# A STUDY ON BROAD BASED EXTENSION SYSTEM IN TAMIL NADU

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DEPARTMENT OF AGRICULTURAL EXTENSION
UNIVERSITY OF AGRICULTURAL SCIENCES
BANGALORE
1994

# A STUDY ON BROAD BASED EXTENSION SYSTEM IN TAMIL NADU

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Thesis submitted to the
**University of Agricultural Sciences, Bangalore**
in partial fulfilment of the requirements
for the award of the Degree of

Master of Science

in

**AGRICULTURAL EXTENSION**

BANGALORE

JULY 1994

*Affectionately Dedicated to*

*My Beloved Parents*

**Sri K. Venu**

*and*

**Smt. V. Muthammal**

DEPARTMENT OF AGRICULTURAL EXTENSION
UNIVERSITY OF AGRICULTURAL SCIENCES
BANGALORE

## CERTIFICATE

This is to certify that the thesis entitled "A STUDY ON BROAD BASED EXTENSION SYSTEM IN TAMIL NADU" submitted by Mr. V. LENIN, for the degree of MASTER OF SCIENCE in AGRICULTURAL EXTENSION to the University of Agricultural Sciences, Bangalore, is a record of research work done by him during the period of study in this University under my guidance and supervision and that no part of the thesis has been previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar titles.

Bangalore
July 14 1994

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## ACKNOWLEDGEMENT

I would like to place on record with utmost sincerity my profound sense of gratitude to Dr. V. Veerabhadraiah, Professor of Agricultural Extension, Department of Agricultural Extension, University of Agricultural Sciences, Bangalore and Chairman of my Advisory Committee, for his valuable guidance, sustained encouragement and constructive criticism throughout the period of this investigation. I was indeed fortunate to be associated with him during my research work.

It was great privilege to have Dr. Y. Katteppa, Associate Professor of Agricultural Extension, Dr. M.S. Ameerjan, Assistant Professor of Psychology and Mr. M.N. Venkataram, Associate Professor of Statistics, U.A.S., Bangalore in my Advisory Committee. I am indebted to them for valuable suggestions which have helped me to steer the study in the right direction. Thanks are also due to Dr. K.S. Krishna, Professor and Head, Department of Agricultural Extension, for suggestions, kind co operation and concern.

A special note of thanks to my intimate friend and roommate Mr. C.K. Abdul Wajeed, whose unqualified love and warm camaraderie went a long way in making my stay at the Garden City a pleasant experience.

I acknowledge with gratitude, the encouragement, co-operation and help rendered by my friends Mr. Basavaraj Hulagur, Mr. Ramanji and Mr. Chidananda. I am immensely thankful to Messers. Shivaramu, Shivalinge Gowda, Shivalingaiah, Rao, Danunjaya, Swamy, Ramesh, Shetty and Hareesha for their co-operation and help.

Sincere thanks are due to the Joint Director of Agriculture, South Arcot District of Tamil Nadu, for his kind permission to conduct this study. I am also obliged to the Assistant Directors of Agriculture of Panruti, Kattumannar Koil, Tittagudi, Vridhachalam, Chidambaram and Cuddalore. I would like to thank whole-heartedly my respondents for their kind co-operation and homely treatment.

I owe all my success to my beloved parents, brother, sister and grandma for their inspiration, moral support, care, love and affection.

I highly appreciate the services of Mr. S.B. Jayadeva, for neat typing of this thesis.

Finally, I thank all those who have directly or indirectly been helping during the course of this study.

Bangalore
July 14, 1994

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# INTRODUCTION

# I. INTRODUCTION

To keep pace with the rapid socio-economic and technological changes, the developing countries are restructuring their extension approaches every now and then. India has been launching various development programmes to develop its agricultural economy and ultimately the farmer. During tne pre-independence period, several isolated, yet concerted extension efforts such as Sriniketan Project, Marthandam Project, Gurgaon Project, etc., were made under individual initiatives. The Grow More Food Campaign, Community Development Programme and National Extension Service were the important landmarks in the history of Indian agriculture during the immediate post-independence decade. After the inception of organised extension services in the Fifties, the emphasis shifted from all round development to improvement in agricultural productivity. The Intensive Agricultural District Programme, Intensive Agricultural Area Programme, High yielding Varieties Programme, client-oriented programmes aimed at small farmers, marginal farmers and agricultural labourers and tribal people; area oriented programmes like Drought Prone Area Programme and Hill Area Development Programme; and research based extension programmes such as National Demonstration Project, Operational Research Project and Lab to Land Programme were a few important programmes launched during the intensive extension phase.

In 1970s, India reorganized its extension service as "Training and Visit System" through the encouragement and support of the World Bank. The T & V system has its own merits and demerits. It is largely crop based and does not provide the integrated extension service required by the farmers and considered desirable by the agricultural economies of the farmers. In irrigated areas, the Village Extension Workers have full time job because there are agricultural crops for 9 to 10 months in a year. In dry lands, the agricultural crops are there for only one season of four to six months and during the rest of the period, there are no crops and the Village Extension Workers do not have full time opportunities to deliver messages to the farmers. No uniform criteria are followed by Village Extension Workers to identify and select contact farmers (Udayakumar, 1983). Many contact farmers are unaware of their position as contact farmers (Singh, 1983). They have failed to understand their crucial roles as key communicators (Sethurao et al., 1983). The extent of distortion was about 50 per cent when the message is disseminated by contact farmers to other farmers (Manivannan, 1983). Aspects on important activities like dairy science, grain storage, farm/water management and other important subjects are not covered by the Subject Matter Specialists (Lowdermilk, 1986). And, about 50 per cent of other farmers are not aware of their respective contact farmers (Perumal, 1987).

By and large, tne farmers are not concerned witn crop production alone. A farm is eitner an integrated complex of a number of land based activities or is a potential site for the implementation of activities such as crop production, norticulture, soil and water conservation, animal husbandry including poultry and piggery. In mid 1980s, it was realized that focus of agricultural extension planning needs to be shifted from production orientation to farmers' income orientation. The idea of broadening scope of agricultural extension on bringing in a number of farm activities, in addition to the crop production, under the umbrella of agricultural extension is meant as broad based extension.

The issue of broad basing existing extension services was discussed at the National Seminar on Training and Visit extension system held in 1989. There was general agreement that the extension services should handle all land based activities but the pace and extent of broad basing was left to be finalized by each State Government in accordance witn its prevalent agricultural situations. The National Seminar on Agricultural Extension organised by the Directorate of Extension, Ministry of Agriculture, Government of India, in New Delhi during February, 1992 recommended that;

> "The concept of broad basing should be accepted at the nignest level in State administration in Agriculture and allied departments as each department may not have parallel extension hierarchy drawn up to the village level. The broad-basing of extension should be done based on holistic approach to move beyond crop production to include all the land based activities. Clear coordination and monitoring mechanism to be established at all levels"

The broad based extension system (BBES) has been introduced in the Tamil Nadu state from April 1991. Already, the Government of Tamil Nadu have entered into an agreement with the World Bank through Government of India for implementing the project for seven years from 1991. The project is named as Tamil Nadu Agricultural Development Project (TNADP).

The BBES is envisaged to make good the deficiencies. The extension system will be loaded with additional messages suitable for agriculture and allied activities like crop production, horticulture, animal husbandry, agricultural engineering, forestry, sericulture, fisheries, etc. Farmers need messages not only on their agricultural crops but also in allied activities like fodder cultivation, animal nutrition, sericulture, pisiculture, tree farming, etc. The role of Subject Matter Specialists will be amplified and Subject Matter Specialists of line departments will be involved in formulating messages suitable to the land based activities. The Village Extension Workers will have full time job in delivering messages to dry land farmers in lean season also with messages relating to activities like agro-forestry, sericulture, fisheries and animal nutrition.

The concept of broad based extension lies in formulating and delivering composite messages to the farmers to meet the needs of their full agricultural environment.

Under the T & V system, simple messages on agricultural crops were loaded on to the extension system for deliverance to the farmers. Now, under the BBES, it is envisaged to utilize well established extension agency to help the farmers in getting multiple messages needed to imorove tneir overall economy besides helping them to grow agricultural crops. Under this system, all line departments are coordinated, so that there will be a comprehensive and complementary approach through land use management at district, taluk and village levels.

It is a well known fact that the attitude of an individual towards his profession has a significant influence upon his role performance in that profession. This being so, the efficiency of an extension worker in discharge of his responsibilities is largely influenced by his attitude towards the extension system with which he is associated. Assistant Agricultural Officer (AAO) is the operational person, in TNADP, who is in the lowest rung of the organizational ladder, responsible for carrying out the multiple messages right to the doorstep of the farmers.

Agricultural Officer (Subject Matter Specialists) [AO(SMSs)] is the person who provides the messages to be delivered to the farmer and trains the AAO. In this context, it is necessary to evaluate objectively subject matter areas covered, the attitude of AAOs and AOs(SMSs) towards the BBES and their problems.

Need for the study

The success of the BBES depends largely on the effective functioning of the grassroots level workers. The AAOs, from amongst all the extension personnel, are more in direct contact with the farmers and thus play a pivotal role in the BBES. If he has sincerity of purpose, a sympathetic approach and an unflinching faith in the basic tenets of the BBES, as reflected through his knowledge and attitude, it is to be believed that he will give his best to make the programme a success. Any significant expression of unfavourable attitude towards the programme is bound to have a cumulative effect in the form of adverse reactions among the people. Since AO(SMS) is the trainer of AAO, his attitude is also of utmost importance for the success of the BBES. The BBES has been in operation for the past two years and the extension functionaries have to deliver additional messages on different subject matter areas apart from crop production. So far, an in-depth analysis has not been made to the understanding of extension personnel and their attitude in the State of Tamil Nadu towards this system. Keeping these aspects in view, a study was planned and conducted with the following objectives.

i. To know the different subject matter areas covered under broad based extension system.

ii. To measure the attitude of different types of extension functionaries towards broad based extension system

iii. To find out the relationship between the selected socio-personal characteristics of extension functionaries and their attitude towards broad based extension system.

iv. To identify the problems faced by extension functionaries in broad based extension system.

Scope and limitation of the study

The study covers some important aspects of BBES. It helps to identify the attitude of extension functionaries towards the system. The study also helps to know the extent of different subject matter areas covered under BBES. Another important aspect of the study is that it throws some light on the problems encountered by the extension functionaries in their day to day work. This would call for initiating action by management to solve the important problems so that the extension functionaries perform better.

As the investigation was undertaken by a student researcher, it had the usual limitations of time and resources. As a result, the study was confined to a limited area and sample size. Therefore, the findings have to be viewed in the specific context of the conditions prevailing in the area of the study and cannot be generalised for a wider geographical area. However, these findings will be applicable wherever similar conditions prevail. Further, the investigation is based on the expressed opinion of the respondents by recall and as such, some personal bias and

prejudice might have crept in, although enough care was taken to obtain as reliable information as possible.

**Presentation of the thesis**

The thesis, based on the research study, is presented in seven chapters i.e., Chapter I dealing with Introduction, Chapter II, Review of literature, Chapter III, Methodology, Chapter IV, Results, Chapter V, Discussion, Chapter VI, Summary and Chapter VII, References: Appendices for relevant details are given at the end.

Abbreviations used in the study

| | | |
|---|---|---|
| AAOs | : | Assistant Agricultural Officers |
| AOs(SMSs) | : | Agricultural Officers (Subject Matter Specialists) |
| BBES | : | Broad Based Extension System |
| TNADP | : | Tamil Nadu Agricultural Development Project |

# REVIEW OF LITERATURE

# II. REVIEW OF LITERATURE

The present investigation is mainly an effort to study the attitude of extension functionaries towards BBES, socio-personal characteristics associated with tneir attitude and the problems faced by them in BBES. Based on the objectives of the study, the review of literature is presented under the following heads. Since literature on the attitude of extension functionaries towards BBES per se, is limited, related concepts and studies have been reviewed and presented as follows.

2.1 Subject matter areas covered by extension functionaries

2.2 Concept of attitude

2.3 Attitude of extension functionaries towards extension programmes and related factors

2.4 Problems faced by extension functionaries in their job

## 2.1 SUBJECT MATTER AREAS COVERED BY EXTENSION FUNCTIONARIES

Radhakrishna and Veerabnadraian (1993) revealed that the extension guides frequently delivered subject matter areas such as crop production, vegetable production, crop pests and diseases, fertilizer application, new crop varieties, coconut plantation and fruit production during 1989-90. Vegetable production, crop production, new crop varieties, soil fertility, crop pests and diseases, fertilizer application, coconut plantation, farm planning and records, sericulture and fruit production were the subject matter areas perceived as most important by the extension guides.

## 2.2 CONCEPT OF ATTITUDE

According to Lundberg (1929), an attitude denotes the general set of the organism as a whole towards an object or situation which calls for adjustment.

Allport (1935) stated that 'an attitude is a mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related'.

Krech and Crutchfield (1948) defined an attitude as an enduring organization of motivational, emotional, perceptual and cognitive processes with respect to some aspect of the individual's world.

Bogardus (1960) defined attitude as a process of individual consciousness that determines 'the real or possible activity of the individual in the social world'.

According to Rosenberg and Hovland (1960) attitudes 'are typically defined as predispositions to respond in a particular way toward a specified class of objects'.

Secord and Backman (1964) referred attitude to certain regularities of an individual's feelings, thoughts and predispositions to act toward some aspect of his environment.

Harrel (1967) defined attitude as 'a set to action with an emotional overtone'.

Kolasa (1969) defined attitude as a predisposition to react, positively or negatively, to a person, place or circumstance.

According to Kaufmann (1973) 'attitude' refers to a (possibly implicit) behavioural predisposition derived or inferred from one's affective and cognitive elements.

According to Massie and Douglas (1977), attitudes are also preferences, not necessarily for subjects but rather for objects. They are of longer duration and usually more resistant to change.

## 2.3 ATTITUDE OF EXTENSION FUNCTIONARIES TOWARDS EXTENSION AND DEVELOPMENT PROGRAMMES AND RELATED FACTORS

Dhillon and Samundri (1965) reported that 55.66 per cent of the Village Level Workers had favourable attitude, 33.69 per cent, unfavourable attitude and 10.65 per cent, not developed any attitude towards the Community Development Programme. The Village Level Workers who were under training had more favourable attitude towards the programme of Community Development as compared to those who were already in service.

Mundra (1966) found that 70 per cent AEOs liked their job; out of these, 50 per cent liked it as it fetched them good salary. Dislikeness for the job was expressed partly due to clerical nature of job and due to lack of co-operation from other extension officers. Fifty per cent AEOs were of the opinion that extension teaching methods nad no practical value in the field. Sixty per cent of AEOs expressed that they disliked to work under administrative supervision of BDOs and wanted to remain under direct supervision of District Agricultural Officer.

Singh (1968) reported that there was a significant association in the attitudes of Block Development and Panchayat Officers, AEOs and Gramsevaks towards various aspects of IADP and community development programmes. Attitude towards involvement of rural institutions, 'administration'and 'planning' were negative for both the approaches. Majority of the respondents had a favourable attitude towards both the approaches. There was a non-significant difference in the attitude of various categories of respondents on the basis of personal characteristics towards both approaches, with the exception that agricultural graduate Block Development Officers and Panchayat Officers and matriculate Gramsevaks had more favourable attitude towards IADP and non-agricultural graduate Block Development Officers and Panchayat Officers had more favourable attitude towards community development.

