education was measured by assigning scores for different educational level as per the scoring system followed in the socio economic status acale of Trivedi (1963). Nair (1969) have also used this scale. The scoring vas as follows.

| Ilifterate | $=0$ |
| :--- | :--- |
| Can read only | $=1$ |
| Can read and write | $=2$ |
| Primary level | $=3$ |
| Midale school level | $=4$ |
| High school level | $=5$ |
| Graduate level | $=6$ |
| Above | $=7$ |

## 3. Farm size:-

In this study farm bize was measured in acres and cents. The number of acres cultivated by an individual was taken into consideration.
4. Occupation:-

The extent to which a family is agriculturally occupied is measured under this. Since farm broadcast listening should be expected to be influenced by how far one is agriculturally oriented by profession. The scoring adopted was as follows.

Non agricultural occupation as
the main source of the respondent's a 1
income
Agriculture as the main source of
income to the respondent with 2
some non agricultural income
Agriculture as the sole occupation
and source of income of the $=3$
respondent
5. Crops grown:-

In this study crops grown was measured in terms of number of crops. The crops included were paddy, coconut, tapioca and banana. The scoring was as follows.

For each orop - 1

The maximun score will be four and the minimum will be one.
6. Radio ownership:-

Possession of one or more radio recelving set was recorded. The scoring given was as follows.

No receiving set m 0
for each receiving set owned - 1
7. Social participation:-

The social participation scores were colculated as per the scoring system followed in the socio economic status scale of Trivedi (1963) which was used by Murthy and Singh (1974), Naidu (1978) and Rajendran (1978). The scoring was as follows.

| Heabership in one organisation | $=1$ |
| :---: | :---: |
| fembership in more than one orgenisation | - 2 |
| Office holder | $=3$ |
| Distinctive features | $\pm 6$ |
| B. Discussion:- |  |
| It was considered that discussi |  | broadcast listeners after listening to the farm programme

# Will improve their knowledge. In this atudy the discussion was measured as follows. The response of fermers about their pre and post discussion with family members, friends, relatives, extension agency and Samers' discussion group was obtained separately under throe response categories such as regularly, some times and never and scores of 2,1 and 0 were given respectively. <br> 7 <br> <br> Data collection: - 

 <br> <br> Data collection: -}

The questionnaire was pretested by obtaining the rosponses from thirty non-sample charcha somithy members. Based upon their responses and remarks the questionnaire was modified wherever found necessary. The data were collected by personally interviewing the charcha samithy members individually.

## Statistical measures:-

Farametric statistical methods are used to test the empirical hypotheses. The hypotheses were tested by using correlation analysid. The respondents' preference to mode and nature are tested by Thurstones paired comparison technique. Multiple correlation and regression analyses were also done to find out the contribution of Independent variables to dependent variables. For malking sinple comparisons percentages vere used.

## 1. Thurgtone' B Patred Comparison Techaique:-

This is considered to be a fairly sensitive and sophisticated technique which would both rank the preferences as well as show the distance between the ranks. The five modes and four programes were presented to the responients in pairs in all possible combinations separately. The total number of peirs was determined by the formula $n\left(\frac{n-1)}{2}\right.$. From the responees of the respondents, $F, P$ and 2 fatrices were constructad and scale values for each mode and programe were found out. The scale values of modes and programes were placed on a least preferred to most preferred continuum separately to show the ranks and distance botween the ranks.

## 2. Simple Corrolation Analysis:-

This stathstical techndque was used to find out the type and intensity of relationship between two factors mainly for the selection of independent variables for multiple recression analysis.
3. Multiple Coxreiation and Regression Amalyses:-

As mere relationohip of the variables studied in Isolation will not throw light as how much they actualiy contribute to dependent variable, particularly in the presence of one another, a multiple regression analysis was carried out.

The multiple correlation coefficient ( R ) represented the zero-order correlation between the actual dependent veriable scores and predicted dependent variabla scores obtained from the independent variables under consideration. If the predicted dependent vartable score for each farmer would exactly correspond to his actual dependent variabie score obtained in the study, the multiple correlation coefilicient would be unity or 1.00.

The square of the multiple correlation coefficient ( $R^{2}$ ) reprosented the proportion of the total variation explained by the independent variables in the regression equation taken together.

The significantly related variables were teken as the 'best subset' anong the available independent variables. The variation due to regression was subjected to $F$ - test. The $F$ value was signipicant at 0.05 probability level indicating that the combinet effect of the variables in the subset produce significant variance in the dependent variable.
then the nultipie correlation was statistically significant, it was thought desirable to analyse the relakive importance of each independent variable in order to determine which independent variable was most important. There are two methods. In the first method,
the statistical significance of each parifal coefficients (partial bs ") were determined. The formula uged for testing tho significance mas:

$$
\begin{aligned}
t= & \frac{b 1}{\text { So }(b 1)} \\
\text { Where, b1 }= & \text { partial coefficient } \\
\text { Se }(b 1)= & \text { standard error of the partial } \\
& \text { coefficient }
\end{aligned}
$$

In the present study, the significant $R^{2}$ values necessitated partial regression analysis to determine the relative importance of the variables. The partial regression coefficients were, therefore, obtained for the variables included in the regression equation of the respective groups. The partial bs' thus obtained were tested for significance with the help of ' $t$ ' test.

In the second mathod, the independent variables which contributed most to the prediction of dependent variable were dotermined by comparing the standard partial regression coefficients (called beta weights ) of the respective independent variables in the regression equation.

Fartial coefficients or 'bs' could not be conpared as such to their relative abilities to predict changes in the dependent variable, unleas a correction was made. This became necessary, because in the measurement of

Independent variableg, different scales were used. For example, age was measured in years; fanm size wan meagured in land units; Ilstening behaviour was measured in sone type of scale, etc. Therofore, comparison of a unit change in one variable with a unit change in onother became meaningless without any correction. The correction was made by standardising each partial 'b' value which wes done by utilizing the standard deviation of each variable. A standardized partial i was called the beta welght of the partial coefricient and was computed by the following formula.

Deta Weight $=\frac{\text { S. D. of indepergent variable }}{\text { S. D. of dapendent variable }} \times$ partial o

The absozute values of beta weights indicate the relative importance of the independent variables in influencing the dependent variable.

## RESULTS

## RESULTS

The results of this study, conducted according - to the objectives and methodology detailed elsewhere, are presented in this chapter. They are presented in two major sections as follows.
I. Broadcasting Variables
II. Listening Habit Variables
I. Broadcasting Variables:-

1. Mode Ereference:-

Mode preference was computed by using Paired comparison technique. The $P, F$ and $Z$ matrices were computed. The ' $Z$ ' matrix of various preferences thus arrived are presented in Table 1.

The ' 2 ' values under each column were summed up and means for each colism were worked out. A positive number in absolute value equal to the lowest negative mean was added to all means. By this, the first column attained a zero value and the others obtaining corresponding positive values. The modes preferred were ranked on the basis of the scale values as portrayed in Figure 1.

Table 1:- '2' matrix of the Mode Freference

| Modes of <br> presentation | $\ldots$ | 1.405 | 1.447 | 1.175 | 1.245 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Talks | $\ldots$ | Success <br> Stories | Question <br> and answers | Discussions | Interviews |



FIG:1. MODE PREFERENCE

From this ranking it can be inferred that the respondents, preferred interview as the best mode of farm broadcast. Interview was followed by discussion, question and answers, success stories and talks in descending order.

## 2. Frogramme Ereference:-

To measure the Programe preference, paired comparison technique was employed. The four programes were presented to the respondents in all the poasible pairs. $F, P$ and $Z$ matrices were constructed from which the scale values'for each programes were calculated. The scale values thus obtained were placed on a continuum srom least to most preferred as shown in Table 2 below.

The ranking was given as done for mode preferance having the absolute value method. The programes preferred ranised on the basis of the scale values are presented in Figure 2. It is inferred from this ranking that Karshika Melihala Varthakal was most preferred by the respondents followed by Karshika Rangem and Radio Grama Rangan. Vayalum Veedum programene was found to be the least preferred farm broadcast.

## 3. Duration of Farm Broadcasts:-

Resuits in Table 3 reveals the preference of

## Table 2:- '2' matrix of the Erograme Exeference

| Farm <br> Progremes | Vayalun <br> Veedun | Radio Grama Rangam | Karshika Rangam | Karshika <br> Mekhala <br> Varthakal |
| :---: | :---: | :---: | :---: | :---: |
| Vayalun Veedun | * | 0.176 | 0.844 | 0.954 |
| Radio Grama Rangen | -0.176 | - | 0.840 | 0.643 |
| Rarchika Rangan | -0.842 | -0.842 | . | 0.253 |
| Karsh1: :a Mekhala Varthakal | -0.954 | -0.643 | -0.253 | - . |
|  |  |  |  |  |
| Stur | $-1.972$ | -1.309 | 1.431 | 1.850 |
| Means | $-0.493$ | $-0.328$ | 0.357 | 0.462 |
| $\begin{aligned} & \text { Mean } \\ & 0.493 \end{aligned}+$ | 0 | 0.165 | 0.850 | 0.955 |



FIG.2. PROGRAMME PREFERENCE

Fable 3:- buretion of broadcast es yreferged by the 1Istenera of farm broadcagte

duration for the farm programes expressed by the respondents. It is evident from Table 3 that with respect to Karshika Nekhala Varthakal majority of (70 per cont) the respondents auggested an increase In duration. Of them fifty five per cent of the respondents preferred a dive minutes increase in duration. About 80 per cent of the listeners subgested that the broadcasting time allowed for the other three programes is sufficient.

