INTRODUCTION

The study aimed at comparing audience perception of farm programs by electronic media in Kerala. The word audience specifically stands for the farmers who are watching / listening to farm programs broadcasted by electronic media in Kerala. The study was conducted in rural areas of three selected districts in Kerala. Farmers' perception on farm programs produced and broadcasted by Government and private owned Television channels and All India Radio (AIR). The opinions collected through questionnaire are tabulated processes and evaluated.

This section outlines the research methodology that was followed when collecting data for this study. The factors used to determine dependent and independent variable that were selected for the preparation of questionnaire also is discussed. The research design and process, method for data collection, analysis and coding comprise the content of this document. The research process was also validated by Triangulation method.

SELECTION AND CLASSIFICATION OF MEDIA

The aim of the research was to compare the audience perception of farm broadcasting of Government, private Television channels and All India Radio (AIR) in terms of the rate of adoption, acceptance, opinion, ratings and opinion on credibility and support from Government agricultural authorities.

The questionnaire was designed with five independent variables and 32 dependent variables.
**RESEARCH DESIGN (METHODODOLOGY)**

The core area of research is the comparison of audience perception. As perception highly deals with stimuli, the ability to process stimuli, filtering stimuli, classification, interpretation and giving meaning, a large part of making perception deals with emotion and behavior. This demands a Qualitative approach. However, recording data for comparison in terms of Qualitative methods may lead to lack of accuracy and ambiguity. This situation demands a mixed approach using both Qualitative and Quantitative methods.

While the Quantitative design strives to control for bias so that facts can be understood in an objective way, the Qualitative approach is striving to understand the perspective of the program stakeholders, looking to firsthand experience to provide meaningful data. The accumulation of facts and causes of behavior are addressed by Quantitative methodology as the Qualitative methodology addresses concerns with the changing and dynamic nature of reality.

Quantitative research designs strive to identify and isolate specific variables within the context (seeking correlation, relationships, causality) of the study as the Qualitative design focuses on a holistic view of what is being studied (via documents, case histories, observations and interviews).

Quantitative data is collected under controlled conditions in order to rule out the possibility that variables other than the one under study can account for the relationships identified while the Qualitative data are collected within the context of their natural occurrence.

Both Quantitative and Qualitative research designs seek reliable and valid results. Data that are consistent or stable as indicated by the researcher's ability to replicate the findings is of major concern in the Quantitative arena while validity of the Qualitative findings are paramount so that data are representative of a true and full picture of constructs under investigation.
By combining methods, advantages of each methodology complements the other making a stronger research design results more valid and reliable findings. The inadequacies of individual methods are minimized and more threats to Internal Validity are realized and addressed.

**Triangulation Method**

Triangulation Method is used as the research methodology for this research. Triangulation has been defined as the use of two or more methods of data collection in the study of some aspect of human behavior. (Cohen and Manion, 1989). In the recent years it has been felt that any one method of data collection is insufficient. As Carley (1981) has pointed out, neither type of research, when used alone can give us an accurate window to the world. They are best developed when used in conjunction. While Quantitative research leads us to generalize on particular phenomenon, Qualitative research helps us to understand the specifics. Feilding and Feilding (1986) suggested `there are possible points of convergence' in different approaches. It has now become more acceptable in recent years to combine Quantitative and Qualitative research, and the process is Triangulation of data to substantiate the hypothesis.

Triangulation tests the consistency of findings obtained through different instruments. In the case study, Triangulation will increase chances to control, or at least assess, some of the threats or multiple causes influencing our results. Complementarities clarify and illustrate results from one method with the use of another method. In our case, in-class observation will add information about the learning process and will qualify the scores and statistics.

Mary Duffy, (1987), cites nine benefits associated with Triangulation:

The conceptual framework, which provides the theoretical base of the study, can be developed in whole or in part from Qualitative methods.
In areas where methods produce information overlap, certain Quantitative results can be verified by results obtained through Qualitative methods.

Qualitative data gained from interviews and/or observations can be used as the basis for selecting survey items to be used in instrument construction.