Tripathi et al. (1970) revealed that only a few Gramsevaks (2 per cent) had favourable attitude, a majority of them (69 per cent), neutral and 29 per cent, unfavourable attitude towards Community Development Programme. The attitude score of Gramsevak towards interpersonal relationship ranked highest, closely followed by concept, philosophy and principles of C.D. programme which ranked second. Role perception by the Gramsevak occupied the third rank, extension teaching methods occupied the fourth rank, followed by programme content, while it was lowest towards people's participation in programme execution.

Kherde and Sahay (1972) reported that attitude of Village Level Workers towards bureaucracy was positively significant with the role performance of the Village Level Workers. This indicated that a Village Level Worker having more positive attitude towards bureaucracy exhibited the higher role performance.

Reddy and Shree (1972) reported that 58.33 per cent of the Instructional staff of Farmers Training Centres had an unfavourable attitude and 41.17 per cent, favourable attitude towards high yielding varieties of paddy. Their attitude was dependent upon their qualifications but not on their age and experience.

Halim and Islam (1973) stated that 76 per cent of the front line extension workers felt the necessity of in-service training programme in order to conduct extension work

effectively and 24 per cent was not interested in in-service training programme. Older members with longer period of service were found relevant to attend any in-service training programme. Members with low educational level were disinterested in training course. Comparatively more low income group personnel were interested in in-service training than those of hign income group, personnel with small family size were more interested in training programme than the others.

Nandkeolyar and Singh (1974) reported that while 64 per cent of the Gramsevikas felt like encouraging other women to take up the job of Gramsevikas, only 18 per cent felt otherwise. The remaining 18 per cent were indecisive. This seemed to indicate the general favourable attitude they adopted towards the job.

Sharma et al. (1975) indicated that 10.70 per cent of the Subject Matter Specialists, Block Development Officers, Agricultural Extension Officers and Agricultural Sub-inspectors and Village Level Workers were having strongly favourable attitude towards Indo-German Agricultural Package Project launched in 1962 in Mandi district, Himachal Pradesh. However, 24.37 per cent of them had unfavourable attitude. A large percentage of the respondents (47.02 and 17.91 per cent) were having favourable and strongly favourable attitude, respectively, towards the Indo-German programme.

Ten per cent of the SMSs had strongly unfavourable attitude towards Indo-German Package programme. And out of the remaining 90 per cent, 40 per cent nad favourable and 50 per cent had strongly favourable attitude. Majority of the Block Development Officers had either favourable or strongly favourable attitude, whereas 14.28 and 25.58 per cent possessed strongly favourable and unfavourable attitude. It was found that 45.45 and 27.27 per cent of AEOs were having favourable and strongly favourable attitude, respectively. A population of 29.47 per cent of Village Level Workers studied had unfavourable attitude whereas 48.43, 12.63 and 9.47 per cent of Village Level Workers had favourable, strongly favourable and strongly unfavourable attitude, respectively, towards the Indo-German Package programme.

Reddy (1976) found that majority of the Village Level Workers showed a strong discontentment towards the sub-component 'appreciative attitude' of team work existing in the block administration.

Dhillon and Sandhu (1977) reported that the attitude of District Extension Specialist of Farm Advisory Services towards organization was significantly related to job effectiveness.

Karami (1981) found that there was a positive and moderate correlation between agent's family attitude towards his job and nis level of job satisfaction.

Katteppa (1984) reported that the majority of the Subject Matter Specialists were at 'medium' level in respect of their attitude towards the T & V system.

Prajapati and Patel (1984) reported that 62.5 per cent of the extension workers were neutral, whereas 22.5 per cent had favourable attitude and 15 per cent, unfavourable attitude towards the T & V system. They had favourable attitude towards'linkage with research' and 'general aspects' while an unfavourable attitude towards 'supply and services'.

Puttaswamy (1986) reported that slightly little more than half of Agricultural Assistants (51 per cent) were having favourable attitude towards T & V system and the rest (49 per cent) had unfavourable attitude towards T & V system. Mass media participation and training had significant relationship with the attitude of AAs towards T & V system. But age, education, experience and rural-urban background had no significant relationship with attitude to AAs towards T & V system. The attitude of AAs towards T & V system and their perception of job were significantly associated.

Reddy (1986) reported that nearly 2/3rd of the VEOs had neutral attitude towards T & V system, while only 14.44 per cent had favourable attitude towards T & V system. The VEOs attitude towards T & V system had a positive and highly significant relationship with their level of productivity.

Reddy (1986) constructed an equal - appearing interval scale to measure attitude of agricultural extension workers towards hign yielding varieties of paddy.

Reddy (1987) reported that 76 per cent of the Village Extension Officers had neutral attitude towards T & V system. A few of them (14 per cent) had favourable attitude towards T & V system when compared to those (10 per cent) having less favourable attitude. The attitude of Village Extension Officers towards T & V system indicated a positive and significant relationship with their level of job effectiveness.

Hussain and Reddy (1989) developed a scale to measure the attitude of resource personnel towards monthly workshops under T & V system.

Reddy (1990) reported that there was highly significant association between attitude of AOs towards T&V system and their job competence. Also, there was highly significant association between the attitude towards T & V system and job performance.

## 2.4 PROBLEMS FACED BY EXTENSION FUNCTIONARIES IN THEIR JOB

Sapkal (1960) classified the problems of Village Level Workers which bothered them more in their work into three categories viz., i) problems due to shortcomings in the people i.e., party factions among the people, casteism, vested interests, prejudice and superstitions and local

obstructionist elements; ii) Shortcomings in the department which included lack of coordination, targets beyond capacity, conflicting demands of work, too larger area of operation, too many orders resulting in confusion and lack of timely guidance and supply; and iii) shortcomings in themselves that included lack of practical training in public health, animal husbandry, agriculture and co-operation.

Murthy (1960) reported that all the AEOs and Village Level Workers expressed their concern for insufficient and untimely supply of agricultural inputs such as seed, fertilizer and insecticides, etc. They had also felt that thoroughness of technical knowledge, orientation or pre-service training in local agriculture including improvements suggested for the area under senior member, office training in correspondence, record keeping and accounts, practical bias and specialist lectures for clearing doubts during in-service training were desirable.

Reddy and Bhaskaram (1966) noted that inadequacy of material equipment and literature needed for extension work, non-availability of supplies for demonstrations, inadequate transport facilities, lack of sufficient audio-visual aids in block headquarters and too much office work, as the barriers for effective extension work.

Bhaskaram et al. (1979) concluded that the arrangements for inputs was not quite satisfactory in the T & V system. They further reported that VEOs were not satisfied with their pay scales, promotions, avenues and otner facilities like house accommodation, conveyance, etc.

Sobhana (1982) in ner study reported that most important problems felt by Junior Agricultural Officers were: i) poor chances of promotion, ii) lack of recognition for good work, iii) reluctance of farmers towards improved farm practices due to illiteracy, inability, prejudice against innovation, etc., iv) more office work, v) poor salary as compared to work load and vi) lack of co-ordination among agencies involved in agricultural development,

Venkateshprasad (1982) reported that low wages of labourers, high cost of fertilizers, plant protection chemicals, inadequate staff, non-availability of labourers in time were some of the major problems as perceived by the Seed Farm Managers in their work.

Reddy (1983) reported that the problems as faced by the Village Extension Officers were: lack of supply of inputs and credit to the farmers, lack of basic amenities to them, lack of encouragement, appreciation, recognition and incentives and rewards, non co-operation of contact farmers, lower pay scales in comparison to heavy work load involved in Training and Visit system, lack of sufficient number of plant

protection equipment, lack of conveyance and conveyance allowance, lack of proper coordination between the inter departments of Command Area Development, of spurious inputs like damaged seeds, adulterated fertilizers and pesticides, lack of 50 per cent subsidy facility to the cultivators for the purchase of plant protection equipment, lack of co-operation and lack of supply of literature to the farmers on improved agriculture.

Bora (1984) identified the difficulties of Village Level Workers as : irregularities in payment of salary, no godown facilities, insufficient implements and equipment, lack of repairing works and no residential facility.

Katteppa (1984) reported that 'irregularity of the scientists in the University of Agricultural Sciences in attending workshops ', 'lack of practical oriented training' and 'inadequately specialised UAS scientists who were located at a longer distance', were the three most important problems expressed by SMS in relation to UAS scientists. 'Non-availability of the vehicle regularly for field visits, training and transporting audio-visual aids', 'non-payment of travelling allowances' and 'lack of proper guidance' were the three important problems expressed by the SMS in relation to Administrators. 'Field staff not being enthusiastic due to lack of promotional opportunities', 'lack of residential facilities' and 'lack of transportation

facilities' were the most important problems expressed by the SMS in relation to the field staff.

Niknade and Kitey (1984) reported that the Village Level Workers expressed their difficulties such as, lack of people's coordination, untimely supply of necessary materials, lack of co-operation from supplying agencies and close supervision from higher authorities while carrying out the work.

Puttaswamy (1986) reported that the AAs in T & V system perceived the following important problems: i) inputs like seeds, fertilizers, pesticides and loan, etc. were not available in time at reasonable prices to farmers (57 per cent), ii) contact farmers and other farmers were not available at the time of visit and did not co-operate fully (54 per cent), iii) proper and timely promotional facilities for AAs were not available (36 per cent), iv) superiors were not co-operative (28 per cent), v) it was not always possible to stick to the fixed schedule of visits (24 per cent) and vi) could not help farmers to obtain any financial help (22 per cent).

Reddy (1986) reported that the lack of inputs in required quantity at the appropriate time, lack of teaching aids, non-availability of residential quarters and lack of plant protection equipment were encountered by VEOs as major problems in that order.

Reddy (1987) reported that lack of transport facilities, lack of residential facilities, lack of input supply at appropriate time, lack of plant protection equipment and lack of teaching aids for educational use were perceived by VEOs as the major problems in that order, in their effective functioning.

Srinath (1987) reported that lack of technical field staff with full knowledge (50 per cent), lack of training for field staff (47 per cent), inadequate budget to maintain farms, nurseries at sub-divisional level (60 per cent), delay in communication of budget from head office (57 per cent), lack of financial powers (50 per cent), insufficient staff at operational level (43 per cent), transfer of good staff and replacement by unreliable staff (33 per cent), untimely supply of inputs (53 per cent), lack of transportation facilities for arranging timely supply of inputs to farms (47 per cent), lack of incentives like free seeds, seedling, etc. to farmers (43 per cent) and lack of propaganda facilities to motivate farmers (33 per cent) were perceived as management problems by Assistant Directors of Horticulture in Karnataka.

Prasad (1988) reported that the problems most perceived by Sericultural Extension Officers were i) reluctance of silk farmers towards improved practices due to illiteracy, inability, prejudice against innovations and superstitions, etc., ii) non-availability of inputs like fertilizers,

pesticides, rearing equipment and loans in time at reasonable prices, iii) insufficient salary compared to work load, iv) inadequate travelling allowance, and v) lack of training to improve technical know-how.

Bhardwaj and Sharma (1990) reported that the problems most perceived by Rural Agricultural Extension Officers were : i) the pending claims, ii) non co-operation with other departments and iii) lack of technical resources and non-availability of inputs to the farmers. Other important problems reported were lack of contact with research scientists, urgent work on fixed tour days, non-availability of latest agricultural literature, lack of guidance by superior officers, unnecessary transfer and lack of good behaviour on the part of the concerned officers.

Jhamtani and Singh (1990) reported that the Village Level Workers felt that the grievances were not being handled adequately. They had, by and large, felt that little was done about the problems. Whereas, the officers felt that the problems were referred to higher authority in the organization and were tackled there.

Reddy (1990) reported that the problems encountered by AOs in T & V system were, lack of qualified VEOs, lack of inputs at appropriate time, political interference and additional charge of other posts, in that order.

Gowda (1993) found that lack of promotional opportunities, lack of residential facilities, lack of transport facilities, reluctance of sericulturists towards improved practices were the important problems encountered by Sericultural Demonstrators in their work in traditional and non-traditional areas.

# METHODOLOGY

# III. METHODOLOGY

In this chapter, the empirical measures designed to quantify the different variables, procedures used in construction of attitude scale, selection of respondents,collection of data and statistical tests used for analysis of the data are described, under the following headings:

3.1 Locale of the study

3.2 Selection of the respondents

3.3 Methods of measuring independent variables

3.4 Procedure used in the construction of a scale to measure the dependent variable - attitude of extension functionaries towards BBES

3.5 Procedure used in the measurement of infrastructural facilities available to extension functionaries and their problems in BBES

3.6 Method of data collection

3.7 Analyses of data

## 3.1 LOCALE OF THE STUDY

The study was conducted in South Arcot district of Tamil Nadu State during 1993-94. The district was purposefully selected for the study since the area was big enough to obtain the adequate sample of respondents and familiar to the researcher. Taluks having more scope for crop production, horticulture, animal husbandry, agricultural engineering, forestry, sericulture and fisheries were purposefully selected since these taluks enabled the efficient implementation of the BBES . Hence, six taluks of

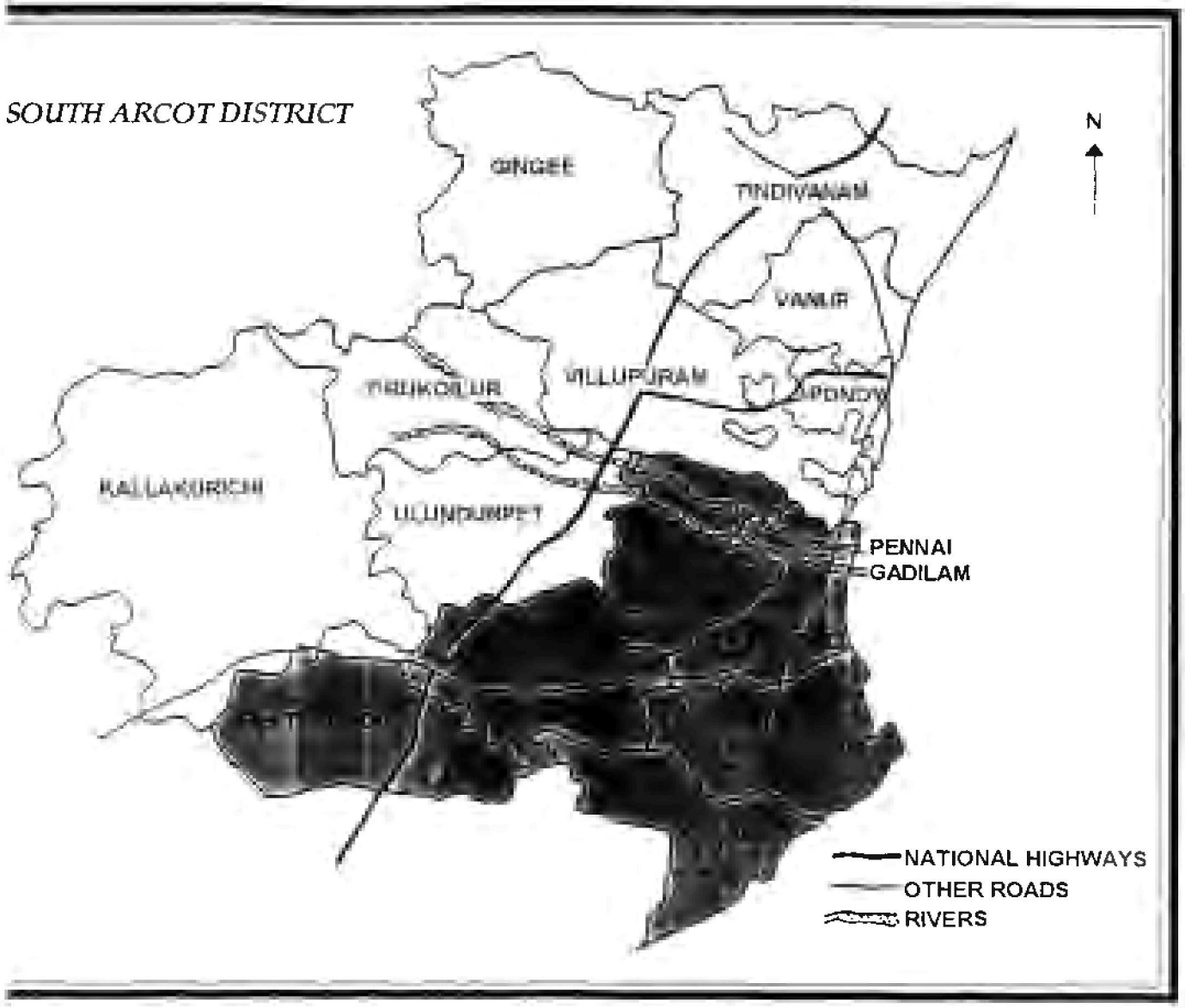


FIG 1 MAP SHOWING THE TALUKS SELECTED IN SOUTH ARCOT DISTRICT OF TAMIL NADU FOR THE STUDY

the district, namely Chidambaram, Cuddalore, Vridhachalam, Tittagudi, Panruti and Kattumannar Koil were covered under the study (Fig. 1).