## 4. Erequency of Broadeasts:-

According to Table 4 majority of the respondents ( 90 per cent) expressed that the present irequency of presentation of the programme per week is sufficient with respect to Karshita Melhala Varthakal, Radio Grama Rangam and Vayalum Veedun. Regarding Karshika Rangam about one ifith of ( 19.93 per cent) the ilstoners suggested an increase in its presentation to two times per week.

Table 4:- Frequancy of broadoast as preferred by the 15 isteners of fers broadcasts

| S1 <br> no. | Frogremat | Frescnt frequency per: veels | Preference response in percentage ( $\mathrm{N}=150$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sufficient | Should be more | Should be less |
| 1. | Karshile Nekinala Varthakal | 7 | 91.33 | 8.67 | 0.00 |
| 2. | Earshika Rengam | 1 | 80.67 | 19.35 | 0.00 |
| 3. | Radio Grama Rangaa | 2 | 88.00 | 12.00 | 0.00 |
| 4. | Vayaiun <br> Veedur | 4 | 92.67 | 7.33 | 0.00 |

## II. Listening Habit Variables:-

1. Relationship between independent variables and Hass Redia Erposure Behaviour of the Listeners of Farm Broadcests:-

The results of the analysis of correlation between indepenient variobles and mass nedia exposure behaviour are presented in Table 5. Among the eight independent variables, six variables namely, education, farm size, crops grow, redio ownership, social participation and discussion were found to be positively and significantly associated with mass media exposure behaviour. The variables age and occupation were not significantily related to mass media exposure behaviour of the IIsteners.

It can be inforred fron the table that on increase In the five independent variables, namely, ecucation, fara size, crops grow, radio ownership, social participation and diacussion would also increase the nass nedia exposure behaviour of the farm broadcast IIsteners.

A12 the aignificent variables were subjected to regression anaiysis. The variation due to regression was tested by analysis of variance and the results are presented in Tabie 6. The F value was significant at 0.01 level of probability indicating that the selected

Table 5：－Correlation atrix for the dependent variable（inss hedia Sxposure Eehaviour ）and irdeperdent variables

|  | $X_{2}$ | $\mathrm{X}_{3}$ | $\mathrm{X}_{4}$ | $\mathrm{X}_{5}$ | $\mathrm{X}_{6}$ | ${ }_{7}$ | $\mathrm{X}_{6}$ | $\chi_{9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{X}_{1}$ | ． 0396 | ． 0128 | .1715 | ．0894 | ． 1388 | ． 0319 | .1158 | ． 0947 |
| $\mathrm{X}_{2}$ | 1 | ． $3512^{* *}$ | ． 1531 | ． 1622 | ． $4034^{* *}$ | ． 0710 | .1606 | $.3923^{* *}$ |
| $\mathrm{X}_{3}$ |  | 1 | .1599 | .1621 | $.2610^{\text {82x }}$ | ．2776 ${ }^{\text {6\％}}$ | ． $2049^{*}$ | ． 0701 |
| $\mathrm{X}_{4}$ |  |  | 1 | $.5995^{\text {学震 }}$ | $.3909^{\text {2＊}}$ | ．2546＊＊ | $.4430^{\text {＊}}$ | $.34 .61^{\text {\＃2 }}$ |
| $\mathrm{K}_{5}$ |  |  |  | 1 |  | ． 1914 | ． $4265^{\text {E＊}}$ | ． $3498{ }^{* *}$ |
| $\mathrm{X}_{6}$ |  |  |  |  | 1 | ． $3335{ }^{* *}$ | ． $4114^{\text {ti }}$ |  |
| $\mathrm{X}_{7}$ |  |  |  |  |  | 1 | $.3617^{* *}$ | ． $4093{ }^{\text {\＃\＃}}$ |
| $x_{8}$ |  |  |  |  |  |  | 1 | ． $4420{ }^{64}$ |
| $x_{9}$ |  |  |  |  |  |  |  | 1 |

＊Signicicant at 0.05 Level of probability
＊${ }^{4}$ I它nificant at 0.01 level of probabilitu
$x_{1}=$ Age
$x_{2}=$ Eaucation
$x_{3}=$ Occupation
$x_{4}=$ Fazm bize
$X_{7}$－Sccial participation
$X_{2}=$ Eiucation $\quad X_{5}=$ Crops gromn $\quad X_{5}=$ Discussion
$\gamma_{3}=0$ acupation
${ }^{7}{ }^{4}=$ Radis owership
$x_{9}-$ Fass medsa exposure

Table 6:- Analysis of Variance table showing the influence of six selected independent variables on

Mass Media Exposure Behaviour of Iisteners of Farm
Broadcasts

|  | stan of <br> square | Degres of <br> Ireedom | Hean <br> Square | F Value |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Total | 50955.71 | 149 |  |  |
| Regression | 21804.34 | 6 | 3534.05 | $17.82^{* *}$ |
| Error | 29151.37 | 143 | 203.85 |  |

** Significant at 0.01 Level of probability

$$
\begin{aligned}
\text { Nultiple correlation coefficient }(R) & =0.6541 \\
R^{2} & =0.4277
\end{aligned}
$$

independent variables significantly influenced the mass media exposure behaviour of listeners of farm broadcasts.

The $R^{2}$ value of the anolysis was 0.4277 . It indicates that all the independent variables taken for regression analysis contributed for about 43 per cent of variation in mass media exposure behaviour of farm broadcast Iisteners.

Partial b's, corresponding $t$ values and their significance are shown in Table 7. All the six variables namely equcation, farm size, crops grown, radio ownership, social participation and discussion were found to be highly significant indicating that, these varlables contributed effectively to the mass media exposure behaviour of the respondents.

The bata weights listed in the highest to the lowest order are presented in Table 8. The highest beta weight denotes the variable namely discussion, followed by social participation, farm size, crops grown, radio ownership and education. From Table 6 it is evident that the selected six variables were found to explain 43 per cent of variation in mass media exposure behaviour of farm broadcast Iisteners. The beta weights indicate that among these six variables discussion was the most influencing, followed by social participation, farm bize,

Table 7:- Fartial Regression Coeftcients for independert variables (Hass Hedia Exposure Behaviour - dependent variable)

| $\begin{aligned} & \text { SI } \\ & \text { No. } \end{aligned}$ | bariable No. | Varisbles ( $\mathrm{XI}_{1}$ ) | Faritial Regression Cocificient (bs) | S.E. (bi) | ¢ Velues |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | $x_{1}$ | Education | 1.1492 | 0.2311 | $4.9714^{* *}$ |
| 2. | $\mathrm{X}_{2}$ | Forn stze | 7.1432 | 1.6317 | $4.3777^{\text {星考 }}$ |
| 3. | $\mathrm{X}_{3}$ | Crops grown | 5.6097 | 1.2561 | 4.4651** |
| 4. | $X_{4}$ | Radio ownership | 6.1293 | 0.8119 | $7.5486^{* *}$ |
| 5. | $x_{5}$ | Social powticipation | 7.9248 | 1.4772 | $5.36477^{64}$ |
| 6. | ${ }^{*} 6$ | Discussion | 2.6587 | 0.4511 | $5.8928^{* *}$ |

*** Significant at 0.01 level of probability

Table 8:- Standardised Fartial Regression Coefficients
Ior Mass Media Exposure Behaviour and Independent variablos
(Orfered by beta wesphts)

crops grown, radio ownerihip and education in that order.
2. Relationship between independent variables and Ifstening Behnytour of the IIsteners of Fam Iroadcasts:-

Table 9 reveals the results of the analysis of correletion between incependent varisbles and Iistendng behavious. Among the nine independent variables, the variables nonely education, fam size, crops grown, redio ownership, social participation, discussion and mass media exposure bohaviour vere found to be positively and sitmificantly associated with the Iistening behaviour of farm broadcast listeners. In this Table 9 age and occupation are not significantly releted.

It can be inferred from the above table that an increase in the geven independent variables namely education, farm size, crops mrom, radio ownemoip, social porticipation, discussion and mass media exposure behaviour mould also increase the Ifstening behaviour of the farm broaccast listeners.

A23 the significant variables were subjected to regression analysis. The variation due to regression was tested by analysis of variance and the resulte are presented in Table 10. The F value was significart at 0.01 level of probability indicating that the selected

Table 9:- Gorrelation matrix for the dependent varigble (istening
Behaviour ) and indopandent varinbles

$$
(N=150)
$$

|  | $3_{2}$ | $x_{3}$ | $K_{4}$ | $\mathrm{r}_{5}$ | ${ }^{x_{6}}$ | $\mathrm{X}_{7}$ | $\mathrm{x}_{9}$ | $\mathrm{X}_{9}$ | $\mathrm{x}_{10}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $x_{1}$ | . 0306 | . 0123 | . 1715 | . 3394 | . 1300 | . 0319 | . 1158 | . 0947 | . 0671 |
| $x_{2}$ | 1 | . $3512^{\text {a }}$ | . 1531 | .0622 | . 4031 ** | . 0710 | . 1606 | . $3838{ }^{* *}$ | . $3096 *$ |
| $\mathrm{X}_{3}$ |  | 1 | . 1599 | . 1621 | . 2610 ** | $.2776^{* *}$ | .2049** | . 0701 | . 0557 |
| $\mathrm{X}_{4}$ |  |  | 1 | . $5995{ }^{* *}$ | . $3903^{* *}$ | . $2545^{3 *}$ | . $4430{ }^{\text {䍃 }}$ | . $3453^{\text {*** }}$ | . $2617^{* *}$ |
| $\mathrm{X}_{5}$ |  |  |  | 1 | . $3711{ }^{\text {*** }}$ | . 1914 | . $4265{ }^{\text {mi* }}$ | . $3498{ }^{* *}$ | . $2832^{* *}$ |
| $\mathrm{X}_{6}$ |  |  |  |  | 1 | $.3335{ }^{* *}$ | . $41144^{\text {ma }}$ | . $5332^{* 4}$ | . $5571{ }^{* *}$ |
| $\mathrm{x}_{7}$ |  |  |  |  |  | 1 | . $3617{ }^{\text {** }}$ | . $4093{ }^{* *}$ | . $4625^{* *}$ |
| $\mathrm{x}_{8}$ |  |  |  |  |  |  | 1 | . 4420 ** | . $4382^{\text {\% }}$ |
| $x_{9}$ |  |  |  |  |  |  |  | 1 | $.5726^{* *}$ |
| $\mathrm{z}_{10}$ |  |  |  |  |  |  |  |  | 1 |