External validation of empirically generated constructs can be obtained by comparison with interview and/or observation data; where discrepancies exist, additional probing can be done to determine whether the mismatch was because of a weakness in the instrument or to misinterpretation by the individuals taking the test.

Case studies can be used to illustrate statistically derived models.

Clarification of ambiguous and provocative replies to individual questionnaires can be observed by re-examining field notes.

Quantitative data can provide information about program stakeholders who were overlooked initially.

The use of a survey instrument that collects data from all program stakeholders in the study may serve to correct the Qualitative research problem of collecting data only from an elite group within the system being studies.

Using Quantitative assessment can correct for the "holistic fallacy"; (the perception by the researcher that all aspects of a given situation are congruent, when in fact only those persons interviewed by the researcher may have held that particular view). Also the use of Quantitative instruments can verify observations collected during informal field observations. (p. 132).

Although Triangulation moves the social Science researcher closer to convergence, corroboration and correspondence of results across different method types, threats to Internal Validity must be recognized and minimized.
Expert Interview

The field experts who are directly interacting with the farmers towards understanding their farming methods, introduction of new methods and awareness for better practices are identified as experts. This group comprises from farm information officers (block, village), agricultural assistant directors, Farm Information Bureau officers, agriculture communication researches. Expert opinions greatly influenced the selection samples and survey questionnaire formulation.

Questionnaire Survey

A multi stage sampling procedure was used to select the sample for this study. After finalizing the sample from the three different districts of Kerala, where agriculture practices are homogenous in nature, a questionnaire survey was conducted. Questionnaire was a set of 42 Questions with 6 independent variables and 36 dependant variables.

This method was utilized to assess habit of audience in watching agricultural programs, the factors which are affecting the adoption of new practices.

Focus Group Discussions

Focus Group Discussions were conducted with 20 farmers from the whole population whose answers showed more dearness to the hypothesis. This focus group analysis is used to understand the habit and nature of adopting agricultural methods by the farmers.

Process of Selection of Methods for Triangulation

Pilot Survey

To conduct a pilot study, the researcher recorded opinions from a panel of agricultural officers, farm Information officers, agro extension researchers and
experts. According to their opinion and guidelines, a pilot study is designed and conducted in Kanjikuzhy Panchayath, in Alappuzha district, Kerala. The Panchayath is selected by considering its ideal status to being the sample for a social Science research. Besides, the nature of farming in the Panchayath, which devoid of the cultivation of cash crops also supported its sample value. Kanjikuzhy Panchayath in being selected as an object for data collection in which Seventy (70) farmers from 70 (70) different families with own or leased farming land has been surveyed.

*Observations based on primary data analysis (Pilot study)*

The primary data collected through this survey has been placed as basis of formatting the survey questionnaire for testing of hypotheses. The main observations from the primary data are as follows.

100% farmers are watching Television at least twice in a week.

Minority (80%) watch agricultural programs.

Majority (80%) watches entertainment shows regularly and watch agricultural programs irregularly.

Most of the conventional farmers (73%), who are following the traditional farming methods, are not at all open to adopt any new farming method. However, 22% farmers partially adopted the methods transmitted through farm programs in Television.

Most of the unconventional farmers (49%) who are adopting non-traditional farming methods are not open to adopt new farming methods. However, 51% farmers partially adopted the methods transmitted through farm programs in Television.

Media interaction/feedback methods like phone and SMS (Short Message Service) were attempted by only 20% of people, while only 5% of people succeeded in that. Only 3% farmers were interested to attempt these feedback methods again.
Acceptance (not in adoption level) of farm programs (T.V.) were also surveyed based on the style of presentation, relevance for a particular crop, adaptability of information, provision of in-depth information, advice from experts, response for doubts from the channel and provision of updated information.

For this query, farmers favored Government owned Television channels than private owned Television channels.

**Observations based on primary data analysis**

From the pilot survey, the researcher reached in a conclusion that, the survey should not be confined to a single district. The researcher accepted the following facts about the secondary survey to be conducted.