3.2 SELECTION OF THE RESPONDENTS

There are 137 AAOs in the six selected taluks viz., Chidambaram, Cuddalore, Vridhachalam, Tittagudi, Panruti and Kattumannar Koil in South Arcot district. Fifty five AOs(SMSs) and 137 AAOs were in position in the whole district at the time of study. Out of 137 AAOs, 110 responded to the interview schedules distributed to them. Out of 55 AOs(SMSs), 40 responded to the questionnaires mailed to them. Hence, the sample for the study was 150 (110 AAOs and 40 AOs(SMSs). The break up of the respondents talukwise is given below :

| Taluk | AAOs | | | AOs(SMSs) | | |
|---|---|---|---|---|---|---|
| | Sanctioned posts | No.in position | Sample | Sanctioned posts | No.in position | Sample |
| Chidambaram | 23 | 23 | 19 | 5 | 5 | 4 |
| Cuddalore | 29 | 29 | 17 | 9 | 9 | 7 |
| Vridhachalam | 21 | 21 | 17 | 4 | 4 | 3 |
| Tillagudi | 20 | 20 | 18 | 3 | 3 | 2 |
| Panruti | 24 | 24 | 21 | 3 | 3 | 2 |
| Kattumannar koil | 20 | 20 | 18 | 3 | 3 | 2 |
| Kallakurichi | 53 | - | - | 4 | 4 | 3 |
| Thirukoilur | 33 | - | - | 3 | 3 | 2 |
| Ulundurpet | 22 | - | - | 3 | 3 | 2 |
| Villupuram | 43 | - | - | 8 | 8 | 6 |
| Tindivanam | 31 | - | - | 4 | 4 | 3 |
| Vanur | 12 | - | - | 3 | 3 | 2 |
| Gingae | 36 | - | - | 3 | 3 | 2 |
| Total | 367 | 137 | 110 | 55 | 55 | 40 |

## 3.3 METHODS OF MEASURING INDEPENDENT VARIABLES

The independent variables included in the study and tools of measurement used are presented below.

| Independent variables | Empirical measurement |
|---|---|
| **Personal variables** | |
| 1. Age | Schedule developed for the study |
| 2. Education | -do- |
| 3. Rural-urban background | Scale developed by Hosur (1977) |
| 4. Total Experience | Schedule developed for the study |
| 5. Experience under T & V system | -do- |
| 6. In-service training | -do- |
| 7. Mass media use | -do- |
| **Psychological variables** | |
| 8. Achievement motivation | Scale developed by Byra Reddy (1976) |
| 9. Job satisfaction | Scale developed by Laharia (1978) |
| 10. Job involvement | Scale developed by Lodahl and Kejner (1965) |
| 11. Morale | Scale developed by Talukdar (1984) |
| 12. Perceived workload | Scale developed by Dougherty (1985) |

| Independent variables | Empirical measurement |
|---|---|
| **Organizational variables** | |
| 13. Work facility | Schedule developed for the study |
| 14. Conveyance facility | -do- |
| 15. Coordination | -do- |
| 16. Availability of funds for TA | -do- |
| 17. Residential accommodation | -do- |
| 18. Promotional opportunities | -do- |
| 19. Organizational climate | Scale developed by Reddy (1987) |

3.3.1 AGE

Age was operationalised as the number of years completed by the respondent at the time of investigation. The respondents were categorized into three groups based on their age.

| Category |
|---|
| Up to 35 years |
| 36 to 50 years |
| Above 50 years |

3.3.2 EDUCATION

Education refers to the formal educational qualification of the respondents. Respondents were asked to furnish information about qualification they possessed. Based on the score obtained the respondents were grouped into two categories taking mean as central point.

| Category for AAOs | Category for AOs(SMSs) |
|---|---|
| H.Sc. | M.Sc. (Ag.) |
| S.S.L.C | B.Sc. (Ag.) |

3.3.3 MASS MEDIA USE

The operationalization of this variable was arrived at by the procedure followed by Hosur (1977) with slight modifications.

Detailed information about the mass media use of the respondents was obtained with respect to: i) their reading habits and frequency of reading, ii) their radio listening habits and frequency of listening and iii) viewing television.

To arrive at a complete score for mass media use, the following scoring pattern was followed.

| Category | Reading Habit | Score |
|---|---|---|
| a. Media | | |
| i) News paper | Reading | 1 |
| | Not reading | 0 |
| ii) Magazines | Reading | 1 |
| | Not reading | 0 |
| iii) Journals related to agriculture | Reading | 2 |
| | Not reading | 0 |
| iv) Scientific journals | Reading | 2 |
| | Not reading | 0 |
| v) Books on agriculture | Reading | 2 |
| | Not reading | 0 |
| vi) Extension literature, leaflets, folders, etc. | Reading | 2 |
| | Not reading | 0 |

b. Frequency of Reading

| Item | Frequency | Score |
|---|---|---|
| News paper | Daily | 3 |
| | Weekly once or twice | 2 |
| | Monthly once of twice | 1 |

c. Frequency of listening to radio programmes on agriculture

| Frequency | Score |
|---|---|
| Daily | 3 |
| Weekly once or twice | 2 |
| Monthly once or twice | 1 |

d. Frequency of viewing television

| Frequency | Score |
|---|---|
| Daily | 2 |
| Occasionally | 1 |

The composite score was obtained by summing up the scores obtained by the respondent. Based on the score obtained, they were grouped into two categories, taking mean as central point [$\bar{X}$: AAOs = 10.78; AOs(SMSs) =12.20].

| Category | Score |
|---|---|
| High | Above mean |
| Low | Mean and below |

3.3.4 TOTAL EXPERIENCE

It has been operationalised as the number of completed years of service by a respondent in the Department of Agriculture at the time of investigation. A score of one was assigned to each year of experience/service.

Based on the mean score, the respondents were categorized as under [$\bar{X}$: AAOs = 19.26; AOs(SMSs) =17.93].

| Category | Score |
|---|---|
| More | Above mean |
| Less | Mean and below |

3.3.5 EXPERIENCE UNDER T&V SYSTEM

This variable was operationalised as the number of completed years of service of a respondent in the Department of Agriculture under T & V system at the time of investigation. A score of one was assigned to each year of experience/service.

Based on the mean score, the respondents were categorized as under [$\bar{X}$: AAOs = 10.96; AOs(SMSs) =10.87].

| Category | Score |
|---|---|
| More | Above mean |
| Less | Mean and below |

3.3.6 IN-SERVICE TRAINING

This variable was performed as number of weeks of training received by the respondents during their service. A score of 1 was assigned to each week of training received. The composite score for training was arrived at by summing up the scores obtained by the respondent. Based on the score obtained, the respondents were grouped into two categories taking mean as central point as under [$\bar{X}$: AAOs = 7.37; AOs(SMSs) =5.35].

| Category | Score |
|---|---|
| More | Above mean |
| Low | Mean and below |

3.3.7 WORK FACILITY

This refers to sufficient provision of facilities to the extension functionaries for effective functioning in their job. This was measured by using the schedule developed for the study. This schedule consisted of 7 statements with the first statement having 3 sub items. The possible score ranged from 9 to 27. Later, the respondents were classified into two categories based on mean as given below [$\bar{X}$: AAOs = 21.75; AOs(SMSs) =15.90].

| Category | Score |
|---|---|
| High | Above mean |
| Low | Mean and below |

3.3.8 CONVEYANCE

Conveyance was operationalised as the transport facility available with the respondent for his mobility. The procedure followed for quantification of this aspect was:

| Type of transport | Score |
|---|---|
| None | 1 |
| Cycle | 2 |
| Moped | 3 |
| Motor cycle | 4 |

The possible score ranged from a minimum of 1 to a maximum of 4. Based on the score obtained, the respondents were grouped into two classes, taking mean as central point as under [$\bar{X}$: AAOs = 2.17; AOs(SMSs) =2.30].

| Category | Score |
|---|---|
| Adequate | Above mean |
| Inadequate | Mean and below |

3.3.9 COORDINATION

To measure the extent of coordination with other departments and agencies, different departments and agencies were listed in consultation with the officers of the Department of Agriculture. Thus, 10 departments / agencies were selected for the purpose of the study and included in the schedule for measuring level of coordination since their services were needed in order to implement the BBES at grassroots level. Each department/agency was arranged on a five point continuum with the following scoring pattern.

| | Score |
|---|---|
| To a greater extent | 4 |
| Great extent | 3 |
| Some extent | 2 |
| Limited extent | 1 |
| Not at all | 0 |

Total score of all the items formed the total co-ordination score for that respondent. Based on the mean score, the respondents were categorized as under [$\bar{X}$: AAOs = 11.12; AOs(SMSs) = 9.33].

| Category | Score |
|---|---|
| High | Above mean |
| Low | Mean and below |

3.3.10 AVAILABILITY OF FUNDS FOR TRAVELLING ALLOWANCE (TA)

This variable was operationalised as the adequacy of funds for TA, speediness of passing of TA bills by the

superior and amount of TA given. To arrive at a complete score for the variable, the following scoring pattern was followed:

| Availability of funds for TA | Score |
|---|---|
| Very much adequate | 3 |
| Adequate | 2 |
| Not adequate | 1 |
| **Passing of bills by the Superior** | |
| Very fast | 3 |
| Fast | 2 |
| Delay | 1 |
| **Amount of TA given** | |
| Enough | 2 |
| Not enough | 1 |

The composite score was obtained by summing up the score obtained by the respondent. Based on the composite score obtained, they were grouped into two categories, taking mean as the central point [$\bar{X}$: AAOs = 3.11; AOs(SMSs) =3.88].

| Category | Score |
|---|---|
| More | Above mean |
| Less | Mean and below |

3.3.11 RESIDENTIAL ACCOMMODATION

It was operationalised as living in work place and availability of Government residential facilities at the work place. The scoring pattern was given below:

| 1. Living in work place | Score |
|---|---|
| a) I live in my work place | 6 |
| b) 5 km away | 5 |
| c) 10 km away | 4 |
| d) 15 km away | 3 |
| e) 25 km away | 2 |
| f) Beyond 25 km away | 1 |

2. Availability of Government residential facilities

| | |
|---|---|
| a) Available | 2 |
| b) Not available | 1 |

If available

| | |
|---|---|
| a) Accommodation given | |
| i) Adequate | 2 |
| ii) Inadequate | 1 |
| b) Annual repairs done by Government | |
| i) Once in a year | 4 |
| ii) Once in 2 to 3 years | 3 |
| iii) Once in 4 to 5 years | 2 |
| iv) Not done at all | 1 |

The composite score was obtained by summing up the scores obtained by the respondent. Based on the mean score, the respondents were categorized as under [$\bar{X}$: AAOs = 8.64; AOs(SMSs) =8.48].

| Category | Score |
|---|---|
| More | Above mean |
| Less | Mean and below |

3.3.12 PROMOTIONAL OPPORTUNITIES

This variable was operationalised as the expected years of service for subsequent promotions and the satisfaction over the promotional opportunities available in the Department of Agriculture. The following scoring pattern was followed.

| First Promotion | Score |
|---|---|
| After 15 years of service | 3 |
| After 20 years of service | 2 |
| I do not get first promotion at all | 1 |

Second Promotion

| | |
|---|---|
| After 25 years of service | 3 |
| After 30 years of service | 2 |
| I do not get second promotion at all | 1 |

Satisfaction Over Promotional Opportunities

| | |
|---|---|
| Satisfied | 2 |
| Not satisfied | 1 |

The composite score was obtained by summing up the scores obtained by the respondent. Based on the mean score the respondents were categorized as under [$\bar{X}$: AAOs = 5.01; AOs(SMSs) =4.25].

| Category | Score |
|---|---|
| More | Above mean |
| Less | Mean and below |

3.3.13 RURAL-URBAN BACKGROUND

This variable was measured by making use of the scale developed by Hosur (1977) with suitable modifications. The information about rural-urban background was obtained on various aspects like place of birth, father's occupation and the places where the respondent had completed his formal education. The following scoring procedure was adopted for measuring rural-urban background of the extension functionaries.

| Item | Score |
|---|---|
| a) Father's occupation | |
| Farming | 2 |
| Non-farming | 1 |
| b) Native place of the respondent | |
| Village | 3 |
| Taluk Headquarters | 2 |
| District Headquarters | 1 |

c) Place of completing primary education

| | |
|---|---|
| Village | 3 |
| Taluk Headquarters | 2 |
| District Headquarters | 1 |

d) Place of completing high school education

| | |
|---|---|
| Village | 3 |
| Taluk Headquarters | 2 |
| District Headquarters | 1 |

e) Place of completing higher secondary education

| | |
|---|---|
| Village | 3 |
| Taluk Headquarters | 2 |
| District Headquarters | 1 |

The composite score for the rural-urban background was arrived at by summing up the score obtained by the respondent on each item.