* Significant at 0,05 level of probability * Significant at 0.01 level of probability
$x_{1}=$ Age
$x_{2}=$ Eacation
$X_{3}=$ occupation
$x_{4}=$ Fan size
$X_{5}=$ Crope Erown
$X_{6}=$ Rad 0 ownersh2p
$X_{9}=\underset{\substack{\text { hass media } \\ \text { behoviour }}}{ }$ exposure
${ }^{6}=$ Sacio owersh2p
$x_{10}=$ Listentna behaviour
$x_{4}$ a Fonit size
$\mathrm{F}_{\mathrm{B}}=$ Eisclasion

| influence of seven selectect indenendent, variablos |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| on Iistening Dohaviour of 11 stoners of Earm Sroadcasts |  |  |  |  |
|  | Sum of square | Degrees Ireedo | Mean Squ | $\square$ |
| Total | 7252.29 | 149 |  |  |
| Recression | 3467.15 | 7 | 495.31 |  |
| pror | 3735.13 | 142 | 20.66 |  |
| ** Sicnificant at 0.01 lovel of probubility |  |  |  |  |
| $\begin{aligned} \text { Fultible correlation coefficient }(n) & =0.691 \\ n^{2} & =0.477 \end{aligned}$ |  |  |  |  |

Independent varsables significantly influence the Listening behaviour of farm broadcast Iisteners.

The $R^{2}$ value of the anolysis was 0.477 . It indicates that all the independent variables taken for regression analysis contributed for 48 per cent of variation in listenting behaviour of farm broadcast Insteners.

Partial b's, corresponding $t$ values and their significance are shom in Table 11. The variables radio Ovnership, social participation, discussion and mass medida exposure behaviour were found to be highly eignificant indicating that, they vere the exfcotive contributors for the listening behaviour of fom broadcast Insteners.

The beta weights listed in the highest to the Lowest order are presented in Table 12. The ranking of beta weights denote the variables namely mass media exposure behaviour foliowed by social participation, diseussion, radio ownership, fam size, education, crops Erown and discussion in the descending order. From Table 10 it 19 evident that the selected seven variables vere fount to explain 48 per cent of variation In Iistenting behaviour of farm broadcast listonerg. The beta woights indicate that among these seven variables mass media esposure behaviour was the nost inganencing.

Table 11:- Fartial Regression Coetticients for indepentent variables (Listening Rehaviour - dependent variable)

| $\begin{aligned} & \text { Si. } \\ & \text { no. } \end{aligned}$ | Varisble No. | Varsablee ( X ( ) | Fartial Regression Coefficiant (bi) | S.E.E. (bi) | t Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | $\chi_{1}$ | Frueation | 0.3148 | 0.3337 | 0.9434 |
| 2. | $\mathrm{X}_{2}$ | Fasal size | 0.6083 | 0.5615 | 1.0653 |
| 3. | ${ }_{3}$ | Crops from | 0.2762 | 0.7144 | 0.3867 |
| 4. | $x_{4}$ | Tadio omnership | 3.5520 | 0.9973 | 3.5621**********) |
| 5. | $\mathrm{X}_{5}$ | Social participation | 1.6620 | 0.5205 | $3.1945^{* *}$ |
| 6. | ${ }^{8}$ | Discugsion | 0.3389 | 0.9045 | 3.3389 ** |
| 7. | ${ }^{x_{7}}$ | pass medie exposure behavictr | 0.3347 | 0.1165 | $3.3013^{\text {\% }}$ |

* Significant at 0.01 level of mobability

Table 12:- Standardised Fartial Regression Coefticients for Listening Behoviour and independent variables
(Criered by beta weights)

| Rantr <br> Order | Variable <br> No. | Name of the Variables | Beta Weight |
| :---: | :---: | :--- | :--- |
| 1 | $X_{7}$ | Mass media exposure <br> behaviour | 0.862 |
| 2 | $x_{5}$ | Social participation | 0.643 |
| 3 | $x_{6}$ | Discussion | 0.304 |
| 4 | $x_{4}$ | Radio ownership | 0.274 |
| 5 | $x_{2}$ | Farm size | 0.264 |
| 6 | $x_{1}$ | Education | 0.221 |
| 7 | $x_{3}$ | Crops grown | 0.140 |

Pollowed by social participation, discussion, radio ownership, farm size, education and crops grown in that order.
3. Fegationghsp between independent varinbles and Combucation Dohaytour of Istonors of Farm Epoacicasts:-

The results of analysis of correlation between independent variables and the comunication behaviour is shown in Table 13. Among the ton independent vartables, the variables namely education, fara size, radio ownership, soctal participation, discussion, mass media exposure behaviour and 2istening behoviour are Bigntficant? and positively related to the comunication behaviour of listeners of farm broadcasts. The variables age, occupation and crops grown are not significantly related.

It can be inferred fron the above table that an Increase in the soven independent variables namely education, farm atee, radio ownerghip, social participation, discussion, mass media exposure behaviour and listening behaviour would also increase the commancation behaviour of Parm broadcast Insteners.

All the sienificant variables vere subjected to regreasion analysis. The variation due to regression was tested by analysis of vartance and the results are

Nable 13:- Correlation matrix for the cepenient variable (Comanication Behaviour ) and indenemient variables

|  |  |  |  |  |  |  |  |  | ( ${ }^{\text {N }}=$ | 503 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{X}_{2}$ | $\pi_{3}$ | $\mathrm{X}_{4}$ | $\mathrm{X}_{5}$ | ${ }^{6} 6$ | ${ }^{1} 7$ | ${ }^{8} 8$ | ${ }^{2} 9$ | $\mathrm{X}_{10}$ | $\mathrm{X}_{11}$ |
| $\mathrm{X}_{1}$ | .0396 | .0128 | .1715 | .0894 | .1388 | . 0319 | .1158 | . 0947 | . 0671 | . 1362 |
| $\mathrm{R}_{2}$ | 1 | $.3512{ }^{4}$ | . 1531 | . 1622 | . $4031{ }^{14}$ | . 0710 | .1606 | . $3033{ }^{* *}$ | $.3036{ }^{* *}$ | . $3233^{\text {\% }}$ |
| $x_{3}$ |  | 1 | . 1599 | . 1621 | . 2640 | $.2776^{*}$ | . $2049{ }^{\text {\# }}$ | . 0701 | .0557 | .1136 |
| $X_{4}$ |  |  | 2 | $.5995^{\text {4* }}$ | . $3909^{*}$ | . $2546^{*}$ | $.4430^{\text {m* }}$ | . $3461^{\text {² }}$ | $.2617^{* *}$ | . $2738{ }^{\text {* }}$ * |
| $\mathrm{X}_{5}$ |  |  |  | 1 | . $3711{ }^{\text {* }}$ | . 1914 | . $4265^{*}$ | . 3498 | . $28982^{\text {考 }}$ | .1816 |
| $8_{6}$ |  |  |  |  | 1 | . 3835 | . $4114^{\text {th }}$ | $.5332^{* *}$ | . $5571^{* *}$ | . $4664^{\text {ma }}$ |
| ${ }_{7}$ |  |  |  |  |  | 1 | $.3617{ }^{\text {*** }}$ | . $40933^{* *}$ | . $4625^{* *}$ | . $2623^{\text {3** }}$ |
| $x_{8}$ |  |  |  |  |  |  | 1 | .4420 ** | . $4392 * *$ | $.2543^{* *}$ |
| $\mathrm{X}_{9}$ |  |  |  |  |  |  |  | 1 | $.5726^{* *}$ | . $4716{ }^{* *}$ |
| $\mathrm{X}_{10}$ |  |  |  |  |  |  |  |  | 1 | $.4932^{\text {里 }}$ |
| $\mathrm{X}_{1}$ |  |  |  |  |  |  |  |  |  | 1. |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

presented in Table 14. The E value was algnificant at 0.07 level of probability indicating that the selected Independent variables oignificently influence the commuication behaviour of Ilsteners of farm broadcageb.

The $R^{2}$ value of the amalysis was 0.367 . It indicates that all the independent vartables taken for regression analysis contributed for 37 per cent of variation in communcation behaviour of fam broadcast 11steners.

Fartial b's, corresponding $t$ values and their algnificarce are ahown in Table 15. All the variables namely education, farm size, radio ownership, social participation, discussion, mass media exposure behaviour and listening behaviour were found to be higkiy significant indicating that they were the effective contributors for the comunication behaviour of farm broedcast 1isteners.