The secondary survey should be conducted in different areas of three districts, considering the variety of crops, geographical patterns and weather conditions.

Regions which are having any deep political, religious ideology avoided maximum. The Kanjikuzhy panchayath, is strongly into a certain political consciousness and the farm programs by the Television channel owned by that political party has been viewed more. Apart from that, a major share of the farm programs by this channel is been shot in Kanjikuzhy Panchayath. This also created a proximity factor among farmers for the farm programs in that channel. The researcher’s information threshold in politics is not par with the expertise needed to explain this factor as per the standards of research.

Farm programs of All India Radio (AIR) regional stations also should be considered, as farmers opined that they find AIR farm programs really useful.

From the observations and conclusion of primary survey, the following method of data collection is designed.

**Quantitative Research Methods Utilised for Secondary Data Collection**

**Questionnaire Survey:** - A questionnaire with closed-end and choice type questions, with a total of 42 questions were prepared and finalized. Conducted
survey among 400 farmers in different wards from three districts of Kerala i.e. Pathanamthitta, Idukki and Alappuzha. After rejecting 40 answered questionnaires with contradictory data, the response from 360 farmers is selected and data is processed tabulated and tested for testing of hypotheses.

**Qualitative Research Methods Utilised for Secondary Data Collection**

**Focus group analysis:** From the whole sample, farmers whose response having affinity to hypothesis is call for in-depth discussions.

**Expert Interview:** The field experts who are directly interacting with the farmers towards understanding their farming methods, introduction of new methods and awareness for better practices are identified as experts. This group comprises from farm information officers (block, village), agricultural assistant directors, Farm Information Bureau officers, agriculture communication researches. Expert opinions greatly influenced the selection of samples and survey questionnaire formulation.

**SAMPLING**

Sampling refers to the selection of units of analysis for a study (Seale, 1999:329). In this study, people from three different districts were selected by purposive sampling. Purposive sampling is often preferred in both Qualitative and Quantitative research because data of depth, accuracy and richness is needed (Struwig & Stead, 2001:121)

**Sampling of Respondents of Questionnaire Survey**

The three districts were selected on the basis of variety of crops, geographical distribution of different types of farming land, availability of different types of farmers with reference to the independent variable. Pathanamthitta and Idukki are having hilly geographical distributions, while, Alappuzha is a seashore district. These three districts could represent farmers who are cultivating almost
all the crops described in the farm guide published by the Farm Information Bureau (2007)

The respondents were selected on the basis of farmers who are watching Television regularly and among them farmers who are watching at least one farm broadcast of Doordarshan / private Television channels /AIR in a week. The researcher conducted survey among 400 farmers in different wards from three districts of Kerala i.e. Pathanamthitta, Idukki and Alappuzha. After rejecting 40 answered questionnaires with contradictory data, the response from 360 farmers is selected and data is processed tabulated and tested for testing of hypotheses.

The researcher selected this method of sampling because of the following reason

It was convenient due to shortage of funds, time constraints and logistics; and

To understand the perception of farmers about the farm programs broadcasted by electronic media, the respondent should watch the programs at least occasionally.

**Sampling of Respondents for Focus Group Discussion**

360 farmers participated in the questionnaire survey. The responses of farmers to the Questions weren’t neutral as it showed their biased opinions out of the dominance of a political party in the research location. Out of the 360 farmers, 20 farmers are considered as ideal.

The ideal sample is the group of farmers, whose response to the questionnaire was neutral and didn’t show the influence of political party and the proximity to the program because the location for the research was the shooting location for most of the agriculture programs.