Based on the scores obtained by the respondents they were grouped into two categories taking mean as central point [$\bar{X}$: AAOs = 10.79; AOs(SMSs) = 9.23].

| Category | Score |
|---|---|
| Rural | Above mean |
| Urban | Mean and below |

3.3.14 ACHIEVEMENT MOTIVATION (n-ach)

A Likert type of scale developed by Byra Reddy (1976) to measure the achievement motivation of Village Level Workers was used in this study to measure n-ach of extension functionaries. It contained seven items put on a 5 point rating continuum, namely strongly agree, agree, undecided, disagree and strongly disagree with weightage of 5, 4, 3, 2 and 1, respectively. The composite score was arrived at by summing up the scores obtained by the respondents under each

item. The maximum possible score in the scale was 35. Based on the scores obtained, the respondents were grouped into two categories taking mean as central point [$\bar{X}$: AAOs = 30.42; AOs(SMSs) =26.38].

| Category | Score |
|---|---|
| High | Above mean |
| Low | Mean and below |

3.3.15 JOB SATISFACTION

It is the degree to which an individual is satisfied or dissatisfied about various dimensions of his job. Since satisfaction with one facet of the job cannot be measured in isolation because of complex ways in which it may be interrelated with other aspects, an overall measure of satisfaction may provide dependable data. Keeping this in view, a comprehensive scale developed by Laharia (1978) was adopted, with slight modification, in measuring job satisfaction. It contained 14 statements and the score on them ranged from 14 to 70. The responses were obtained on a 5 point continuum, namely, very much satisfied, satisfied, partially satisfied, dissatisfied and very much dissatisfied with the weightages of 5, 4, 3, 2 and 1. The composite score was arrived at by summing up the scores obtained by the respondents under each item. Based on the mean score, the respondents were categorized as under [$\bar{X}$: AAOs = 43.67; AOs(SMSs) =25.73].

| Category | Score |
|---|---|
| High | Above mean |
| Low | Mean and below |

3.3.16 JOB INVOLVEMENT

The variable was operationalised as the degree to which a person is identified psychologically with his work or the importance of work in his self-image. This variable was measured by using the scale developed by Lodahl and Kejner (1965) and adopted by Veerabhadraiah (1980). It contained 20 statements and the score on them ranged from 20 to 100. The responses were obtained on a 5 point continuum, namely, strongly agree, agree, undecided, disagree and strongly disagree, with the weightages of 5, 4, 3, 2 and 1. The composite score was arrived at by summing up the scores obtained by the respondents under each item. Based on the mean score, the respondents were categorized as under [$\bar{X}$: AAOs = 79.95; AOs(SMSs) =33.95].

| Category | Score |
|---|---|
| High | Above mean |
| Less | Mean and below |

3.3.17 ORGANIZATIONAL CLIMATE

Scheinder and Snyder (1975) defined organizational climate as a summary or overall perception which people have of an organization. This variable was measured by adopting the scale developed by Reddy (1987) with slight

modifications. It contained 25 statements and the score on them ranged between 25 and 125. The responses were obtained on a 5 point continuum namely, almost always, usually, some times, rarely and almost never with the weightages of 5, 4, 3, 2 and 1. Tne composite score was arrived at by summing up the scores obtained by the respondents under each item. Based on the mean score, the respondents were categorized as under [$\bar{X}$: AA0s = 97.64; A0s(SMSs) =85.08].

| Category | Score |
|---|---|
| More facilitating | Above mean |
| Less facilitating | Mean and below |

3.3.18 MORALE

Morale was operationalised as the mental state with regard to spirit and confidence. The scale developed by Talukdar (1984) was used with slight modification to measure morale. The 14 statements in it were expected to yield a score range of 14 to 70. The positive statements attracted a score of 5, 4, 3, 2 and 1 on a 5 point continuum and the score was reversed for negative statements. The composite score was arrived at by summing up the scores obtained by the respondents under each item. Based on the mean score, the respondents were categorized as under [$\bar{X}$: AA0s = 53.23; A0s(SMSs) =37.08].

| Category | Score |
|---|---|
| High | Above mean |
| Low | Mean and below |

3.3.19 PERCEIVED WORKLOAD

It was operationalised as the degree to which the respondents have comprehended the nature and quantum of work and its (work) relation to the quality of their performance. A scale developed by Kirmeyer and Dougherty (1988) containing four items, with a score range of 4 to 20, was adopted for measuring this variable. The scoring given ranged from 5 to 1 for the 5 point response category from 'strongly agree' through 'strongly disagree'. The composite score was arrived at by summing up the scores obtained by the respondents under each item. Based on the mean score, the respondents were categorised as under [$\bar{X}$: AAOs = 17.24; AOs(SMSs) =15.85].

| Category | Score |
|---|---|
| More | Above mean |
| Less | Mean and below |

3.4 PROCEDURE USED IN THE CONSTRUCTION OF A SCALE TO MEASURE THE DEPENDENT VARIABLE - ATTITUDE OF EXTENSION FUNCTIONARIES TOWARDS BBES

The procedure used in the construction of attitude scale is presented below. The method adopted for construction of scale was that of summated ratings as detailed by Likert (1932).

3.4.1 Collection of items

A large number of statements were collected by the researcher in consultation with experts and books and journals. Care was taken to include approximately equal

number of positive and negative statements. These statements were edited, revised and restructured to avoid ambiguity and duplication. Thus, 24 statements were finally selected for further analysis.

3.4.2 Selection of items

These 24 statements were mailed to 110 judges who are experts in the field of extension education and subject matter. They were asked to check each of the statements carefully for being relevant or not relevant towards BBES. Only 70 judges (63.64 per cent) responded to the questionnaire. The 22 statements which were considered relevant by more than 50 per cent of the judges were selected and remaining two statements were eliminated.

3.4.3 Item analysis

These 22 statements were administered in local language to 60 extension functionaries in the non sample area. The responses were obtained on a 5 point continuum viz., strongly agree, agree, undecided, disagree and strongly disagree. In the case of positive statements the scoring pattern was 5, 4, 3, 2 and 1, and in case of negative statements the scoring pattern was reversed i.e., 1, 2, 3, 4 and 5 for responses strongly agree, agree, undecided, disagree and strongly disagree. The score for each individual on the scale was computed by summing up the weightages of the individual item response.

3.4.4 Computing 't' values

For the purpose of evaluating the statements criterion group was selected i.e., 25 per cent of the respondents having the highest scores and 25 per cent of those having the lowest scores. The 't' value for each statement was calculated by using the formula

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\Sigma X_H^2 - \frac{(\Sigma X_H)^2}{n} + \Sigma X_L^2 - \frac{(\Sigma X_L)^2}{n}}{n(n-1)}}}$$

where,

$\bar{X}_H$ = Mean score on a given statement for the high group

$\bar{X}_L$ = Mean score on a given statement for tne low group

n = Number of respondents in each group

The 't' values for all the statements were computed and the statements were arranged in the descending order of values ranging from 7.88 to 2.24. All the 22 statements were selected, since they were having the 't' value more than 1.75. The final format of the attitude scale in which 11 statements were positive and 11 were negative is given in Appendix I.

3.4.5 Reliability of the scale

The 'split-half' method was used for testing the reliability of the attitude scale.

The items of the scale were divided into two halves by pooling the odd numbered items for one set of scores and the even numbered items for another set. The agreement between the two sets of scores on each half of the scale was determined by a correlation coefficient. The reliability coefficient of the test which was as high as 0.6, indicated the accuracy or precision of the attitude scale.

3.4.6 Validity

Validity indicates whether the scale measures the variable that it is supposed to measure. The validity of the scale was tested in the following way.

3.4.6.1 Content validity: The scale was examined for the content validity by determining how well the content of the scale represented the subject matter under study. As all the possible items covering the universe of content were selected by discussion with experts, resource personnel and from the available literature on the subject, scale satisfied the content validity.

3.4.7 Categorization of respondents

The respondents were asked to put a check mark ( ) against the five point continuum viz., strongly agree, agree, undecided, disagree and strongly disagree with scores of 5, 4, 3, 2 and 1 for favourable statements and reverse scoring system was employed for unfavourable statements. The total attitude score for each respondent was calculated. The

possible total score of the scale ranges from 22 to 110. The respondents were classified into four categories based on the range of scores.

| Attitude category | Score |
|---|---|
| Highly favourable | 88.6 - 100.0 |
| Favourable | 75.1 - 88.5 |
| Less favorable | 62.6 - 75.0 |
| Unfavourable | 50.0 - 62.5 |

## 3.5 PROCEDURE USED IN THE MEASUREMENT OF INFRASTRUCTURAL FACILITIES AVAILABLE TO EXTENSION FUNCTIONARIES AND THEIR PROBLEMS IN BBES

### 3.5.1 Infrastructural facilities

It was operationalised as living in work place, availability of Government residential facilities at the work place and the transport facility available with the respondent for his mobility. The scoring pattern given for residential accommodation and conveyance holds good for infrastructural facilities also.

### 3.5.2 Problems encountered by extension functionaries

After detailed discussion with a sample of extension functionaries, 10 problems which might possibly affect the working of the extension functionaries were listed and the respondents were asked to state the seriousness of the problems. The response categories were 'to a greater extent', 'to some extent' and 'not a problem' with the weightages of 3, 2 and 1, respectively. Total score obtained for each

problem was calculated by summing up the response scores of all respondents for that problem. Based on the total score obtained, the problems were ranked to indicate the severity of the problem listed in the instrument in the order of priority.

## 3.6 METHOD OF DATA COLLECTION

A structured interview schedule was developed based on the objectives of the study for the purpose of data collection (Appendix II). The interview schedule was translated into Tamil language (local language) for easy and correct understanding by the AAOs. The data for this study were collected during the monthly training sessions in the months of December, 1993 and January, 1994. In the headquarters of each of the six taluks, the structured interview schedule with code numbers were distributed among the respondents. Sufficient care was taken to avoid respondents consulting each other while responding to the items given in the interview schedule. The researcher explained to the respondents the purpose of investigation and appealed to them to give their frank and unbiased response with an assurance that the information supplied by them would be kept confidential. The doubts raised by the respondents were cleared.

The same interview schedule was mailed to all the 55 AOs(SMSs) in South Arcot district of the State Department of Agriculture, Tamil Nadu.

## 3.7 ANALYSES OF DATA

The data obtained were scored, tabulated and analyzed with the help of following statistical tests.

The data regarding the different subject matter areas covered under BBES were computed by using percentages. Multiple linear regression was used to investigate the relationship between socio-personal characteristics of extension functionaries and their attitude towards BBES.

# RESULTS

# IV. RESULTS

The data collected have been scored, tabulated, analysed and presented in the form of results in this chapter under the following headings.

4.1 Subject matter areas covered by extension functionaries under BBES

4.2 Attitude of extension functionaries towards BBES

4.3 Relationship between selected socio-personal characteristics of extension functionaries and their attitude towards BBES

4.4 Infrastructural facilities available to extension functionaries and their problems in BBES

## 4.1 SUBJECT MATER AREAS COVERED BY EXTENSION FUNCTIONARIES UNDER BBES

### 4.1.1 Subject matter areas on which extension functionaries delivered messages under BBES

The extension functionaries have delivered messages on different subject matter areas under BBES. A great majority of AAOs (95 - 100 per cent) have delivered messages in agriculture, forestry and horticulture. The next in the order were in the areas of sericulture, animal husbandry, fisheries and agricultural engineering (Table 1 and Fig.2).

It is evident from Table 2 that almost all AOs(SMSs) (95-100 per cent) have delivered messages in agriculture, forestry and horticulture. It is closely followed by animal husbandry, sericulture, agricultural engineering and fisheries (Fig.3).

Table 1

Subject matter areas on which AAOs delivered messages under BBES during the past one year

(n = 110)

| Subject matter area | Messages delivered | |
|---|---|---|
| | No. | Per cent |
| Agriculture | 110 | 100.0 |
| Horticulture | 105 | 95.0 |
| Animal Husbandry | 87 | 79.0 |
| Agricultural Engineering | 78 | 70.0 |
| Forestry | 106 | 96.0 |
| Sericulture | 95 | 86.0 |
| Fisheries | 82 | 74.0 |

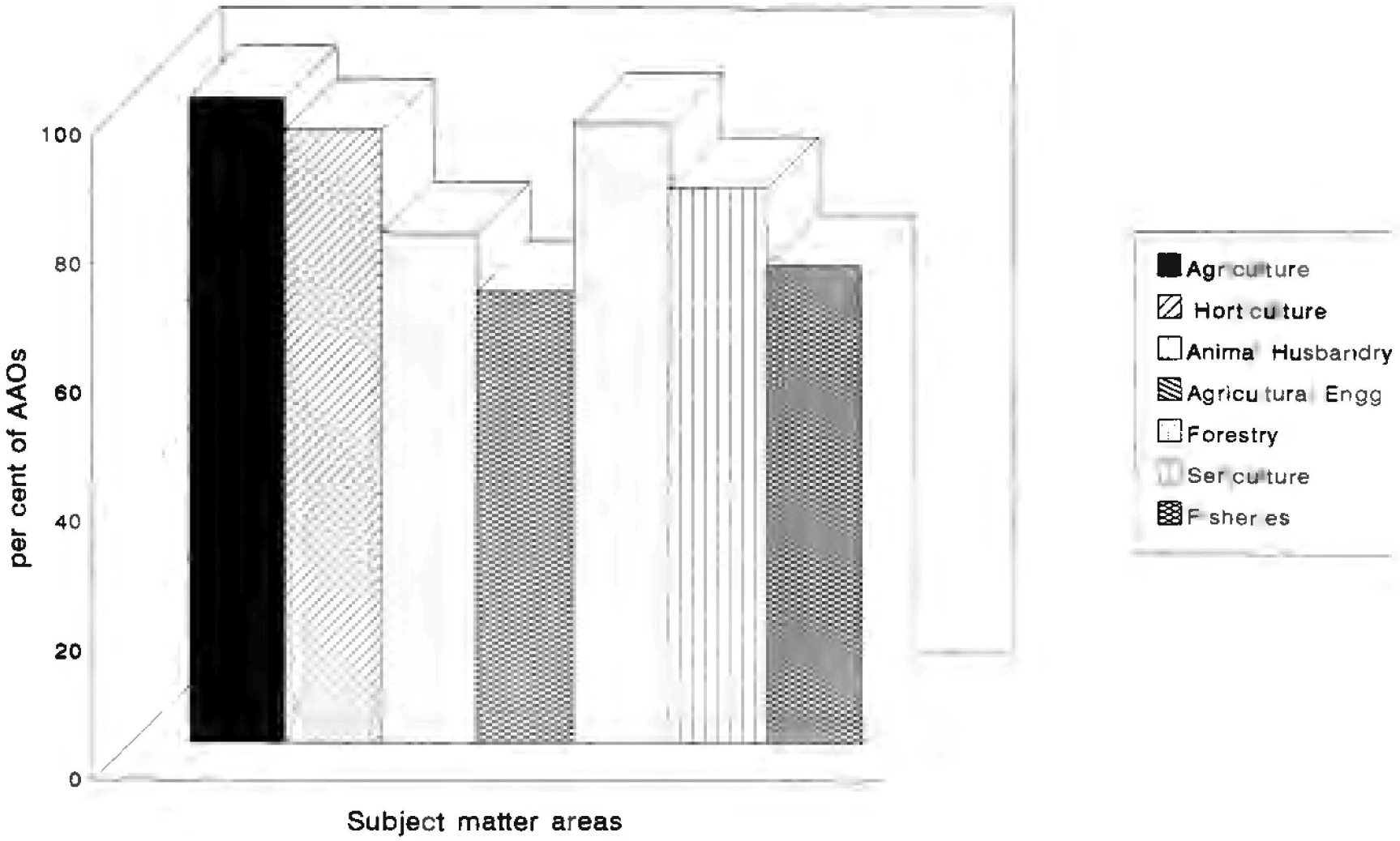


Fig.2 SUBJECT MATTER AREAS ON WHICH AAOs DELIVERED MESSAGES UNDER BBES

Table 2

Subject matter areas on which AOs(SMSs) delivered messages under BBES during the past one year