The beta valghts listed in the highest to the 10wect order are presented in Table 16. The ranking of beta weights denote the variables namely listening behaviour, followed by discussion, mass media exposure beheviour, education, fam size, social participation and radio ownersinip in the deacending order. From Table 14 it is evident that the selected seven independent varisbles were found to explain 37 per cent

# Tabla 14:- Analysis of Variance table showing the Influence of seven selected independent variables on Commication Behaviour of 11steners of Farm 

## Broxdcasts

|  | Stur of square | Degreas of freecion | Hean Square | F Value |
| :---: | :---: | :---: | :---: | :---: |
| rotal | 26260.13 | 149 |  |  |
| Rogression | 96676.62 | 7 | 13310.94 | $11.81^{* *}$ |
| urror | 1659.24 | 142 |  |  |

** Significant at 0.01 Iavel of probability
fultiple conralation coerfsciant (R) $=0.6067$
$n^{2}=0.3672$


64 Bignificont at 0.01 Level of probabizity

SabTe 16:- Standardised Faritiol Regroesion Coefectents for Comunication behovicur and 1 ndorondent variables
(onderod by beta wetghts)

| Ganls Crier | Varigble No. | Wano of the Vardabl | Eeta Neisht |
| :---: | :---: | :---: | :---: |
| 1 | $\mathrm{X}_{7}$ | isstentre behavious | 5.9342 |
| 2 | $x_{5}$ | Discussion | 5.1177 |
| 3 | $x_{6}$ | Mass medta exposuase behavioter | 2.6836 |
| 4 | $\mathrm{H}_{1}$ | Elucataon | 1.6491 |
| 5 | $x_{2}$ | Form 3ize | 0.6635 |
| 6 | $x_{4}$ | Soclal porticluation | 0.5603 |
| 7 | $x_{3}$ | nasko ounembinp | 0.3460 |

of variation in listenting behaviour of farm broadcast 1istenerg. The beta welghts inciscate that anong these seven vartables ligtendng behaviour was the most Influencirs, Pollowed by discussion, mase media exposure behaviour, education, fam size, bocial pardicipstion and sadio ownerahip in that order.

## 4. Relationship between independent variables and Source Utilization Behaviour of the 11steners of Farm Broadcasts:-

Table 17 shows the results of correlation analysis between independent variables and the source utilization behaviour. It is seen that there is signipleant relationship between seven personal characteristics and the source utilization behaviour. The inceperdent variables afgnificant at 0.01 level of probability are Lam size, radio ownership, social participation, Aiscusaion, mass media exposure behaviour, listening behaviour and comantcation behaviour.

It can be infersed from Table 17 thet an increase In the seven independent vardables namely farm mize, ratio ownership, cocial participation, discussion, mass medsa exposure behaviour, listening behaviour and comunication behaviour caused an increase in the source utilization behaviour of farm broadeast Ilsterers.

## Fable 17:- Correlatica matix for the dependent varisble (Scurce

Ltilization Behuyqur ) and Imependent variables
( $4=150$ )

|  | ${ }^{3} 2$ | $x_{3}$ | $x_{4}$ | $\mathrm{X}_{5}$ | $\mathrm{x}_{6}$ | $5_{7}$ | $\mathrm{x}_{5}$ | ${ }_{9}$ | $x_{10}$ | $\mathrm{X}_{11}$ | $x_{12}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{X}_{1}$ | . 0396 | .0120 | . 1745 | . 0094 | . 1383 | . 0319 | . 1158 | . 0947 | . 0571 | . 1362 | . 0211 |
| $\mathrm{n}_{2}$ | 1. | $.3512^{\text {*** }}$ | . 1534 | . 1622 | . $4051^{\text {*** }}$ | . 0710 | . 1606 | . $3838{ }^{*}$ | . $3036{ }^{\text {-1/4 }}$ | .3233** | 1023 |
| $x_{3}$ |  | 1. | . 1599 | . 1621 | . $2610^{* *}$ | . $2775^{* *}$ | . $20639^{*}$ | . 0701 | . 0557 | . 1136 | . 0449 |
| $x_{2}$ |  |  | 1. | . $5995^{* *}$ | . 3909 * | . $254.6{ }^{\text {\#** }}$. | . $44350^{* *}$ | $.3667^{3 / 4}$ | . $2617^{* / 4}$ | .2738** | . $3317^{* *}$ |
| $\mathrm{x}_{5}$ |  |  |  | 1. | . $3711^{\text {\#. }}$ | . 1914 | * $42655^{* *}$ | . $3458^{* *}$ | .2see** | . 1316 | . 2235 |
| $x_{6}$ |  |  |  |  | 1 | . $3335^{* *}$ | . $47144^{\text {² }}$ | . $5332^{* *}$ | . $5571^{\text {T* }}$ | . $4604^{* *}$ | . $49744^{* *}$ |
| $x_{2}$ |  |  |  |  |  | 1 | . $36177^{* * *}$ | . $4093^{\text {\%*** }}$ | .4625** | . $2628^{* *}$ | .4065 ${ }^{\text {\% }}$ |
| ${ }^{8}$ |  |  |  |  |  |  | 1 | . $44.90^{* *}$ | . $4332{ }^{3 \%}$ | . $2543^{* 4}$ | . $2954{ }^{\text {*** }}$ |
| $x_{9}$ |  |  |  |  |  |  |  | 1 | .5726 ${ }^{* *}$ | . $42796^{3 / 8}$ | . $4737{ }^{* *}$ |
| $x_{10}$ |  |  |  |  |  |  |  |  | 1 | . $4932^{3 *}$ | . $4533^{\text {\% }}$ |
| $\mathrm{x}_{11}$ |  |  |  |  |  |  |  |  |  | 1 | . $6127^{* *}$ |
| $\mathrm{x}_{12}$ |  |  |  |  |  |  |  |  |  |  | 1 |



The signifscantly related variables in Table 17 were subjocted to regression analysis. The varlation duc to regression was tested by the analysis of varience and the rosults are presented in table 18. The $F$ value was significant at 0.01 level of probability indscating that the selected independent variables significantly influencert the source utilization behaviour of listeners of farm broadcasts.

The $R^{2}$ value of the analysis was 0.4856 . it Indicates that all the independent varlables taken for regression analyais contributed for about 49 per cent of variation in source utilization behaviour of form broadcast 11 atenerc.

Cartial b's, corresponiling 't' values and their significance are shown in Table 19. All the seven varlables namely lam size, radio omership, social participation, alscussion, mass media exposure behaviour, zistening behaviour and comunication behaviour were Pound to be algniflcant indicating that they exerted coneiderable influence on the source utilization belvaviour of respondents.

The beta weights ilated in the higheat to the 1oweat ordor are being presented in Table 20. The highest beta welfhte denotes tho variable manciy listening behoviour followed by mass media exposure
Table 18:- Analygis of Veriance table showing the
Influence of seven aelacted indepencient varlables
on source utilyation behavicur of Ilsteners of

## Farm Broadcasts

|  | Sum of square | Deerrees of freedom | Mean Square | F Value |
| :---: | :---: | :---: | :---: | :---: |
| Tota 2 | 87468,43 | 149 |  |  |
| negression | 42487.61 | 7 | 6069.65 | 19.16 ${ }^{\text {娄 }}$ |
| Error | 44980.81 | 142 | 316.76 |  |

** Significant at 0.01 level of probability
Nultipio comelation ocofficient ( A ) = 0.6569

$$
R^{2}=0.4856
$$

Table 19:- Eartial Regession Coefficients for indepenjent variables (Source utifization Bohaviour - depercient variable)

| $\begin{aligned} & \text { \$1. } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { variable } \\ & \text { Fo. } \end{aligned}$ | Variables ( Xi ) | Fartiel Regression Coofetcient (bi) | S.E. (bi) | t Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | $\mathrm{K}_{1}$ | Farn size | 0.8504 | 0.2029 | $4.1904^{\text {\# }}$ |
| 2. | $\mathrm{X}_{2}$ | Fadio ownership | 0.7103 | 0.1039 | $6.8345^{* *}$ |
| 3. | $X_{3}$ | Social participation | 0.9777 | 0.1843 | $5.3054^{* *}$ |
| 4. | $x_{4}$ | Discusbion | 2.2060 | 0.5990 | 3.6826** |
| 5. | ${ }_{5}$ | Prass media exposure behavious | 5.9469 | 0.9151 | 6.4930 |
| 6. | $\chi_{6}$ | Listening behaviour | 8.2745 | 1.3472 | $6.1419{ }^{\text {\% }}$ |
| 7. | $x$ | Conmuication behaviour | 1.0008 | 0.1091 | $9.2399^{\text {\% }}$ |

** Significont at 0.01 level of probability

| (Opdered by beta welghts) |  |  |  |
| :---: | :---: | :---: | :---: |
| Rank Order | $\begin{aligned} & \text { Vapiable } \\ & \text { No. } \end{aligned}$ | Name of the Variables | Beta Velght |
| 1 | $x_{6}$ | Listening behaviour | 14.9449 |
| 2 | ${ }_{5}$ | hass medsa exposure behaviour | 7.3960 |
| 3 | $x_{7}$ | Communication behaviour | -1.6611 |
| 4 | ${ }^{4}$ | Discusazion | 1.5014 |
| 5 | $x_{3}$ | Sociel participation | 0.2349 |
| 6 | $\mathrm{x}_{1}$ | Farm size | 0.2178 |
| 7 | $\mathrm{X}_{2}$ | nedio ownersh1p | 0.1013 |

Dehoviour, commacation behsviour, discusaion, social particluation, fare size and radio ownership in the descending order, From Table 18 it is evident that the selected seven varisbles were sound to explain 49 per cent of variation in source utilization behaviour of farm broadcast 1iateners. The beta welghts Indicate that among these seven variables listenting behavious was the most influsncing folloved by maas meala exposure behaviour, comenication behaviour, discussion, social participation, farm size am radio ownership in that ordaz.