Apart from the neutral answers, the following six independent variables have been taken for filtering the 20 farmers out of the 360.
Table 1: Focus Groups Sample

<table>
<thead>
<tr>
<th>Age</th>
<th>Income level (In rupees per year)</th>
<th>Education level</th>
<th>land</th>
<th>Area of land for cultivation (In acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-35: 5</td>
<td>Large (more than 1,10,000): 6</td>
<td>Graduate: 4</td>
<td>Own: 14</td>
<td>Large (5 and above): 2</td>
</tr>
<tr>
<td>36-55: 11</td>
<td>Medium (50,000-1,00,000): 5</td>
<td>Matriculate and above: 8</td>
<td>leased: 6</td>
<td>Medium(1-4): 17</td>
</tr>
<tr>
<td>&gt;55: 4</td>
<td>Small (less than 50,000): 9</td>
<td>High School: 8</td>
<td></td>
<td>Small(Below1): 1</td>
</tr>
</tbody>
</table>

Apart from the 20 farmers from different locations, the Agriculture Officer in Kanjikkuzhy Panchayath has been taken as the moderator for the discussion. The agriculture officer is considered as the ‘expert’ in the FGD (focus group discussion) as he knows each of the farmers in the sample individually.

**Sampling of Respondents for Expert Interview**

Expert opinions greatly influenced the selection of samples and survey questionnaire formulation. A group consisting two people, an agricultural assistant director and farm officer, from each district, is selected for the group discussion. Apart from this total six from three different districts, a farm information officer from the regional Farm Information Bureau, an agricultural scientist, a scholar in Farm Journalism and a visual media farm journalist were included in the group with 10 members. The researcher moderated the discussions and from the live recording of the sound track of discussion, a
detailed report is prepared. Based on this report, research methods were detected, analyzed and finalized.

DATA COLLECTION

In this study, data was gathered through Expert interviews, Questionnaire survey, focus group interviews and observations. During data collection, the researcher interpreted Questions to the farmers to their local language. Questions were drawn up in a simple language (English) that could be understood by the respondents. However, most of the respondents, other than expert group, were not fluent with English and they prefer to communicate in their mother tongue, Malayalam, the language spoken in Kerala.

Data Collection- Questionnaire Survey Method

A judgmental sampling procedure was used to select the sample for this study. After finalizing the sample from the three different districts of Kerala, where agriculture practices are homogenous in nature, and all variety of crops are been cultivated, questionnaire survey was conducted among a total of 400 respondents from each district. After rejecting incomplete or contradictory responses, the researcher selected 360 answered questionnaires, 120 from each district. Questionnaire was a set of 42 Questions with 6 independent variables and 36 dependant variables.

The five independent variables were tabulated against 36 dependent variables. The data is arranged in tables with two parts, A and B. Table A displays data in district level while table B displays data of three districts as a whole (data from all 360 respondents).

Data Collection- Expert Interview

A group consisting two people, an agricultural assistant director and farm officer, from each district, is selected for the group discussion. Apart from this
total six from three different districts, a farm information officer from the regional Farm Information Bureau, an agricultural scientist, a scholar in Farm Journalism and a visual media farm journalist were included in the group with ten members. The researcher moderated the discussions and from the live recorded sound track of discussion, a detailed report is prepared.

Based on this report, methods, type, number of Questions, dependent and independent variables were determined. The document out of this interview is used as a supportive document to prepare other data collection methods.

Data Collection- Focus Group

360 farmers participated in the questionnaire survey. The responses of farmers to the Questions weren’t neutral as it showed their biased opinions out of the dominance of different factors including dominance of certain political parties in the research location. Out of the 360 farmers, 20 farmers are considered as ideal.

The ideal sample is the group of farmers, whose response to the questionnaire was neutral and didn’t show the influence of political party and the proximity to the program because the location for the research was the shooting location for most of the agriculture programs.

The group got 17 Questions and the different answers from all respondents to each question were organized and tabulated. From the table, Questions and answers were used to interpret hypotheses.

Validity of Data

This conceptualization of validity has been very influential even within the so-called Qualitative tradition, wherein a solid approach to assess the quality of interpretative inquiry is the trustworthiness criteria (Lincoln and Guba, 1985; Guba and Lincoln, 1989). Besides the critiques to the classical approach of validity, these criteria include the notions of credibility and transferability that
are parallels to the concepts of Internal Validity and external validity, respectively.