(n = 40)

| Subject matter area | Messages delivered | |
|---|---|---|
| | No. | Per cent |
| Agriculture | 40 | 100.0 |
| Horticulture | 38 | 95.0 |
| Animal Husbandry | 36 | 90.0 |
| Agricultural Engineering | 32 | 80.0 |
| Forestry | 39 | 97.0 |
| Sericulture | 34 | 85.0 |
| Fisheries | 31 | 77.0 |

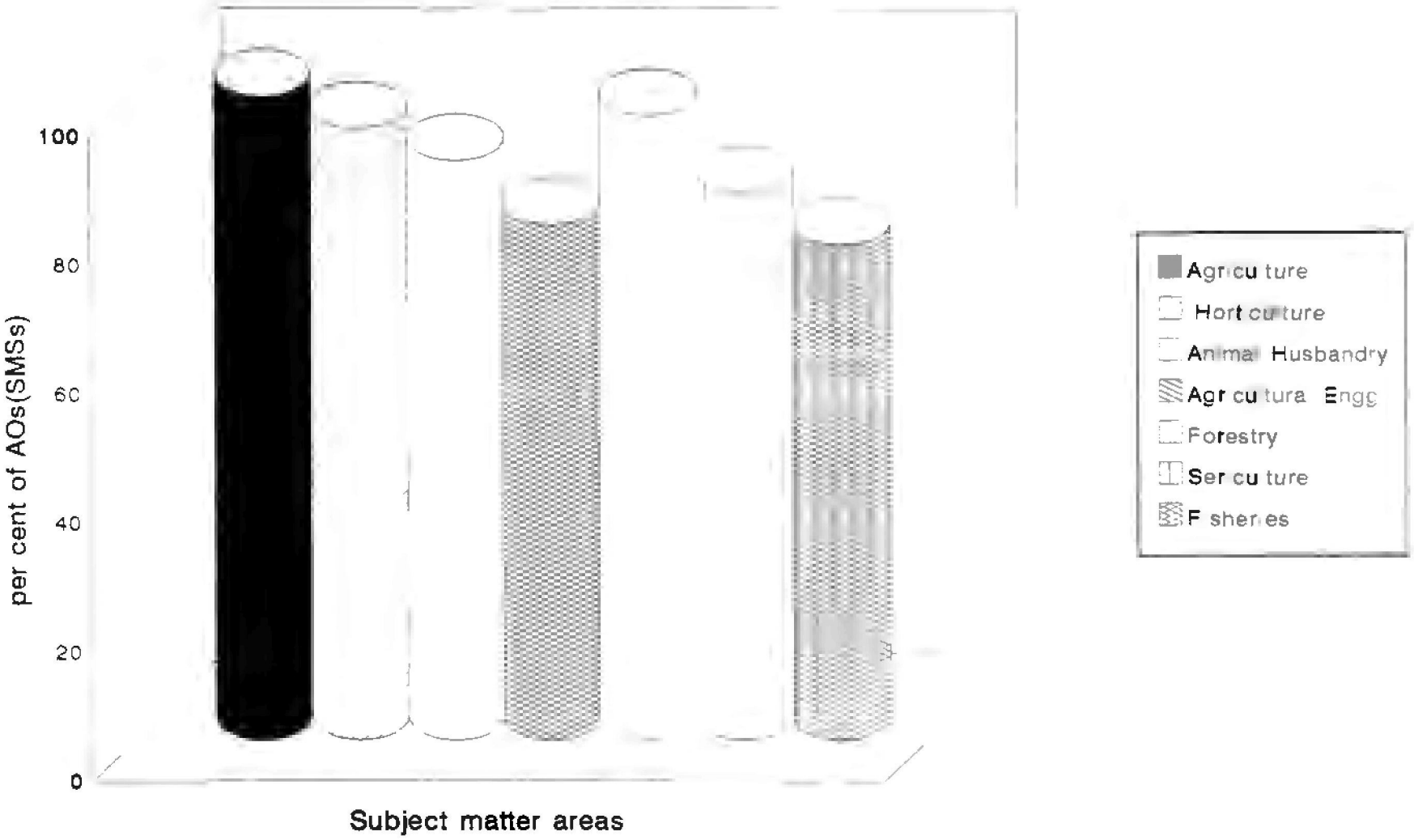


Fig 3. SUBJECT MATTER AREAS ON WHICH AOs(SMSs) DELIVERED MESSAGES UNDER BBES

Table 3

Number of messages delivered by AAOs in different subject matter areas under BBES during the past one year

(n = 110)

| Subject matter area and number of messsages | AAOs reporting | |
|---|---|---|
| | No. | Per cent |
| Agriculture | | |
| More than 200 | 15 | 14.0 |
| 100 to 200 | 87 | 79.0 |
| Less than 100 | 8 | 7.0 |
| Horticulture | | |
| More than 100 | 4 | 3.0 |
| 50 to 100 | 79 | 72.0 |
| Less than 50 | 27 | 25.0 |
| Animal Husbandry | | |
| More than 25 | 12 | 11.0 |
| 15 to 25 | 90 | 82.0 |
| Less than 15 | 8 | 7.0 |
| Agricultural Engineering | | |
| More than 10 | 26 | 24.0 |
| 5 to 10 | 72 | 65.0 |
| Less than 5 | 12 | 11.0 |
| Forestry | | |
| More than 50 | 18 | 16.0 |
| 25 to 50 | 70 | 64.0 |
| Less than 25 | 22 | 20.0 |
| Sericulture | | |
| More than 10 | 15 | 14.0 |
| 5 to 10 | 67 | 61.0 |
| Less than 5 | 28 | 25.0 |
| Fisheries | | |
| More than 10 | 3 | 3.0 |
| 5 to 10 | 46 | 42.0 |
| Less than 5 | 61 | 55.0 |

Table 4

Number of messages delivered by AOs(SMSs) in different subject matter areas under BBES during the past one year
(n = 40)

| Subject matter area and number of messsages | AOs(SMSs) reporting | |
|---|---|---|
| | No. | Per cent |
| Agriculture | | |
| More than 200 | 12 | 30.0 |
| 100 to 200 | 27 | 67.0 |
| Less than 100 | 1 | 3.0 |
| Horticulture | | |
| More than 100 | 6 | 15.0 |
| 50 to 100 | 32 | 80.0 |
| Less than 50 | 2 | 5.0 |
| Animal Husbandry | | |
| More than 25 | 8 | 20.0 |
| 15 to 25 | 28 | 70.0 |
| Less than 15 | 4 | 10.0 |
| Agricultural Engineering | | |
| More than 10 | 2 | 5.0 |
| 5 to 10 | 30 | 75.0 |
| Less than 5 | 8 | 20.0 |
| Forestry | | |
| More than 50 | 10 | 25.0 |
| 25 to 50 | 23 | 57.0 |
| Less than 25 | 7 | 18.0 |
| Sericulture | | |
| More than 10 | 7 | 18.0 |
| 5 to 10 | 28 | 70.0 |
| Less than 5 | 5 | 12.0 |
| Fisheries | | |
| More than 10 | 4 | 10.0 |
| 5 to 10 | 24 | 60.0 |
| Less than 5 | 12 | 30.0 |

### 4.1.2 Number of messages delivered by extension functionaries in different subject matter areas under BBES

A large majority of AAOs (72 - 82 per cent) delivered 15 to 25 messages on animal husbandry,100 to 200 messages on agriculture and 50 to 100 messages on horticulture. It is followed by agricultural engineering (5 to 10 messages), forestry (25 to 50 messages) and sericulture (5 to 10 messages) (Table 3).

It is clearly brought out from the results in Table 4 that 67 per cent of AOs(SMSs) delivered 100 to 200 messages in agriculture. Further, a majority of them (70 to 80 per cent) delivered 50 to 100 messages in horticulture, 5 to 10 messages in agricultural engineering, 15 to 25 messages in animal husbandry and 5 to 10 messages in sericulture. It is followed by 5 to 10 messages in fisheries and 25 to 50 messages in forestry.

### 4.1.3 Perceived knowledge of extension functionaries on different subject matter areas

A large number of AAOs had stated tnat they had adequate knowledge in agriculture (92 per cent), forestry (71 per cent) and horticulture (52 per cent). Majority of them (47 to 58 per cent) perceived less knowledge in animal husbandry, agricultural engineering, sericulture and fisheries (Table 5).

Table 5

Perceived knowledge of AAOs on different subject matter areas under BBES in past one year

(n = 110)

| Subject matter area | Knowledge | | | | | |
|---|---|---|---|---|---|---|
| | Adequate | | Less adequate | | No knowledge | |
| | No. | Per cent | No. | Per cent | No. | per cent |
| Agriculture | 101 | 92.0 | 9 | 8.0 | 0 | 0.0 |
| Horticulture | 58 | 53.0 | 52 | 47.0 | 0 | 0.0 |
| Animal Husbandry | 43 | 39.0 | 64 | 58.0 | 3 | 3.0 |
| Agricultural Engineering | 41 | 37.0 | 63 | 57.0 | 6 | 6.0 |
| Forestry | 78 | 71.0 | 26 | 23.0 | 6 | 6.0 |
| Sericulture | 38 | 35.0 | 54 | 49.0 | 18 | 16.0 |
| Fisheries | 28 | 26.0 | 52 | 47.0 | 30 | 27.0 |

Table 6

Perceived knowledge of AOs(SMSs) on different subject matter areas under BBES during the past one year

(n = 40)

| Subject matter area | Knowledge | | | | | |
|---|---|---|---|---|---|---|
| | Adequate | | Less adequate | | No knowledge | |
| | No. | Per cent | No. | Per cent | No. | per cent |
| Agriculture | 40 | 100.0 | 0 | 0.0 | 0 | 0.0 |
| Horticulture | 38 | 95.0 | 2 | 5.0 | 0 | 0.0 |
| Animal Husbandry | 26 | 65.0 | 10 | 25.0 | 4 | 10.0 |
| Agricultural Engineering | 25 | 62.0 | 12 | 30.0 | 3 | 8.0 |
| Forestry | 31 | 77.0 | 9 | 23.0 | 0 | 0.0 |
| Sericulture | 25 | 62.0 | 10 | 25.0 | 5 | 13.0 |
| Fisheries | 21 | 52.0 | 10 | 25.0 | 9 | 23.0 |

Table 7

Number of demonstrations conducted by AAOs in different subject matter areas under BBES during the past one year

(n = 110)

| Demonstrations conducted | AAOs reporting | |
|---|---|---|
| | No. | Per cent |
| Agriculture | | |
| More than 50 | 32 | 29.0 |
| 25 to 50 | 65 | 59.0 |
| Less than 25 | 13 | 12.0 |
| Horticulture | | |
| More than 10 | 7 | 6.0 |
| 5 to 10 | 79 | 72.0 |
| Less than 5 | 24 | 22.0 |
| Animal Husbandry | | |
| More than 10 | 4 | 3.0 |
| 5 to 10 | 75 | 68.0 |
| Less than 5 | 31 | 29.0 |
| Agricultural Engineering | | |
| More than 10 | 2 | 1.0 |
| 5 to 10 | 74 | 67.0 |
| Less than 5 | 34 | 32.0 |
| Forestry | | |
| More than 10 | 16 | 15.0 |
| 5 to 10 | 82 | 74.0 |
| Less than 5 | 12 | 11.0 |
| Sericulture | | |
| More than 10 | 7 | 6.0 |
| 5 to 10 | 74 | 67.0 |
| Less than 5 | 29 | 27.0 |
| Fisheries | | |
| More than 10 | 2 | 2.0 |
| 5 to 10 | 76 | 69.0 |
| Less than 5 | 32 | 29.0 |

Table 8

Number of demonstrations conducted by AOs(SMSs) in different subject matter areas under BBES during the past one year

(n = 40)

| Demonstrations conducted | AOs(SMSs) reporting | |
|---|---|---|
| | No. | Per cent |
| **Agriculture** | | |
| More than 50 | 18 | 45.0 |
| 25 to 50 | 20 | 50.0 |
| Less than 25 | 2 | 5.0 |
| **Horticulture** | | |
| More than 10 | 4 | 10.0 |
| 5 to 10 | 32 | 80.0 |
| Less than 5 | 4 | 10.0 |
| **Animal Husbandry** | | |
| More than 10 | 2 | 5.0 |
| 5 to 10 | 33 | 82.0 |
| Less than 5 | 5 | 13.0 |
| **Agricultural Engineering** | | |
| More than 10 | 1 | 2.0 |
| 5 to 10 | 36 | 90.0 |
| Less than 5 | 3 | 8.0 |
| **Forestry** | | |
| More than 10 | 6 | 15.0 |
| 5 to 10 | 30 | 75.0 |
| Less than 5 | 4 | 10.0 |
| **Sericulture** | | |
| More than 10 | 2 | 5.0 |
| 5 to 10 | 26 | 65.0 |
| Less than 5 | 12 | 30.0 |
| **Fisheries** | | |
| More than 10 | 2 | 5.0 |
| 5 to 10 | 28 | 70.0 |
| Less than 5 | 10 | 25.0 |

Almost all AOs(SMSs) (95 to 100 per cent) perceived that they had adequate knowledge in agriculture and horticulture. Furtner, 77 per cent perceived that tneir knowledge in forestry was adequate. Next in the order were animal husbandry, agricultural engineering, sericulture and fisheries (Table 6).

### 4.1.4 Number of demonstrations conducted by extension functionaries in different subject matter areas

A close observation of results in Table 7 reveals that 59 per cent of AAOs conducted 25 to 50 demonstrations in agriculture. Further, a considerable majority (67 to 71 per cent) conducted 5 to 10 demonstrations in forestry, horticulture, fisheries, sericulture and agricultural engineering.

As regards AOs(SMSs) , exactly half of them conducted 25 to 50 demonstrations in agriculture. Majority of them conducted 5 to 10 demonstrations in agricultural engineering (90 per cent), animal husbandry (83 per cent), horticulture (80 per cent), forestry (75 per cent), fisheries (70 per cent) and sericulture (65 per cent) (Table 8).