## 5. Relationship between independent variebles <br> and Adogtion Hohraviour of the Listeners of

Farm Broadcasts: -

The rasults of the correlation analysis between the independent variebles and adoption behaviour are presented in rable 21. It is seen that there in aignificant relationohip botween oight pargonal and altuational characterdatice of the respondants and their edoption behaviour. The indopendent varlables olgnificant at 0.01 level of probability were equcation, staio omorship, social participation, discussion, mass pedia exposure bchaviour; 11steming beheviourp comunicaticn behaviour and source utilization behaviour.

Faple 21:- Cormelatson matrix for the dependent variable
(Adoption Behaviour ) ard othes Incepencent

## variebles

( $N=150$ )

|  | $x_{2}$ | $x_{3}$ | $\mathrm{X}_{4}$ | $\mathrm{X}_{5}$ | $\mathrm{x}_{6}$ | $x_{7}$ | $\mathrm{X}_{6}$ | $\mathrm{x}_{9}$ | $\mathrm{X}_{10}$ | $\mathrm{x}_{11}$ | $\mathrm{X}_{12}$ | $\mathrm{X}_{13}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $x_{1}$ | . 0396 | . 0123 | .1715 | . 0394 | . 1338 * | . 0379 | . 1158 | . 0947 | . 0671 | . 1362 | . 0211 | . 0759 |
| $x_{2}$ | 1 | . $3512^{* *}$ | . 1531 | - 1622 | . 4031 ** | . 0710 | . 1605 | . $3838{ }^{\text {\#* }}$ | . $3096^{\text {*** }}$ | . $3233{ }^{\text {\%** }}$ | .1023 | . 2993 ** |
| $4_{3}$ |  | 1 | . 1599 | . 1621 | .2610*** | .2776** | .2049** | . 0701 | . 0557 | .1136 | . 0149 | . 0345 |
| $x_{4}$ |  |  | 1 | . 5959 ** | . $3000^{\text {** }}$ | . $2546^{* *}$. | . 4430 ** | . 3461 ** | . $2517^{* *}$ | . $2733^{* *}$ | . $3317^{* *}$ | . 1278 |
| $\mathrm{x}_{5}$ |  |  |  | 1 | . $3711^{* *}$ | . 1914 * | . $42655^{* *}$ | .3498*** | .2882** | .1896 |  | $.1592$ |
| $x_{6}$ |  |  |  | - | 1 | . 3335 ** | -4114*** | .5332************) | . 5571 ** | .4604*** | .4974**** | . $4358^{* * *}$ |
| ${ }_{7}$ |  |  |  | - |  | 1 | $.3617^{\text {i }}$ | .4093*** | . $4625^{* *}$ | .2628** | . $4065{ }^{\text {** }}$ | $.4237_{*}^{* *}$ |
| ${ }_{8}$ |  |  |  |  |  |  | $\pm$ | .4420 ${ }^{\text {an }}$ | . $43832^{* * *}$ | .2543 ${ }^{\text {\% \% }}$ | . $2954^{* *}$ | . $3536^{\text {*****}}$ |
| $x_{9}$ |  |  |  |  |  |  |  | 1. | $.5726^{* *}$ | . $4716^{* *}$ | . 4787 ******** | . $5791^{* *}$ |
| $x_{10}$ |  |  |  |  |  |  |  |  | 1. | .4932** | . $4581{ }^{* *}$ | . $5923^{* *}$ |
| $\mathrm{X}_{11}$ |  |  |  |  |  |  |  |  |  | 1 | . $6127^{* *}$ | . $66710^{* *}$ |
| $\mathrm{x}_{12}$ |  |  |  |  |  |  |  |  |  |  | 1 | . 5973 ** |
| $\mathrm{x}_{13}$ |  |  |  |  |  |  |  |  |  |  |  | 1 |

* Sicmiftcant at 0.05 level of probabilitty

In Sqmipicant at 0.01 level of probebility


It can be inferred from the Table 21 that an Ancrease in the eight indopendent variables namely evucation, radio ownership, occial participation, discussion, mass media exposure behaviour, ilstening behavioux, comminication behaviour and mource utilization behaviour also enhanced the adoption behnviour of ferm broncast 11steners.

The significantiy related variables in the Table 21 were subjected to regression analysis. The variation due to regression was tested by analysis of variance and the results are prosented in Sable 22. The $F$ value was significant at 0,01 level of probability inaicatins that the selected independent variabien gignificantly Influenced the adoption behaviour of farm brondcast 14steners.

The $\mathrm{r}^{2}$ value of the analysis was 0.5929 . It Indicates that all the independent variables taken for regression analysia contributed for 59 per cent of varlation in acoption bohaviour of farm broadcast $11 s t e n e r s$.

Fartial $b^{i s}$, corremporcling $t$ values and theis significance are shown in Table 23. Eive variables namely social participation, masa media exposure behaviour, Iistentng behaviour, comunication behaviour and sourco utilization behaviour yere foum to be significant

Table 22:- Anglysts of Yariance table showing the influence of oight selacted independent variables on adoption behaviour of Ifsteners of Farm Broadcants

|  | Sun of <br> square | Degrees of <br> freedor | Meen Square F Value |  |
| :--- | ---: | ---: | ---: | ---: |
| Total | 24047.97 | 149 |  |  |
| Regression | 14546.67 | 8 | 1218.33 | $26.99^{* *}$ |
| Error | 9501.29 | 141 | 67.30 |  |

** Significant at 0.01 level of probability
Nuitiple correlation coefficient ( R ) $=0.7777$

$$
\mathrm{R}^{2}=0.5929
$$

Tebie 23:- Fartial Hegression Coefficients for independent variables (Adoption Behaviour - dependent variable)

| $\begin{aligned} & 52 . \\ & \text { No. } \end{aligned}$ | Varigoble No. | Variables ( Xi ) | Farticl fegression Coefficient (b1) | S.E. (bl) | $t$ Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | $x_{1}$ | Education | 0.5595 | 0.5527 | 1.0123 |
| 2. | $x_{2}$ | Radio ownership | 2.4696 | 1.6918 | 1.4597 |
| 3: | ${ }^{3}$ | Social participation | 2.0757 | 0.8631 | 2.4819** |
| 4. | $X_{4}$ | Discussion | 0.3739 | 0.2810 | 1.3302 |
| 5. | ${ }_{5}$ | llass nedia exposure behaviour | 0.4938 | 0.1970 | 2.5998 |
| 6. | ${ }_{6}$ | Listening behaviour | 0.3471 | 0.1371 | 2.5280** |
| 7. | $x_{7}$ | Commatication behaviour | 0.7271 | 0.1494 | $4.3663^{* *}$ |
| E. | ${ }^{8} 8$ | source utilization beheviour | 0.6330 | 0.2505 | $2.5259^{* \%}$ |

Q* Significant at 0.01 Zovel of mobability

Indseating that they wero the effective contributors to the adoption behavicur of respondents.

The bota weighta listoc in the highest to the Iowest order are preaented in Toble 24. The hichert beta weight denotes the variabse mmely comanication behaviour followed by ass media exposure beheviour. mource utilization behaviour, social participation, Ifstening behovicur, radio ownership, discussion and educotion in the descerding order. From Table 22 it is svident that the selected elght varlebles were found to explain 59 per cent of variation in adoption behaviour of farm broadcast Isateners. The beta weichts indicated that among these elght voriables comuntcation beiaviour was the noot Influencing, followed by mass medla exposure behoviour, source utilization behaviour, social participation, listening behoviour, radio ownership, discupsion and education in that order.

Table 24:~ 5tandanised iontial Regreselcn Coerficients Por Adoption Behoviour and imiependent variables
( Draered by beto wesehts)

| Nant Ordor | Varsable Ho. | None of the Vantables | Eeta telcht |
| :---: | :---: | :---: | :---: |
| 1 | $x_{7}$ | Commundcotion behavious | 9.399 |
| 2 | ${ }_{5}$ | fass media exposure behsviour | 6.320 |
| 3 | $\mathrm{x}_{6}$ | Source utilization behaviour | 3.640 |
| 4 | $\mathrm{X}_{3}$ | Soctal participation | 1.924 |
| 5 | $\mathrm{X}_{6}$ | Listenins behaviour | 1.905 |
| 6 | ${ }_{2}$ | Scaso Ownerents | 1.047 |
| 7 | $X_{4}$ | miscussion | 0.848 |
| 8 | $\mathrm{X}_{1}$ | Esucation | 0.162 |

## DISCUSSION

The discussion of the results of this study has boen furnished in this chopter under the following two hamds.

## I. Broadcasting Veriables

IT. Listenfing Habit Variables

Is Broadcasting Variables: -

1. Zode Prefererce:-

Figure 1 revaled that sarmers of charoha samithies preferred interview as the nost effective node of fam broadcast through radio followed by discussions, question and andurs, succean stories and talks in the field of agricuature. Tins finding is in confirmity with that reported by Crile et al. (1945) and Hanson (1946) who reported that interview was the nost preforred mode of broedcast by the farners. Enight (1973) and Sabarathnam and Rajarem (1975 a) also roported that interview with lamers is the most preferred node of brondcast by the farm broadcast listenera. The precess of interview being informative and by personal exposition on a subjoct matter the farm broadonst Iistener could perceive the contents of the subject better timough the gethod of interview.