These parallels suggest that the dichotomy--Quantitative versus Qualitative--might not be as incompatible as purists from both sides have argued. More than that, studies using mixed-method have shown that integration of these traditions within the same study can be seen as complementary to each other (Greene and Caracelli, 1979; Caracelli and Greene, 1997).

**External Validity**

The data collected from experts about the trends is an active data collected as the interpretation of experts about the media watching habits of the farmers. The data collected from the farmers through focus group interaction also is active data from the farmers through making them answering pre-set Questions on media watching habits. These two sets of active data is similar to the passive data from farmers collected trough the Quantitative questionnaire survey method on the media watching habits of h farmers.

**Internal Validity**

There are multiple factors supporting the Internal Validity of the collecting data.

Credibility of responses of farmers through the questionnaire survey as the sampling and questionnaire for the survey is based on scientific methods according to the principles of research.

Similarity of responses of the farmers from the same locale and other defined areas and samples for data collection through questionnaire survey.

Proximity of responses of farmers to questionnaire the responses of farmers in the focus group.
Analysis of Data

The data collected through Expert Interview, questionnaire survey and focus group analysis were utilized to prove the pre-defined hypotheses. The results are organized in findings with the support and reference of the analyzed data. Percentage analysis is the main tool used to analyze the results of questionnaire survey.

THE RESEARCH PROCESS

The procedure according to which the research was undertaken is discussed in this subsection. The procedure is discussed according to the 4 parameters adopted from Struwig & Stead (2001:46). The four parameters used when describing the research are:

The Setting (Where the Research Took Place)

The research took place in Kerala, the southernmost state of the republic of India. The areas selected were the 3 districts in the central part of Kerala named Idukki, Alappuzha and Pathanamthitta. These areas were chosen because the population is involved in farming of almost all the crops in Kerala. In all three areas, the Questions were presented in the same way to enable a more objective comparison of the results (Bless & Higson-smith, 1995:107).

The Actors (Who were Observed or Interviewed);

In this study, actors refer to the people who participated and contributed to the success of the research. The researcher conducted the research. The farmers, as respondents in this research participated by giving responses about the Questions asked regarding the media watching habits. The extension officers, directors from the Department of Agriculture, farm journalists and extension and farm communication researchers participated and acted as intermediaries.
between the researcher and the respondents, and also as the moderators. The extension officers guided the interviews.

**The Events (What Happened While the Actors were Being Interviewed)**

The responses of the farmers about the perception on farming methods through electronic media broadcasting were recorded. The researcher looked at the way how the respondents respond to Questions. Group discussion of experts and focus group discussion of selected ideal farmers also is conducted. The respondent farmers were interviewed to understand the media watching habits, rate of adoption, acceptance and credibility of farm programs were recorded using a questionnaire survey. They were also interviewed in the form of focus group interaction to actively understand the media watching habits of farmers. The data and inferences from the expert group discussion are the basis of questionnaire survey and focus group discussion of farmers.

**The Process (the Evolving Nature of Events Undertaken by the Actors Within Setting)**

The researcher arranged the dates of the areas concerned, for the research to take place.

The first visit took place on 19 September 2006 after the expert group discussion on 23 June 2006. This visit took place at Kanjikuzhy Panchayath at Alapuzha district, and a pilot survey was conducted on 20th and 21 of October 2006.

The first phase of the questionnaire survey was conducted on November 3, 2007 at Kallissery Panchayath of Pathanamthitta District. The surveys on all districts were completed by April 2008.

Focus group interviews took place after the data is collected about the media watching habits of farmers through questionnaire survey. The focus group discussion meeting was on January 12, 2009. The discussion was recorded
and data is collected. Questions were asked in Malayalam as stipulated in the schedule. Respondents were given chance to ask Questions.

**CONCLUSION**

In this chapter the research methodology, the research design, the methods of collecting data, and the research process were discussed. The way in which data is collected, analyzed, coded and validated is also discussed. The research findings are discussed and analyzed in the next chapter.