### 4.1.5 Number of field days arranged by extension functionaries under BBES in different subject matter areas

Results in Table 9 reveal that 74 per cent of AAOs arranged 5 to 15 field days in agriculture which is followed by 5 to 10 field days (60 to 73 per cent) each in

Table 9

Number of field days organised by AAOs in different subject matter areas under BBES during the past one year

(n = 110)

| Field days organised | AAOs reporting | |
|---|---|---|
| | No. | Per cent |
| Agriculture | | |
| More than 15 | 16 | 15.0 |
| 5 to 15 | 82 | 74.0 |
| Less than 5 | 12 | 11.0 |
| Horticulture | | |
| More than 10 | 3 | 3.0 |
| 5 to 10 | 81 | 73.0 |
| Less than 5 | 26 | 24.0 |
| Animal Husbandry | | |
| More than 10 | 2 | 2.0 |
| 5 to 10 | 81 | 74.0 |
| Less than 5 | 27 | 24.0 |
| Agricultural Engineering | | |
| More than 10 | 3 | 3.0 |
| 5 to 10 | 69 | 63.0 |
| Less than 5 | 38 | 34.0 |
| Forestry | | |
| More than 10 | 10 | 9.0 |
| 5 to 10 | 78 | 71.0 |
| Less than 5 | 22 | 20.0 |
| Sericulture | | |
| More than 10 | 2 | 2.0 |
| 5 to 10 | 66 | 60.0 |
| Less than 5 | 42 | 38.0 |
| Fisheries | | |
| More than 10 | 2 | 2.0 |
| 5 to 10 | 69 | 63.0 |
| Less than 5 | 39 | 35.0 |

Table 10

Number of field days organised by AOs(SMSs) in different subject matter areas under BBES during the past one year

(n = 40)

| Field days organised | AOs(SMSs) reporting | |
|---|---|---|
| | No. | Per cent |
| Agriculture | | |
| More than 15 | 10 | 25.0 |
| 5 to 15 | 28 | 70.0 |
| Less than 5 | 2 | 5.0 |
| Horticulture | | |
| More than 10 | 4 | 10.0 |
| 5 to 10 | 32 | 80.0 |
| Less than 5 | 4 | 10.0 |
| Animal Husbandry | | |
| More than 10 | 1 | 3.0 |
| 5 to 10 | 36 | 90.0 |
| Less than 5 | 3 | 7.0 |
| Agricultural Engineering | | |
| More than 10 | 2 | 5.0 |
| 5 to 10 | 28 | 70.0 |
| Less than 5 | 10 | 25.0 |
| Forestry | | |
| More than 10 | 5 | 13.0 |
| 5 to 10 | 32 | 80.0 |
| Less than 5 | 3 | 7.0 |
| Sericulture | | |
| More than 10 | 3 | 7.0 |
| 5 to 10 | 26 | 66.0 |
| Less than 5 | 11 | 27.0 |
| Fisheries | | |
| More than 10 | 1 | 3.0 |
| 5 to 10 | 24 | 60.0 |
| Less than 5 | 15 | 37.0 |

Table 11

Number of meetings conducted by AAOs in different subject matter areas under BBES during the past one year

(n = 110)

| Meetings conducted | AAOs reporting | |
|---|---|---|
| | No. | Per cent |
| Agriculture | | |
| More than 100 | 78 | 71.0 |
| 50 to 100 | 21 | 19.0 |
| Less than 50 | 11 | 10.0 |
| Horticulture | | |
| More than 50 | 25 | 22.0 |
| 25 to 50 | 67 | 62.0 |
| Less than 25 | 18 | 16.0 |
| Animal Husbandry | | |
| More than 25 | 41 | 37.0 |
| 15 to 25 | 46 | 42.0 |
| Less than 15 | 23 | 21.0 |
| Agricultural Engineering | | |
| More than 25 | 5 | 4.0 |
| 15 to 25 | 69 | 63.0 |
| Less than 15 | 36 | 33.0 |
| Forestry | | |
| More than 25 | 26 | 23.0 |
| 15 to 25 | 68 | 62.0 |
| Less than 15 | 16 | 15.0 |
| Sericulture | | |
| More than 25 | 8 | 7.0 |
| 15 to 25 | 68 | 62.0 |
| Less than 15 | 34 | 31.0 |
| Fisheries | | |
| More than 25 | 3 | 3.0 |
| 15 to 25 | 51 | 46.0 |
| Less than 15 | 56 | 51.0 |

Table 12

Number of meetings conducted by AOs(SMSs) in different subject matter areas under BBES during the past one year

(n = 40)

| Meetings conducted | AOs(SMSs) reporting | |
|---|---|---|
| | No. | Per cent |
| Agriculture | | |
| More than 100 | 26 | 65.0 |
| 50 to 100 | 12 | 30.0 |
| Less than 50 | 2 | 5.0 |
| Horticulture | | |
| More than 50 | 3 | 7.0 |
| 25 to 50 | 28 | 70.0 |
| Less than 25 | 9 | 23.0 |
| Animal Husbandry | | |
| More than 25 | 18 | 45.0 |
| 15 to 25 | 16 | 40.0 |
| Less than 15 | 6 | 15.0 |
| Agricultural Engineering | | |
| More than 25 | 14 | 35.0 |
| 15 to 25 | 25 | 62.0 |
| Less than 15 | 1 | 3.0 |
| Forestry | | |
| More than 25 | 2 | 5.0 |
| 15 to 25 | 26 | 65.0 |
| Less than 15 | 12 | 30.0 |
| Sericulture | | |
| More than 25 | 1 | 3.0 |
| 15 to 25 | 24 | 60.0 |
| Less than 15 | 15 | 37.0 |
| Fisheries | | |
| More than 25 | 3 | 8.0 |
| 15 to 25 | 18 | 45.0 |
| Less than 15 | 19 | 47.0 |

horticulture, animal husbandry, forestry, agricultural engineering, fisheries and sericulture.

Similarly, 70 per cent of AOs(SMSs) arranged 5 to 15 field days in agriculture. A large majority of them conducted 5 to 10 field days each in animal husbandry (90 per cent), horticulture (80 per cent), forestry (80 per cent), agricultural engineering (70 per cent), sericulture (65 per cent) and fisheries (60 per cent) (Table 10).

### 4.1.6 Number of meetings conducted by extension functionaries in different subject matter areas under BBES

A cursory look at the Table 11 points out that majority of AAOs (71 per cent) conducted more than 100 meetings on agriculture. Further, they (61 per cent) conducted 25 to 50 meetings on horticulture, 61 to 62 per cent conducted 15 to 25 meetings each on agricultural engineering, forestry and sericulture. In the case of animal husbandry, 42 per cent conducted 15 to 25 meetings, 37 per cent conducted more than 25 meetings and 21 per cent conducted less than 15 meetings. Regarding fisheries, majority of them (51 per cent) conducted less than 15 meetings and 46 per cent conducted 15 to 25 meetings.

A large number of AOs(SMSs) (65 per cent) conducted more than 100 meetings on agriculture. Similarly, they conducted 25 to 50 meetings in horticulture (70 per cent), 15 to 25 meetings in forestry (65 per cent), agricultural

Table 13

Number of farmers benefited by supplies and services arranged by AAOs under BBES during the past one year in different subject matter areas

(n = 110)

| Farmers benefited | AAOs reporting | |
|---|---|---|
| | No. | Per cent |
| Agriculture | | |
| More than 500 | 46 | 42.0 |
| 250 to 500 | 52 | 47.0 |
| Less than 250 | 12 | 11.0 |
| Horticulture | | |
| More than 200 | 23 | 21.0 |
| 100 to 200 | 38 | 35.0 |
| Less than 100 | 49 | 44.0 |
| Animal Husbandry | | |
| More than 100 | 15 | 14.0 |
| 50 to 100 | 67 | 61.0 |
| Less than 50 | 28 | 25.0 |
| Agricultural Engineering | | |
| More than 50 | 6 | 5.0 |
| 25 to 50 | 68 | 62.0 |
| Less than 25 | 36 | 33.0 |
| Forestry | | |
| More than 100 | 4 | 4.0 |
| 50 to 100 | 74 | 67.0 |
| Less than 50 | 32 | 29.0 |
| Sericulture | | |
| More than 25 | 2 | 2.0 |
| 10 to 25 | 84 | 76.0 |
| Less than 10 | 24 | 22.0 |
| Fisheries | | |
| More than 25 | 4 | 4.0 |
| 10 to 25 | 69 | 63.0 |
| Less than 10 | 37 | 33.0 |

Table 14

Number of farmers benefited by supplies and services arranged by AOs(SMSs) under BBES during the past one year in different subject matter areas

(n = 40)

| Farmers benefited | AOs(SMSs) reporting | |
|---|---|---|
| | No. | Per cent |
| Agriculture | | |
| More than 500 | 20 | 50.0 |
| 250 to 500 | 17 | 42.0 |
| Less than 250 | 3 | 8.0 |
| Horticulture | | |
| More than 200 | 16 | 40.0 |
| 100 to 200 | 19 | 47.0 |
| Less than 100 | 5 | 13.0 |
| Animal Husbandry | | |
| More than 100 | 4 | 10.0 |
| 50 to 100 | 28 | 70.0 |
| Less than 50 | 8 | 20.0 |
| Agricultural Engineering | | |
| More than 50 | 2 | 5.0 |
| 25 to 50 | 18 | 45.0 |
| Less than 25 | 20 | 50.0 |
| Forestry | | |
| More than 100 | 7 | 17.0 |
| 50 to 100 | 30 | 75.0 |
| Less than 50 | 3 | 8.0 |
| Sericulture | | |
| More than 25 | 3 | 8.0 |
| 10 to 25 | 22 | 55.0 |
| Less than 10 | 15 | 37.0 |
| Fisheries | | |
| More than 25 | 2 | 6.0 |
| 10 to 25 | 19 | 47.0 |
| Less than 10 | 19 | 47.0 |

engineering (62 per cent) and sericulture (60 per cent). There was almost equal distribution in the case of fisheries and animal husbandry. In fisheries, 47 per cent conducted less than 25 meetings and 45 per cent conducted 15 to 25 meetings. As regards animal husbandry, 45 per cent conducted more than 25 meetings and 40 per cent conducted 15 to 25 meetings (Table 12).

### 4.1.7 Number of farmers benefited by supplies and services arranged by extension functionaries under BBES in different subject matter areas.

It is clear from Table 13 that nearly half of the AAOs (47 per cent) reported that 250 to 500 farmers were benefited by supplies and services in agriculture and 41 per cent reported that more than 500 farmers were benefited. Further, less than 100 farmers were benefited from horticultural supplies (44 per cent AAOs reporting), 50 to 100 farmers in forestry and animal husbandry (67 and 60 per cent), 25 to 50 farmers in agricultural engineering (62 per cent), 10 to 25 farmers in sericulture (76 per cent) and fisheries (63 per cent).

In respect of AOs(SMSs), 50 per cent reported that more than 500 farmers benefited from agricultural supplies, 100 to 200 farmers in horticulture (47 per cent), 50 to 100 farmers in forestry (75 per cent), animal husbandry (70 per cent), less than 25 farmers in agricultural engineering (50

Table 15

**Overall attitude of AAOs towards BBES**

(n = 110)

| Attitude | AAOs | | Mean | S.D | C.V |
|---|---|---|---|---|---|
| | No. | Per cent | | | |
| Highly favourable | 11 | 10.0 | 71.42 | 6.98 | 9.77 |
| Favourable | 74 | 67.0 | | | |
| Less favourable | 22 | 20.0 | | | |
| Unfavourable | 3 | 3.0 | | | |
| Total | 110 | 100.0 | | | |

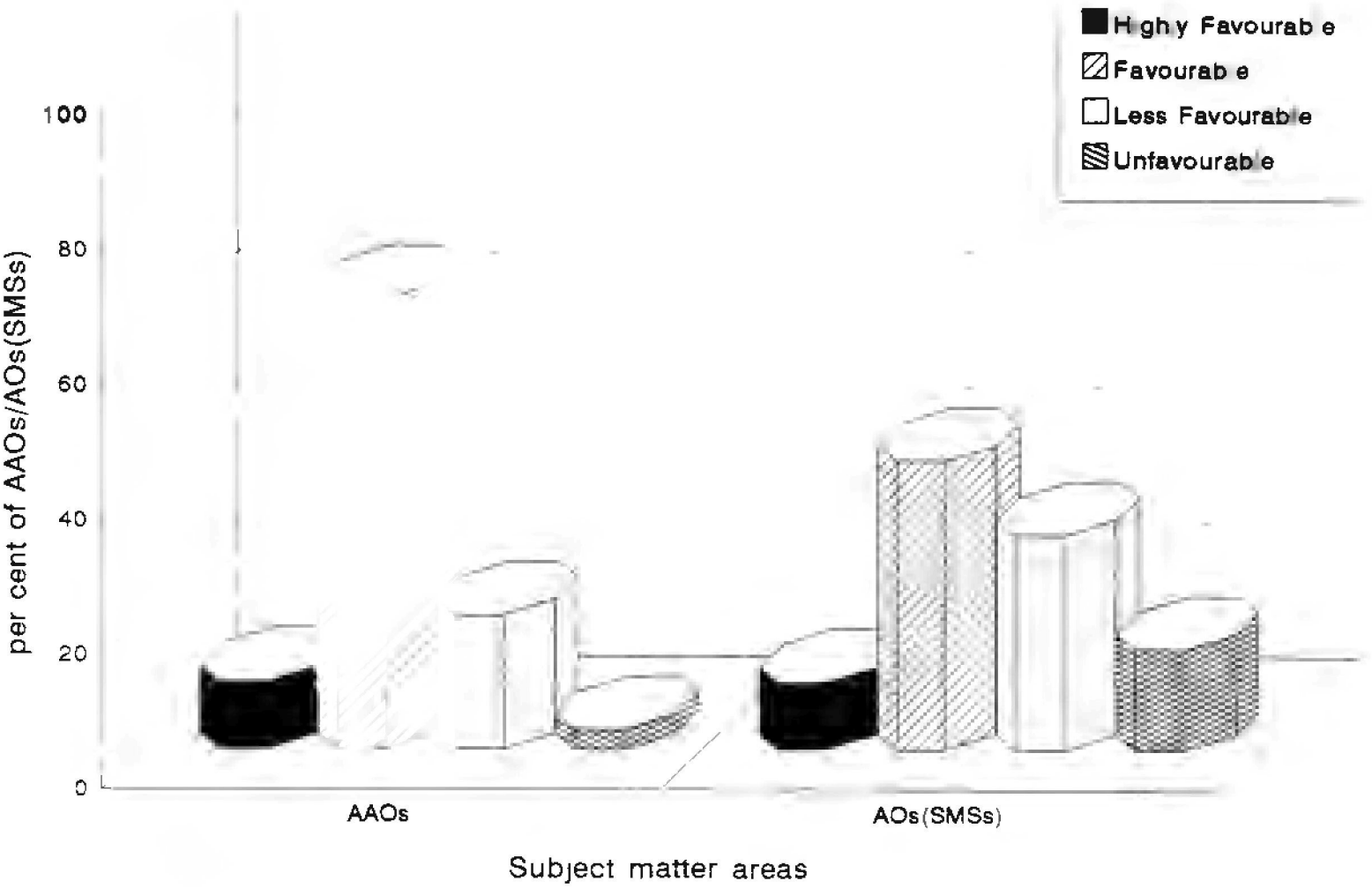


Fig.4 OVERALL ATTITUDE OF AAOs AND AOs(SMSs) TOWARDS BBES

Table 16

Responses of AAOs to different attitude statements relating to BBES

(n = 110)

| Statements | Strongly agree | Agree | Undecided | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| Extension functionaries' knowledge widened due to training in different subject matter areas | 93 (84.0) | 17 (16.0) | 0 | 0 | 0 |
| Visits not planned according to the needs of farmers | 55 (50.0) | 33 (30.0) | 0 | 17 (16.0) | 5 ( 4.0) |
| Guidance to extension functionaries is adequate | 55 (50.0) | 38 (34.0) | 0 | 17 (16.0) | 0 |
| Sub-divisional training is not useful | 33 (30.0) | 22 (20.0) | 17 (16.0) | 33 (30.0) | 5 ( 4.0) |
| All through the year extension functionaries do work | 50 (45.0) | 33 (30.0) | 16 (15.0) | 0 | 11 (10.0) |
| More publicity than work | 38 (35.0) | 33 (30.0) | 11 (10.0) | 6 ( 5.0) | 22 (20.0) |
| More demonstrations and farm trails | 33 (30.0) | 55 (50.0) | 17 (16.0) | 0 | 5 ( 4.0) |
| More importance to supplies and services than technology transfer | 38 (35.0) | 61 (55.0) | 11 (10.0) | 0 | 0 |
| Training programmes are useful | 38 (35.0) | 33 (30.0) | 39 (35.0) | 0 | 0 |
| Only farmers benefitted in T & V are again benefitted in BBES | 33 (30.0) | 27 (25.0) | 0 | 33 (30.0) | 17 (15.0) |
| Overall development of farmers | 38 (36.0) | 55 (50.0) | 6 ( 5.0) | 5 ( 4.0) | 6 ( 5.0) |