## 2 Erogramae Freference:-

Figure 2 revealed that "Karshike Nekhalo Varthakal' was the most preferred prognane followed by Karshita Rengam, Redio Grama Rongan ard Vayalum Veedur. This einding is in line with the reaults reported by Tampi (1979) who observed that forn news was the most preferred programe by the fam oroadcest 11stenars.

Discumsion with the meabers of charcha samithiea also revealed that Karshisa Mekhala Varthakal procramme pressents mastly information pertaining to their ragional condition and that it offered informations regarding farm services provided by the different input agoncies. Karshika Rangan waa ranked second which may be because of the fact that, it provides detailed information and experiences of famers involvod in different farming enterprises. Even though Vayalum Veedum programe provided detailed information on now varieties of paddy and their cultivation practices, the progranse seems to be least preferred by the respondent famers because only one thirs of the respondent were mainly paddy growers.

## 3. Duration of Rarm Broadcaste:-

The results in Table 3 depict that majority of (70 per cont) the radio 2isteners buggested an Increate in the duration of Korshika Methale Varthakal programe

Iron five minutes to ten minutes. Table 2 evinees that the Parmind cosmunty gives more attention to this programed winch may be the reason for their suggestion for increasing the duration of this broadcest. Host of the charcha amathy members ( 77 per cent) were of the opinion that present duration of 30 minutes $f$ or Farghita Rengan, Radio Grame Rangam and Vayalun Veedum programed is quite nufficient.

## 4. Frequeney of Farm Brcadcasto:-

The results presented in peble 4 revealed that majority ( 90 per cent) of the form broadcast Instenors opined that the preaent frequency of broadeast per veek is sufficient in respect of Rarshika liekhala Varthakal, Radio Grama Rangam and Vayalw Veedum. This implies that the progransa coverage of fara brodcasts ifts the need of the farm brosdcast listeners.
II. Listenine Habst Veria07ess -

1. Relationship betwoon infeemdent variables and Mass ledta Expogure Behaviour of the 19steners of Fam Broadcasts:-

Erom Table 5 it could be evidenced that education, fam size, crops grom, redio ownership, eocial parcicipation and diccussion vere found to be positively and eignificantly associated with the mass medta exposure
behaviour of farmer listeners of the charcha samithies. The hypotheses $I: 2, I: 4, I: 5, I: 6,1: 7$ and I : e are accepted as there was positive and significant relationship. The hypotheses I : 1 and I : 3 are refected since the variables, namely, age and occupation are having no significant relationahis With the mass media exposure behoviour of the farmer listeners of charcha amsthrea.

The resuits in Table 5 evidenced thot there was no oignificant relationshid between mass medie exposure behaviour and age and oocuration of the charcha eamithy insteners. The finding inplies that famars of all ages irrespective of their occupation get exposed to mass medta which might be due to the timing of farm programes - except Konghtha Mekhals Varthakal - being fixed in the evening, a lessure time for almost all categories of radio 11steners.

As an outcone of the results in Table 6 and 7 the regression analysis was undertaken. The data in Table 8 evidencod that diecussion, social participation, farm size, erops grown, radio ownership and education as the nost influencine voriables in their opder of importance as expressed by the farmess. This firding Bhow that iryespective of the omership of radso or higher acreage of fam size the farmer - members of charcha samithies gave due icportance to the process
of discusaion which is the primary objective of the charche smithies. This also indicates that the objectives of the samithies axe being fully mot with the samans' exposure to the mass media other than radio also.
2. Relathonehip between Independent yariabies Fara Brodecagts:-

The reault of the correlation analysis (Table 9) showed that education, tarm aize, crops grown, radio owrership, social partiefpation, discussion and mass medla exposure behaviour are found to be positively and eignificantly assoclated with the listening behavicur of farm broadcost 11stoners, The hypotheses II: 2, II $: 4$, II : 5, II: 6; II: 7, II: 8 and II: 9 are accepted as there was positive and algnificant relationship. The hypotheses II : 1 and II: 3 are rejectod since the variables age and occupation did not have any significant relationship with the listening behaviour of the farmers.

Thus age and occupation did not affect the Iistening behaviour of the aembers of charcha somithies. This is in confirmity with the findings of hlangeer (1970). The listentng behaviour of fara broadcast 1isteners is significantly and positively related to education and radio omerehip. This timaing is olso in
agreanent with the findings of Alomgeer (1970) and Eadrinorayaman (1977).

Acoording to the Indings presented in Toble 10 and 2able 11 regression anolyais was uniertaken. The beta weights ilated in the Table 12 indicated that among tho zeven independent variables nass media exposure behoviour was the nost influencing factor in the farsors' 11stentag behaviour tollowed by social partieipation, asscussion, radio omership, farm size, education and crops growin in the deaceming order.

The IInding that Listening behaviour was Enfluenced a greater extent by the mass media exposure behaviour of Lamers le not beyond esey comprehension since these two are oniy different phases of one aingle process.
3. Relationship between independent variables em Comuncation Dehavicur or the Insteners of Fara Broadcaste:-

The data in table 43 show the cooificienta or correlation botween 1udepentent variables and the comunication behavicur of mombors of charcha samithies, Thesr level of education, farm size. radio omerginip, social participation, discussion, mase medio exposure benaviour as well as their listening behaviour as significantly and positively associoted with compuncation
behaviour. Hence the hypotheses III : 2, III : 4, III : 6, III : 7, III : 8, III : 9 and III : 10 are accepted. Since the three variables age, occupation and crops grown were found to have no positive and significant relationship with communication behaviour, the hypotheses III : 1, III : 3 and III : 5 are rejected.

According to the Eindings presented in Table 14 and 15 regression analysis was undertaken. The results presented in Table 16 indicate that listening behaviour is the most contributing variable for the communication behaviour folloved by discussion, mass media exposure behaviour, education, farm size, social participation and radio ownership in that order. Their activity of listening is thus very high which might be due to the regular preparatory and follow up activities of Famers Training Centre which is responsible to maintain the tempo of $11 s t e n i n g$ the farm broadcasts in the higher order anongst the nembers of the charcha samithtes.

## 4. Relationship batween independent varisbles and Source Utilization Bohavtour of the 19steners of Farm Broadcasts:-

It was evident from Table 17 that farm size, radio ownership, social parifelpation, discussion, mass media exposure behaviour, 11stening behaviour and
consunication behaviour were found to be positively and significantly related with the source utilization behavious of listeners of charcha asaithy nemberb. Therefore the hypotheses IV : 4, IV : 6, IV : 7: IV : 8, IV : 9, IV : 10 and IV : 11 are accepted. The varlables namely age, education, occupation and crops grom were having oniy non-significant relationship with the source utilization behaviour. Therefore the hypotheses IV : 1, IV : 2, IV : 3 and IV : 5 are rejected.

Accorning to the findings presented in Tabla 18 and 19 regression analysis had Dean undertaken. The Table 20 inilcates that 31stening behavioun is the most contributing variable for source utilization behaviour followed by nass media exposure behaviour, cemsunication behaviour, discusaion, social partioipation, farn size and radio ownerghp.

The results emit the important relation that raclo was superior as an important source of farm Infomation to the fazmer - meabers of the charcha samithies. The reason may be due to the conatant and continuous axposure to the farm programes broadcast through radio.
5. Rejationship between indopendent variables and Adoption Behaviour of the IIsteners of Famm Erondcasts:-

The recults of the correlation analyais (Fabie 21) ghow that eduoation, radio ownership, social participation, discussion, axas meciia exposure behavicur, listening behaviour, conmunication behaviour and source utilization behaviour were significantiy and positively associated with the adoption behavicur of listeners of farm broadcasts. Therefore the hypothesen $v: 2, V: 6, V: 7, v: 8$, V:9,V:10,V:11 and V: 12 are accepted since the varisbles are having poaitive and significant relationsiip with adoption behaviour. Age, occupation, farm size and crops grow are having no aignificant reiotionship with adoption behavsour. Therefore the hypotheses $V: 1$. $\mathrm{V}: 3, \mathrm{~V}: 4$ and $\mathrm{V}: 5$ are rejseted.
nccoriing to the indings presented in Table 22 and 23 regression analysis was carried out. The beta waichte (Table 24) indicate that comanication behaviour 1.s the nost influential variable in determining the adoption behavicur of the famers followed by mass media exposure behaviour, source utilization behaviour, social participation, listening behaviour, radio ownership, discussion and eaucation.

This finding highlights the positive nature of conviction created amongat the samer members of the charcha samithies through the process of commication achleved by affferent sources studied.

It is quite possible to reason out this particular phenomenon in the light of fundamental generalization made by social psychologists that human behnviour - in this case the adoption behaviour with reference to imovations - is a very laportant functionei outcome of human communication behavicur. It also implies that the efriciency in one's comunication bohaviour may reflect on his adoption behaviour also.

## SUMMARY


#### Abstract

With the odvancenent in farm technology faxiers seek more information from alfeerent media of which mass nedia rank fisist, The mas media chonnols are radio, televicion, I11m, newspaper, magazina and the 2iko which reach large numer of audience spread over a iarge aree within a abort time. Among the mass pedia chanmels radio is the moat copular and easily available. The information needs to be presented to then in rodes in which they prefer to $218 t e n$. The farmers' preference towards programe also difiers since each programe has tis own apectal chameter. So, the programe preference and mode preference have to be stualed in order to lanrove the efinciency of fam broadcast.


Hany of the past studies have revealed that tho radio ilsteners are varying in their personal and situational characteristics. It is therefore, imperative to struly the characteristics that are asaociated with mass nedia exposure behoviour, Ilatenting behaviour, commansation behaviour, source utilization behavicur and adogtion behaviour of fam broadcast 1isteners, in onter to find out how far this powerful cedium la actualiy used by the farming comonity and and also bow far the personal and situational characteriotios influence the abovo merstioned variables.

## Cbjectives:-

1. To find out the preference of the listeners on difierent modes of fazm broadeasta,
2. So find out the proference of the Ingteners on the mogrames put out through fam broaceasts.
3. To assess their preterence on the duration and Iraquency of tam broadcasts.
4. To Ind out the relationship between masa madia exposur behaviour, ilstening behaviour, comuntcation behaviour, source utsilization behaviour and adoption behaviour with the salected permonsl and situational variables.
5. To study the relative intluence of the porsonal and situational variables on mass media exposure behaviour, listening behoviour: comanication behrviour, bource utilization behoviour and aloption beheviour of the listeners of fam broadcaste.

Past sturites on masa media expobure bebaysour, Ifstening behaviour, comuntcation behaviour, source utilization behnviour and adoption behaviour have brought to 7 gh it innwerable vartables that asfect these behawioure. The following important variables were selected for the atudy.

## Dependent Variabios:-

hass media exposure behrviour
Listaning behaviour
Commiteation behaviour
Souree utilization behaviour
Adoption behavicur
Indepandent Vayiables:-

Age
Education
Occupation
Farm $\operatorname{siz}$
Crops grown
Radio ownership
Social participation
Baccussion

Dased on the thearetical concepts the hypotheses wore Eramed to test chelv significance.

This study was comiucted in Trivandrixn District of Kewala. Three blooks zamely, Varkala, Modusangad and Vollanad werc selected based on the probability proportional ampling technigue. Five charcha sanithies Trem each block were selected randonly. Frow each oazithy ton respondents were rondarly soiected. Totally one huvired and fifty Easm broaccast 11ateners belonging
to the charcha samithies ware inciuded in tinis stuay.
Besties using the valld acales ceveloped by earlior vorvera. bone instruments ware also develapad for thia Btudy, The available measurement techniques and bcoring systens were used for independent variables such as erfucation (Trivedi, 1963), social participation (2rivead, 1963) and occupation (Dacrinarayanan, 1977). Age was measured in teras of number of years the responfents had complated and the nutoer of acres cultivated was taken as the measure of form ife. Radio omarship wes meacured in terma of possession of radio recriving set. Discussion was peasured in teras of their pre and post discuscion.

The ingtruments Lor ceasuring mags media exposure bonaviour was develonod on the lines of Rogers and Svenning (1969). The scoles to measure commaleakion behaviour (Nurthy and Singh, 1974) and ilstening behavious (Badrinarayanon, 1977) were uned with alight nodifications. The source utilization bohaviour was measured by the scale developed by Hair (1969). The Ajoption behaviour was mearured by the Adoption Quotient as developed by Jalswal and Dove (1972) with wight modifications.

A tell conatructad interview gchedule was used in data collection after its pre-test. The statiotical
tools usad were percentage analysis, Thurgtone's paired comparison technique, simple correlation, wultiole correlation and regression anolytes. The significance of tests wore dore at 0.05 1evel and 0.01 level of prosability.

The salient Pindings of this study are presented below:-

Mode Preterence:

1. The respondents metorred interviews as the bost mode of fare broodcasts followed by discussions, question and answers, success staries ond taiks in descendine order.

Progamm Proferme:
2. Karshika Resbala Varthakal was the most preferced farm progranme foz2owed by torohita Rangan, Redio Grama Rangam and Vayolum Voedun.

Duration of Fam Brondcests:
3 a. Hajority (70 par cent) of former itistoners eugrested an increase in the duration of Karghita Rechale Verthakal.
35. Three fourth os tha Ifstenora of farm broadcast evidenced that the duration of
broadcest for Xarshika Rangoin, Radio Grama Rangam and Vayalue Veedua as bufficient.

## Frequency of Farm Broedcasts:

4. Majority ( 90 per cent) of the farn broadcast listeners opined sufficiency in the present Erequency of Earshika Hekhala Vartizkaz, fadso Grama Rangan and Veyalun Veedum per week,

## Hass Modia Exposure Dehayiour:

5 a. Education, fam aize, cropg erown, radio ownership, social participation and dimcugsion amonest the famers were found to be positively and significontly associated with their masa media exposure behoviour.

5 b. In multiple regression analysis it was found that the selected six veriebles jointly and sienificancly contributed to 43 per cent of veriation in mess media exposure bohaviour of 1istenera of farm broadeasto.

5 e. Amone the six indepentent variablew discussion was the nost contributing variable for mass media exposure behaviour anongst the famer Insteners followed by thair social
participation, crops grown, radio ownarghip and education.

## Ligtening Behavious:

6 a. The lacters fousd to bo positively and signisicantly associated with the listening behowicur of the famers were their education, fant tize, crops grown, redio ownership. social participation, alscussion and nass gedia exposure behaviour.

6 b . The multipie regression anelysts revaled that the seven varisbles jointly and signiafeantiy contributed to 48 per cent of vawiation in the listening behaviour of fare brondeast Insteners.

6 C. In the Iistening behaviour of famers mass wedia expooure behnviour was the most contributing variable loliowed by social participation, discussion, radio ownerthip, farm size, education and crops grow.

## Comumeation BehayLour:

7 a. Education, farm size, radio ownerohip, social particlpation, dincussion, mass media exposure behaviour and listening behaviour of the
farmer listeners were found to be positively and significantly associated with their communication behaviour.

7 b. In multiple regression analysis it was found that the selected seven variables jointly and aignifiemntly contributed to 37 per cent of variation in communication behaviour of the farm broadcast listeners.

7 c. Listening behaviour was the most contributing variable followed by discussion, man media exposure behaviour, education, farm size. social participation and radio ownership amongst the listeners.

## Source Utilization Behaviour:

8 a. The independent variables, namely, farm size, radio ownership, social participation, discussion, mass media exposure behaviour, listening behaviour and communication behaviour kero found to be positively and significantly associated with source utilization behaviour of the farmers.

8 b. The multiple regression analysis revealed that the seven variables jointly and significantly contributed to 49 per cent of variation in source utilization behaviour.
a c. Latening behaviour of the famef was the post contributing variable for their source utilization behavicur followed by cheir mass media exposura behaviour, commuication behaviour, discussion, social marticipation, farc gize as well as radio ownership.

## Adoption Behaviour:

9 a. Education, mado ownership, social paricipation, diacussion, rass nedle exposure behaviour, listening behavicur, comunication behaviour and source utilization behaviour of the listeners of farm broadcasts were found to be positively and significantly associated with their adoption behaviour.

9 b. The multiple regression anslysia revalec that the aeven vardables jointiy and significantly contributed to 59 per cent of variation in their adoption behaviour.

9 c. Among the oight varlables cormunication behoviour was the most contributing variable among the listerar farwers followed by their mass media exposure behoviour, source utilization behaviour, social participation, ilstening belaviour, radio ownership, aiscussion and education.

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## APPENDICES

Interview Schadule

| Qignemingting agicultura Informations to the Faxmers |  |
| :---: | :---: |
| os mivendrus Disteict |  |
| SART | I |
| 1. Name and addreas of the famar - menber | Respomsent No. |
| 2. Bledk |  |
| 3. AEE |  |
| 4. Education | Illiterate/can read only/can read and witto/primary school level/midale school level/ High school level/Collegiato level |
| 5. Occupation of the rospondent | Agricultural Labour/Bueiness/ Agriculture |
| a. Hain <br> b. Subsiaiary |  |
| 6. Farm alze (owned) | Dry Lami/tet Iond (Area) |
| 7. Crope grown \& Area |  |
| - Crops | Area ${ }^{\text {a }}$ Vrictsom gromm |
| a. Eaddy <br> b. Cocorut | - |

c. Taploca
d. Bernama
8. Radto ownership

Eo you own
3) Redio Yes/LNo
11) Trensistor Yes/No
9. Social participation:


## 10. Biscussion:

a. i ) Do you dibcuss with any one before listening to the fara broadcast?

> Yes/Mo

11 If yes, witi when and how often?
Regularly/Sometimes/Rarely
2 ) Family members
11 ) Friends
iii) felatives
iv ) Extension agents
v ) Eeriners Discussion group members
b. 1 ) Do you diecuss with ony on after instening to the Parm broaicest?

Yes/Mo
13 ) If yes, with woon end how often?
Regulariy/Sometibes/Rarely

1) Paaliy neabers
2) Eriemb

11i ) Relotives
iv ) Extension agents
v ) Farmons Discussion group members
11. Mode of Broadcast:

That noide of presentation of the procmame you ilte to ilston. (Select eacis mode in each pair comparison with the other by plecing ( $V$ ) mark).

Talk/biseusston
Talk/Interview
Talls/Cuestion and Answer
Talk/Success otomies
Discussion/Intarviev
Discussion/Guestion ana Answer
Dacuasion/Suecess atoriea
Intervics/Cuestion and Answer
Intervien/Successm stories
Guestion and Ansuar/Buccoss stories
12. Fieture of Eroacoast:

What kind of prograno you genorally like to Ilsten (select each brograma in compartson with the other by placing ( $\downarrow$ ) manks agoinst your choice in each ratr).