Table continued

Continued table 16:

| Statements | Strongly agree | Agree | Undecided | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| BBES has to be replaced | 27 (25.0) | 38 (35.0) | 17 (15.0) | 6 ( 5.0) | 22 (20.0) |
| Unification of all land-based activities | 33 (30.0) | 66 (61.0) | 5 ( 4.0) | 6 ( 5.0) | 0 |
| Technological base of Subject Matter Specialists is weak | 17 (15.0) | 55 (50.0) | 0 | 33 (30.0) | 5 ( 5.0) |
| Other departments provide updated and relevant information | 38 (35.0) | 22 (20.0) | 6 ( 5.0) | 11 (10.0) | 33 (30.0) |
| Only progressive and big farmers are benefitted | 27 (25.0) | 17 (15.0) | 33 (30.0) | 22 (20.0) | 11 (10.0) |
| All technical problems of farmers are solved | 49 (44.0) | 50 (45.0) | 6 ( 6.0) | 5 ( 5.0) | 0 |
| Additional work reduced efficiency | 44 (40.0) | 44 (40.0) | 5 ( 5.0) | 17 (15.0) | 0 |
| Several extension methods are used | 43 (39.0) | 50 (45.0) | 0 | 17 (16.0) | 0 |
| Overloaded with different subject matter areas | 50 (45.0) | 38 (35.0) | 6 ( 5.0) | 11 (10.0) | 5 ( 5.0) |
| Good co-operation from other departments | 27 (24.0) | 22 (20.0) | 11 (10.0) | 22 (20.0) | 28 (26.0) |
| Status and recognition came down | 22 (20.0) | 27 (24.0) | 17 (16.0) | 39 (35.0) | 5 ( 5.0) |

Figures in parantheses indicate percentage

per cent), 10 to 25 farmers in sericulture (55 per cent) and less than 10 farmers in fisheries (50 per cent) (Table 14).

## 4.2 ATTITUDE OF EXTENSION FUNCTIONARIES TOWARDS BBES

### 4.2.1 Overall attitude of extension functionaries towards BBES

The AAOs deferred in their attitude towards BBES. While majority of them (67 per cent) had favourable attitude, only 10 per cent of them had highly favourable attitude, 20 per cent of them had less favourable attitude and 3 per cent had unfavourable attitude towards BBES (Table 15 and Fig. 4).

It is clearly brought out from Table 17 that nearly half of the AOs(SMSs) (43 per cent) had favourable attitude, 32 per cent had less favourable attitude, a few (10 per cent) had highly favourable attitude and 15 per cent had unfavourable attitude(Fig. 4).

### 4.2.2 Responses of extension functionaries to different attitude statements relating to BBES

It is evident from Tables 16 and 19 that a great majority of AAOs (84 per cent) strongly agreed that the extension functionaries' knowledge has increased due to the training received by them in different subject matter areas under BBES. Nearly half of them (40 to 50 per cent) strongly agreed that the programmes of visits of extension functionaries were never planned according to the seasonal needs and convenience of the farmers, there was adequate

Table 17

Overall attitude of AOs(SMSs) towards BBES

(n = 40)

| Attitude | AOs(SMSs) | | Mean | S.D | C.V |
|---|---|---|---|---|---|
| | No. | Per cent | | | |
| Highly favourable | 4 | 10.0 | 76.95 | 12.11 | 15.74 |
| Favourable | 17 | 43.0 | | | |
| Less favourable | 13 | 32.0 | | | |
| Unfavourable | 6 | 15.0 | | | |
| Total | 40 | 100.0 | | | |

Table 18

Responses of AOs(SMSs) to different attitude statements relating to BBES

(n = 40)

| Statements | Strongly agree | Agree | Undecided | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| Extension functionaries' knowledge widened due to training in different subject matter areas | 28 (70.0) | 4 (10.0) | 6 (15.0) | 2 ( 5.0) | 0 |
| Visits not planned according to the needs of farmers | 5 (13.0) | 6 (15.0) | 0 | 21 (52.0) | 8 (20.0) |
| Guidance to extension functionaries is adequate | 8 (20.0) | 26 (65.0) | 3 ( 7.0) | 1 ( 3.0) | 2 ( 5.0) |
| Sub-divisional training is not useful | 15 (37.0) | 13 (33.0) | 4 (10.0) | 2 ( 5.0) | 6 (15.0) |
| All through the year extension functionaries do work | 8 (20.0) | 22 (55.0) | 1 ( 2.0) | 4 (10.0) | 5 (13.0) |
| More publicity than work | 6 (15.0) | 18 (45.0) | 11 (27.0) | 3 ( 8.0) | 2 ( 5.0) |
| More demonstrations and farm trails | 0 | 3 ( 7.0) | 3 ( 8.0) | 27 (67.0) | 7 (18.0) |
| More importance to supplies and services than technology transfer | 3 ( 8.0) | 2 ( 5.0) | 6 (15.0) | 18 (45.0) | 11 (27.0) |
| Training programmes are useful | 8 (20.0) | 1 ( 3.0) | 26 (65.0) | 5 (12.0) | 0 |
| Only farmers benefitted in T & V are again benefitted in BBES | 4 (10.0) | 7 (17.0) | 22 (55.0) | 3 ( 8.0) | 4 (10.0) |
| Overall development of farmers | 31 (77.0) | 3 ( 8.0) | 0 | 1 ( 3.0) | 5 (12.0) |

Table continued

Continued table 18:

| Statements | Strongly agree | Agree | Undecided | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| BBES has to be replaced | 7 (17.0) | 0 | 3 ( 8.0) | 28 (70.0) | 2 ( 5.0) |
| Unification of all land-based activities | 17 (42.0) | 11 (28.0) | 1 ( 3.0) | 6 (15.0) | 5 (12.0) |
| Technological base of Subject Matter Specialists is weak | 4 (10.0) | 25 (62.0) | 8 (20.0) | 0 | 3 ( 8.0) |
| Other departments provide updated and relevant information | 0 | 4 (10.0) | 4 (10.0) | 30 (75.0) | 2 ( 5.0) |
| Only progressive and big farmers are benefitted | 3 ( 8.0) | 5 (12.0) | 8 (20.0) | 18 (45.0) | 6 (15.0) |
| All technical problems of farmers are solved | 8 (20.0) | 1 ( 3.0) | 2 ( 5.0) | 26 (65.0) | 3 ( 7.0) |
| Additional work reduced efficiency | 3 ( 8.0) | 29 (72.0) | 0 | 7 (17.0) | 1 ( 3.0) |
| Several extension methods are used | 1 ( 3.0) | 25 (62.0) | 2 ( 5.0) | 3 ( 8.0) | 9 (22.0) |
| Overloaded with different subject matter areas | 4 (10.0) | 31 (77.0) | 1 ( 3.0) | 2 ( 5.0) | 2 ( 5.0) |
| Good co-operation from other departments | 3 ( 8.0) | 5 (13.0) | 21 (52.0) | 4 (10.0) | 7 (17.0) |
| Status and recognition came down | 1 ( 3.0) | 4 (10.0) | 28 (70.0) | 0 | 7 (17.0) |

Figures in parantheses indicate percentage

guidance to extension functionaries under BBES, extension functionaries were engaged in extension work throughout the year, overloaded with different subject matter areas and additional work reduced their effective functioning. A majority of them (50 to 60 per cent) agreed that the unification of all land based activities, supplies and services are given more importance than transfer of technology, increase of demonstrations and farm trails, BBES helps for overall development of farmer and weak technological base of SMSs. Less than half (40 to 45 per cent) of them agreed that solving of all technical problems of farmers by extension functionaries, additional work reduced their effectiveness and use of several extension methods. Some of them (20 to 30 per cent) strongly disagreed with providing updated information by other department neads, BBES has to be replaced by some other system and good co-operation from other departments. Some of them (20 to 35 per cent) disagreed with status and recognition of extension functionaries has come down under BBES, weak technological base of SMSs, only those farmers who got benefits of T and V system earlier are now getting benefits of the BBES, sub-divisional level training programmes serve no purpose, only progressive and big farmers are benefited and good co-operation from other departments. Some of them (30 to 35 per cent) are undecided with training programmes are useful and only progressive and big farmers are benefited.

## Comparison of the attitude of AAOs and AOs(SMSs)

| STATEMENT | Statement Nature | AAOs attitude [%] | | | Similarity of attitudes | AOs SMSs attitude [%] | | |
|---|---|---|---|---|---|---|---|---|
| | | positive attitude | undecided | Negative attitude | | positive attitude | undecided | Negative attitude |
| Extension functionanes knowledge w'dened due to train ng in different ubject matter areas. | + | 100 | 0 | 0 | = | 80 | 15 | 5 |
| Visits not p anned accordng to the needs of farmers | - | 20 | 0 | 80 | ≠ | 72 | 0 | 28 |
| Guidance to extens on functionanes s idequate | + | 84 | 0 | 16 | = | 85 | 7 | 8 |
| Sub-div s ona train ng s not useful | - | 34 | 16 | 50 | = | 20 | 10 | 70 |
| All through the year extens on functionaries do work | + | 75 | 15 | 10 | = | 75 | 2 | 23 |
| More pub c ty than work | - | 25 | 10 | 65 | ≠ | 13 | 27 | 60 |
| More demonstrations and farm tra s | + | 80 | 16 | 4 | ≠ | 7 | 8 | 85 |
| More importance to supp es and serv ces tran techno ogy transfer | - | 0 | 10 | 90 | ≠ | 72 | 15 | 13 |
| Tra n ng programmes are usefu | + | 65 | 35 | 0 | ≠ | 23 | 65 | 12 |
| Only farmers benefited n T & V are aga n benefited in BBES | - | 45 | 0 | 55 | ≠ | 18 | 55 | 27 |
| Overall deve opment of farmers | + | 86 | 5 | 9 | = | 85 | 0 | 15 |

*Continued table 19*

| STATEMENT | Statemen Nature | AAOs attitude [%] | | | Similarity of attitudes | AO-SMSs attitude [%] | | |
|---|---|---|---|---|---|---|---|---|
| | | positive attitude | undecide | Negative attitude | | positive attitude | undecide | Negative attitude |
| BBES has to be rep aced | - | 25 | 15 | 60 | ≠ | 75 | 8 | 17 |
| Un f cation of a l and based actv t es | + | 91 | 4 | 5 | = | 70 | 3 | 27 |
| Technological base of Subject Matter Specialists is weak | - | 35 | 0 | 65 | = | 8 | 20 | 72 |
| Other departments provide updated and e evant information | + | 55 | 5 | 40 | ≠ | 10 | 10 | 80 |
| Only progressive and b g farmers are benefited | - | 30 | 30 | 40 | ≠ | 60 | 20 | 20 |
| All technica l prob ems of farmers are solved | + | 89 | 6 | 5 | ≠ | 23 | 5 | 72 |
| Add t ona l work reduced eff c ency | - | 15 | 5 | 80 | = | 20 | 0 | 80 |
| Severa l extens on methods are used | + | 84 | 0 | 16 | = | 65 | 5 | 30 |
| Overloaded with d fferent subject matter areas | - | 15 | 5 | 80 | = | 10 | 3 | 87 |
| Good co-operation from other Departments | + | 44 | 10 | 46 | ≠ | 21 | 52 | 27 |
| Status and recogn tion came down | - | 40 | 16 | 44 | ≠ | 17 | 70 | 17 |

As regards AOs(SMSs) , a majority of them (70 to 77 per cent) strongly agreed that BBES helps for overall development of farmers and knowledge of extension functionaries is widened due to the training received in different subject matter areas. Less than half (42 and 37 per cent) strongly agreed with unification of land based activities and sub-divisional level training is not useful. A majority of them (55 to 77 per cent) agreed that extension functionaries are overloaded with different subject matter areas, additional work reduced their effectiveness, guidance to extension functionaries is not adequate, technological base of SMSs is weak, extension functionaries use several extension methods and they are working throughout the year. Less than half (45 per cent) agreed with more publicity than actual work in BBES. Very few of AOs(SMSs) strongly disagreed with almost all statements. A majority of them (52 to 75 per cent) disagreed with updated information given by other department heads, replacement of BBES, increase of demonstrations and farm trails, solving of all technical problems of the farmers and not planning the visits in accordance to farmer's needs. Giving more importance for supplies and services than transfer of technology in BBES is disagreed by 45 per cent . Majority of them (52 to 70 per cent) were indecisive with coming down of status and recognition of extension functionaries, training programmes are useful, only those farmers who got benefits of T and V

Table 20

Socio-personal characteristic profile of AAOs

(n = 110)

| Characteristics | AAOs | | Mean | S.D | C.V |
|---|---|---|---|---|---|
| | No. | Per cent | | | |
| Age | | | | | |
| Up to 35 years | 18 | 17.0 | | | |
| 36 to 50 years | 75 | 68.0 | 43.78 | 7.16 | 16.35 |
| More than 50 years | 17 | 15.0 | | | |
| Education | | | | | |
| Up to S.S.L.C | 69 | 63.0 | | | |
| Above S.S.L.C | 41 | 37.0 | 1.49 | 0.75 | 50.38 |
| Mass media use | | | | | |
| High | 48 | 44.0 | | | |
| Low | 62 | 56.0 | 10.78 | 6.46 | 59.94 |
| Total experience | | | | | |
| More | 67 | 61.0 | | | |
| Less | 43 | 39.0 | 19.26 | 7.37 | 38.28 |
| Experience under T&V | | | | | |
| More | 69 | 63.0 | | | |
| Less | 41 | 37.0 | 10.96 | 2.21 | 20.15 |
| In-service training | | | | | |
| More | 62 | 56.0 | | | |
| Less | 48 | 44.0 | 7.37 | 4.27 | 57.95 |
| Work facility | | | | | |
| High | 65 | 59.0 | | | |
| Low | 45 | 41.0 | 21.75 | 5.93 | 27.27 |
| Conveyance facility | | | | | |
| Adequate | 21 | 19.0 | | | |
| Inadequate | 89 | 81.0 | 2.17 | 0.81 | 37.34 |
| Coordination | | | | | |
| High | 35 | 32.0 | | | |
| Low | 75 | 68.0 | 11.12 | 6.55 | 58.87 |
| Availability of funds for TA | | | | | |
| More | 5 | 5.0 | | | |
| Less | 105 | 95.0 | 3.11 | 0.51 | 16.50 |