Yarshina Rangam/Kerahike Mekhala Varthakal
Warshika Rangara/Radio Grama Rangam
Karshika Rengam/Vayalum Veedum
Karshika Mekhala Varthakol/Rodio Groma Rangan
Karshike Kekhala Varthakal/Vayalum Veedum
Fodic Groma Ramgan/Vayalum Veedum
13. Frequency of Broadcast:
a. Do you sind the present Irequency of all the Yes/Kio sarm prosrmma are sufficient
b. If no, specify the frequency

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| B3. |  | Fresent |  | Should be more | 3hould be less |
| Mo. | Frogramse | irequency per week | O | (10. Of | (1io. 0 |

1. Rarohikg Hekhale7

Yarthakel
2. Tarshika Rangen

1
3. Radio Grama

2
Rangam
4. Vayalum Veadua

4
14. Duration of Broadcast:
a. Do you find the present
allotted time for all the Yes/io
tarm programmes are
surficient
b. If no, specily the duration


1. Rarshika Mekhale 5 minutes
Varthekal
2. Karghthe Rangam 30 minutes
3. Radio Grata ..... 30 minutes
Rangear
4. Voyalun Veedum 30 minutes

Vass Dedia Expasure Dehaviour:

Neclí Daily | Ocesion |
| :---: |
| naliy | Narely kever

1. How often do you
haar the following
prograzese(s)
through Radio
a. Regional tanguage
"Uws
b. Incilish Cewm
c. liindi nems
d. Peature
e. Elay
2. Music
fr. iowen's progranme
m. Calidren's
progranas
i. Youth zrogramme
j. Reportis
k. Hurol Mrogrania
3. How often do you
reac tine following Daily " o "
Ieadin E llewspapers
a. Remala Kaumuly
b. Rolayala Manorama
c. Natnrubhoomi
a. Janayugam
e. Deopika
4. Deahabimani Daily Occasion Rarely Nevor
g. Thaninimar
h. Indian Express
5. Hindu
Wackiy H H
a. Maloyala Manorema
b. Wathrubhocol
c. Kerala Sebdrm
a. Rala Raunudi
e. DeahabhLnani
s. Jenayugan
E. Manorajyam
h. Halayala Redu
sonthly * *
o. Grana Deepam
b. Kalipdhenu
c. Karnimannu
d. Kerrala Karghaken
6. 

a. Jow many Ilims you More than Four to One to gaw last year
b. How many exitibition you saw last year
c. How many otimes you have visited $\pi$
\#
日
n

## Listening Behaviour:

1. Do you ait before the radio
with sowe thinking or expectations about the progroma before 11 stening to the same
2. Do you note the time of farm Droadcast before instoning a programse
3. Do you ture the radio befora/in time
4. Do you leep the writing watorials ready for listening the broadcast
5. Are you able to listen the fam prograwe and its Hresentation without breajs

Mostiy/Somatires/Rarely/
Never

Mostly/Sometimes/Rerely/
Never

Mostiy/Sometinen/Rarely/
Never
Mostly/Sonetimes/Rarely/ Hever

Mostiy/Sometinem/Rarely/ liever
6. Do you listen to the following progreme, if yes, how often do you listen
Fam Broadcast Mostiy/Sonetimes/Rorciy If not, why

Rarshika Nakhala Varthaikal
Karahika gangsm
Radio Groma Rangon
Vayalun Veedux
7. If so, wist priarity do you eive to these prosrames you

Roat/More/Least/Never listen
8. To what extent do you listen the farm programe

Full/more than 75\%/
more than 50\%/
less than 50:3
9. Row intensively Take
you listen the down fam prozraxe notes $\begin{array}{ll}\text { ILston eat ond } \\ \text { coriousiy } & \text { Isten }\end{array}$ does something and Iisten
10. Do you follow the "gchedula of broadcatt" of the farm progrome
11. H22 you compare your foming with the "Eractice hostly/Sometimes/Rorely/ contint" of the programse heare by you through radio
12. Do you make note of important and useful "Eractica content" of the programe hoard by you
13. Will you frame any opinion on the practice immediately Hostly/Sometimes/Rarely/ after ilstening that programe
14. To what extent the knowledge gained by you through the farm broadcast is related to the incouledge alroady possessed by you on the same

Mostiy/Somatimes/Rarely/ Never

Comanication Behaviour:
i. Whet sources of information are generally known by you for farmine ( $\downarrow$ )

Sources of information (Awareness)
,
Friends, netghbours \& relatives
Saleswan of Farm inputs
Radio Form Broadcast
Farm fagazines
Research Joumals
Information Boarda
KAU/EIB Eublication
Extension functionaries
Hass Media
Scientista
2. Is the practical aspects of the knowledge given through Nostly/Sonetimes/Rarely/ farm broadcasts mierstood liever by you
3. Suppose you have procticaliy unierstood the "practice content ${ }^{\text {" }}$ of the brondcasts, hogtly/Sonetimes/Rarely/ co you match your neactice Never with the content of the broatcast
4. Do you ansess the "prograyme content" with your actual

Mostly/Sometimes/Raraly/ proctice

Never

Source Utilization Behavicur:
7. What are the sources you will use after instening a fam broacast?

## Sources or information

> Fsiends, neiphbours \& reletives
> Selosean of Para imputes
> fadio - Parn broadcast
> Faren magazines
> Reecarch jommals
> Information Boards
> सnU/RTD Mublication
> Extenston functionasies
> Muss teaia
> Seientists

Acoption Eehavicux:

> Name of crops grown Area
1.
2.
3.
4.

## A. Fadiy:

1. In hew much area ycu hevo cultivated nigk yielding varieties of paddy?
2. What is the seed rate you heve used
3. It you have tranepionted your crop uhat spacine you adopted?
4. How much fertilizere ald you apply to the main crop?
Ares. Hane of Eertilizera Quantity
5. Did you experience any pests/ disesses in your crop? If so what remedial neasures you have taken?

Same of Chemical
Quantity
B. Coconut:

1. How much area you have cultivated ingh yielding varlety of coconut?
2. How many seediangs you have used per ocre?
3. What spacing you adopted?
4. llow much fertinizes ..... did
you apply?
Area Name of Pertilizors ..... Quantity
5. Sid you experience any pests/discases in your crops? Ifyes, whet rewsdiol measures
you have taken?
Name of Chemicel Guantity
C. Topioca:
6. Row much area you have cultivated
high yiezaing varieties of
Toploca?
7. How-many cuttinge you havewied per acre?
8. What spacing you have adopted?
9. Row much fertinzera did youapply?
10. Did you exparience any pests/ aisaases in your crop? nis yes, wat seasedinl measures you have takan?

Name of Chemical
Guantity
D. Banara:

1. In how such arae you have cultivate hlgh yielding vorietios of baman?
2. How nany auckers you heve use per acre?
3. What pracing you have adopted?
4. How much fertilizers did you appzy.
5. D1d you experisnce any pests/ discese in your crop? If yos, what rectedial measures you have taken?

Name of Chemical

# TO STUDY THE EFFECTIVENESS OF FARM BROADCASTS THROUGH RADIO IN DISSEMINATING AGRICULTURAL INFORMATION TO THE FARMERS OF TRIVANDRUM DISTRICT 

By

S. MOTHILAL NEHRU

ABSTRACT OF THE THESIS<br>SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT OF THE DEGREE MASTER OF SCIENCE IN AGRICULTURE<br>(Agricultural Extension)<br>FACULTY OF AGRICULTURE<br>KERALA AGRICULTURAL UNIVERSITY

DEPARTMENT OF AGRICULTURAL EXTENSION
college of agriculture
VELLAYANI - TRIVANDRUM

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The study was conducted in Trivamirum district of Kemia with the objective of Identify ing the preferance of 21 steners with reicience to mate. programe, duration and frequency of farim broadcasta. It wos also decided to sududy ths relationahip botween selected charmeteristics of the listeners and their mass media exposure behaviour, listening behaviour, cormunication behaviour, source utilization behaviour and adoption behaviour. The selected characteristics of the ilsteners vere age, efucstion, occupation, farm gize, erops grown, radio ownershtp and discussion,

The available measuremont techniques and scoring syateas were used for indopongent variables such as oducation (Trivedi, 1963), social participation (irivedi, 1963) and occupation (Badrinarayanan, 1977). Age wa peasured in tarms of nuaber of years the respondent had complated and the number of acres cuitivated mas taken os the measure of farm size. Radio ownership was measured in tems of poscession of radio set.

The instruments for moasuring mose nedin exposure behavicus wes developed on the Itnes of Rogers and Gveming (1969). The scales to measure listening
bohaviour (Badrimarayman, 1977) and cominiteation behaviour (furthy and 3ingh, 1974) ware used with alight modisfeationa. The sourc utilizotion behavious wos menoured by the scale developad by hast (1969). Tre adoption behnioum wan moonured by the taption cuotiont as developa by Jaksel ond Dave (1972). Rata has beon collected fron 150 chareh sasithy nembers using a pro-tested, vaild intcrvien schedule. Data statioticaliy anilyeed using approminte parametric tochnigues.

The results revealed that intevie; was porcetved as the best node of sam broatcasts and karghita mektala varthakal wae the nost proferred farm procpume. Aeong the seleated indopenient variables diccuszion was the most contributad varyablo for mass media esposure bohaviour. Listonthe behaviour was foumd to be influencod to a great outent by mans nedio expowne behoylour. Comuntchtion bohoviour was insiuenced nonthy by zistendnt behovioun, alseusaion, mabs cedia emposure bohaviour ete. Fon source utilization behovioum listening behaviow of famer was the coost contributing voriabie. It wes reverle that adoption behaviour of tho listenes wos foum to be determined by their comuniention behaviour.


[^0]:    * Original not seen