Table continued

Continued table 20

| Characteristics | AAOs | | Mean | S.D | C.V |
|---|---|---|---|---|---|
| | No. | Per cent | | | |
| **Residential accommodation** | | | | | |
| More | 77 | 70.0 | | | |
| Less | 33 | 30.0 | 8.64 | 1.60 | 18.54 |
| **Promotional opportunities** | | | | | |
| More | 39 | 35.0 | | | |
| Less | 71 | 65.0 | 5.01 | 1.38 | 27.51 |
| **Rural-urban background** | | | | | |
| Rural | 46 | 42.0 | | | |
| Urban | 64 | 58.0 | 10.79 | 2.35 | 21.82 |
| **Achievement motivation** | | | | | |
| High | 59 | 54.0 | | | |
| Low | 51 | 46.0 | 30.42 | 5.63 | 18.51 |
| **Job satisfaction** | | | | | |
| High | 47 | 43.0 | | | |
| Low | 63 | 57.0 | 43.67 | 12.31 | 28.18 |
| **Job involvement** | | | | | |
| High | 62 | 56.0 | | | |
| Low | 48 | 44.0 | 79.95 | 11.68 | 14.61 |
| **Organizational climate** | | | | | |
| More facilitating | 54 | 49.0 | | | |
| Less facilitating | 56 | 51.0 | 97.64 | 14.21 | 14.56 |
| **Morale** | | | | | |
| High | 68 | 62.0 | | | |
| Low | 42 | 38.0 | 53.23 | 9.78 | 18.37 |
| **Perceived workload** | | | | | |
| More | 35 | 32.0 | | | |
| Less | 75 | 68.0 | 17.24 | 6.33 | 36.75 |

Table 21

Socio-personal characteristic profile of AOs(SMSs)

(n = 40)

| Characteristics | AOs(SMSs) No. | Per cent | Mean | S.D | C.V |
|---|---|---|---|---|---|
| Age | | | | | |
| Up to 35 years | 7 | 17.0 | | | |
| 36 to 50 years | 30 | 75.0 | 42.65 | 7.50 | 17.59 |
| More than 50 years | 3 | 8.0 | | | |
| Education | | | | | |
| B.Sc. (Ag.) | 31 | 77.0 | | | |
| M.Sc. (Ag.) | 9 | 23.0 | 5.23 | 0.42 | 8.09 |
| Mass media use | | | | | |
| High | 19 | 47.0 | | | |
| Low | 21 | 53.0 | 12.20 | 2.27 | 18.58 |
| Total experience | | | | | |
| More | 25 | 63.0 | | | |
| Less | 15 | 37.0 | 17.93 | 7.55 | 42.14 |
| Experience under T&V | | | | | |
| More | 32 | 80.0 | | | |
| Less | 8 | 20.0 | 10.88 | 2.28 | 20.95 |
| In-service training | | | | | |
| More | 15 | 37.0 | | | |
| Less | 25 | 63.0 | 5.35 | 2.89 | 53.97 |
| Work facility | | | | | |
| High | 19 | 47.0 | | | |
| Low | 21 | 53.0 | 15.90 | 3.82 | 24.04 |
| Conveyance facility | | | | | |
| Adequate | 9 | 22.0 | | | |
| Inadequate | 31 | 78.0 | 2.30 | 0.82 | 35.77 |
| Coordination | | | | | |
| High | 19 | 47.0 | | | |
| Low | 21 | 53.0 | 9.33 | 6.76 | 72.51 |
| Availability of funds for TA | | | | | |
| More | 8 | 20.0 | | | |
| Less | 32 | 80.0 | 3.38 | 0.81 | 23.90 |

Table continued

Continued table 21

| Characteristics | AOs(SMSs) No. | Per cent | Mean | S.D | C.V |
|---|---|---|---|---|---|
| Residential accommodation | | | | | |
| More | 23 | 58.0 | | | |
| Less | 17 | 42.0 | 8.48 | 1.38 | 16.25 |
| Promotional opportunities | | | | | |
| More | 23 | 58.0 | | | |
| Less | 17 | 42.0 | 4.25 | 1.28 | 30.02 |
| Rural-urban background | | | | | |
| Rural | 23 | 58.0 | | | |
| Urban | 78 | 42.0 | 9.23 | 1.95 | 21.19 |
| Achievement motivation | | | | | |
| High | 28 | 70.0 | | | |
| Low | 12 | 30.0 | 26.38 | 6.93 | 26.26 |
| Job satisfaction | | | | | |
| High | 15 | 37.0 | | | |
| Low | 25 | 63.0 | 25.73 | 8.85 | 34.41 |
| Job involvement | | | | | |
| High | 12 | 30.0 | | | |
| Less | 28 | 70.0 | 33.95 | 13.68 | 40.29 |
| Organizational climate | | | | | |
| More facilitating | 23 | 58.0 | | | |
| Less facilitating | 17 | 42.0 | 85.08 | 17.65 | 20.75 |
| Morale | | | | | |
| High | 17 | 42.0 | | | |
| Low | 23 | 58.0 | 37.08 | 12.15 | 32.78 |
| Perceived workload | | | | | |
| More | 23 | 58.0 | | | |
| Less | 17 | 42.0 | 15.85 | 3.34 | 21.07 |

system are benefited in BBES and good co-operation from other departments (Table 18 and 19).

### 4.2.3 Socio-personal characteristic profile of extension functionaries.

It is evident from Table 20 that 68 per cent of the AAOs were in middle age group. The proportion of young and old were very few. Majority of them (56 to 70 per cent) had more experienced under T & V, have residential accommodation, high morale, more total experience, more work facility, more job involvement and more in-service training. A great majority of them (95 and 81 per cent) have low availability of funds for TA and less conveyence facility. A majority of them (56 to 68 per cent) have less perceived workload, low coordination, less promotional opportunities, low education, urban background, less job satisfaction and low mass media use. A big majority of AOs(SMSs) (75 per cent) were in middle age group. A few were in old and young group. Large number of them (57 to 80 per cent) had more experience under T and V, high achievement motivation, more total experience, more residential accommodation, more promotional opportunities, rural background, better organizatonal climate and more perceived workload. Majority of them (58 to 80 per cent) stated that there were less funds for TA, low education, less conveyence facility, less job involovement, less job satisfaction, less in-service training (Table 21).

Table 22

Regression analysis of attitude of AAOs towards BBES and socio-personal characteristics

(n = 110)

| Socio-personal characteristics | Multiple regression coefficient values 'b' | S.E | 't' value |
|---|---|---|---|
| Age | 0.1459 | 0.0821 | 1.7771 |
| Education | -1.4731 | 1.0449 | -1.4098 |
| Mass media use | 0.2700 | 0.1473 | 1.8322 |
| Total experience | -0.3945* | 0.1751 | -2.2530 |
| Experience under T & V system | -1.3770* | 0.5066 | -2.7181 |
| In-service training | 0.0175 | 0.1594 | 0.1099 |
| Work facility | 0.0566 | 0.1210 | 0.4676 |
| Conveyance facility | 1.5140 | 0.8316 | 1.8205 |
| Coordination | 0.1895 | 0.1113 | 1.7030 |
| Availability of funds for TA | 1.5513 | 1.4645 | 1.0593 |
| Residential accommodation | -0.4349 | 0.4778 | -0.9104 |
| Promotional opportunities | -0.7440 | 0.5026 | -1.4804 |
| Rural-urban background | 0.1513 | 0.3005 | 0.5035 |
| Achievement motivation | 0.1492 | 0.1454 | 1.0259 |
| Job satisfaction | -0.0728 | 0.0635 | -1.1464 |
| Job involvement | 0.5494** | 0.1838 | 2.9898 |
| Organizational climate | -0.0294 | 0.0501 | -0.5866 |
| Morale | -0.0029 | 0.0737 | -0.0400 |
| Perceived workload | 0.2622 | 0.1366 | 1.9202 |

Value of pure constant = 49.1002 S.E of this constant =0.6215
Value of R square = 0.2794
R - Bar square = 0.1272
Regression D.F = 19
Regression M.S.S = 78.0297
ERR DF = 90
ERR M.S.S = 42.4909
F value = 1.84
* = Significant at 5 per cent level
** = Significant at 1 per cent level

Table 23

Regression analysis of attitude of AOs(SMSs) towards BBES and socio-personal characteristics

(n = 40)

| Socio-personal characteristics | Multiple regression coefficient values 'b' | S.E | 't' value |
|---|---|---|---|
| Age | 0.3030 | 0.7456 | 0.4064 |
| Education | -12.4468 | 6.7820 | -1.8353 |
| Mass media use | 1.6020 | 0.9814 | 1.6324 |
| Total experience | -0.4637 | 0.7419 | -0.6250 |
| Experience under T & V system | 1.8321 | 1.7802 | 1.0291 |
| In-service training | 0.5291 | 0.8580 | 0.6167 |
| Work facility | -0.2709 | 0.6014 | -0.4505 |
| Conveyance facility | 4.3475 | 2.8886 | 1.5050 |
| Coordination | -0.2329 | 0.3445 | -0.6761 |
| Availability of funds for TA | -3.9267 | 3.0929 | -1.2696 |
| Residential accommodation | -2.6832 | 1.6779 | -1.5991 |
| Promotional opportunities | -0.5626 | 1.7022 | -0.3305 |
| Rural-urban background | 1.4501 | 1.0891 | 1.3315 |
| Achievement motivation | 0.2976 | 0.3486 | 0.8536 |
| Job satisfaction | 0.0766 | 0.2913 | 0.2629 |
| Job involvement | 0.5025* | 0.2043 | 2.4589 |
| Organizational climate | -0.0703 | 0.1364 | -0.5155 |
| Morale | 0.2741 | 0.1821 | 1.5053 |
| Perceived workload | -0.4116 | 0.7174 | -0.5738 |

Value of pure constant = 92.0298 S.E of this constant =1.6455
Value of R square = 0.6214
R - Bar square = 0.2618
Regression D.F = 19
Regression M.S.S = 137.1497
ERR DF = 20
ERR M.S.S = 108.3031
F value = 1.73
* = Significant at 5 per cent level
** = Significant at 1 per cent level

Table 24

Infrastructural facilities available for AAOs and AOs(SMSs)

| Infrastructure | AAOs (n=110) | | AOs(SMSs) (n=40) | |
|---|---|---|---|---|
| | No. | Per cent | No. | Per cent |
| Living in work place | | | | |
| I live in my work place | 67 | 61.0 | 22 | 55.0 |
| 5 km away | 21 | 20.0 | 10 | 26.0 |
| 10 km away | 11 | 10.0 | 4 | 10.0 |
| 15 km away | 4 | 3.0 | 2 | 5.0 |
| 20 km away | 3 | 3.0 | 1 | 2.0 |
| Beyong 25 km away | 4 | 3.0 | 1 | 2.0 |
| Availability of Government Residential facilities | | | | |
| Available | 36 | 33.0 | 2 | 5.0 |
| Not available | 74 | 67.0 | 38 | 95.0 |
| Accommodation | | | | |
| Adequate | 27 | 25.0 | 1 | 3.0 |
| Inadequate | 83 | 75.0 | 39 | 97.0 |
| Annual repairs done by Government | | | | |
| Once in a year | 16 | 14.0 | 4 | 10.0 |
| Once in two to three years | 4 | 4.0 | 1 | 3.0 |
| Once in four to five years | 3 | 3.0 | 2 | 5.0 |
| Not done at all | 87 | 79.0 | 33 | 82.0 |
| Conveyance | | | | |
| None | 0 | 0.0 | 1 | 3.0 |
| Cycle | 73 | 66.0 | 30 | 75.0 |
| Moped | 25 | 23.0 | 4 | 10.0 |
| Motor Cycle | 12 | 11.0 | 5 | 12.0 |

## 4.3 RELATIONSHIP BETWEEN SELECTED SOCIO-PERSONAL CHARACTERISTICS OF EXTENSION FUNCTIONARIES AND THEIR ATTITUDE TOWARDS BBES

It is clearly brought out from Table 22 that job involvement had positive and significant contribution to the variance in attitude of AAOs towards BBES, whereas total experience and experience under T and V had negative and significant contribution.

As regards AOs(SMSs), job involvement was the only variable which had positive and significant contribution to the variance in attitude of AOs(SMSs) towards BBES (Table 23).

## 4.4 INFRASTRUCTURAL FACILITIES AVAILABLE TO EXTENSION FUNCTIONARIES AND THEIR PROBLEMS

### 4.4.1 Infrastructural facilities

Results in Table 24 indicated that a majority of AAOs (61 per cent) lived in workplace, the government residential facilities were not available (67 per cent), accommodation given was not adequate (75 per cent) and repairs were not done (79 per cent). Further, 66 per cent of them possessed cycle for mobility.

Most of the AOs(SMSs) expressed that Government residential facilities were not available (95 per cent), accommodation given was not adequate (97 per cent), repairs were not done (82 per cent), used cycle for mobility (75 per cent) and lived in work place (55 per cent).

Table 25

Rank order of problems encountered in BBES as perceived by AAOs

(n = 110)

| Sl. No. | Problems | Total score | Rank |
|---|---|---|---|
| 1. | Overburdened by giving multiple messages on different enterprises | 284 | I |
| 2. | Target achievement comes in the way of transfer of technology | 272 | II |
| 3. | Supplies and services hinder the transfer of technology | 269 | III |
| 4. | Training is not given on different enterprises | 267 | IV |
| 5. | Inadequate knowledge on different enterprises | 258 | V |
| 6. | The officers of other departments do not co-operate with Department of Agriculture | 248 | VI |
| 7. | Training needs of extension workers are not taken care by the department while giving training | 238 | VII |
| 8. | Subject Matter Specialists of the department do not have adequate knowledge on different enterprises | 233 | VIII |
| 9. | Approaching target group of farmers instead of contact farmer affects the effective communication of messages | 215 | IX |
| 10. | Proper orientation training about BBES is not given to extension workers | 215 | IX |

Table 26

Rank order of problems encountered in BBES as perceived by AOs(SMSs)

(n = 40)

| Sl. No. | Problems | Total score | Rank |
|---|---|---|---|
| 1. | Supplies and services hinder the transfer of technology | 107 | I |
| 2. | Overburdened by giving multiple messages on different enterprises | 105 | II |
| 3. | Target achievement comes in the way of transfer of technology | 104 | III |
| 4. | Training is not given on different enterprises | 100 | IV |
| 5. | Inadequate knowledge on different enterprises | 93 | V |
| 6. | Proper orientation training about BBES is not given to extension workers | 93 | V |
| 7. | The officers of other departments do not co-operate with Department of Agriculture | 87 | VII |
| 8. | Subject Matter Specialists of the department do not have adequate knowledge on different enterprises | 85 | VIII |
| 9. | Training needs of extension workers or not taken care by the department while giving training | 82 | IX |
| 10. | Approaching target group of farmers instead of contact farmer affects the effective communication of messages | 63 | X |

Table 27

Extent of problems encountered in BBES as perceived by AAOs

(n = 110)

| Sl. No. | Problems | Degree of problem | | | | | |
|---|---|---|---|---|---|---|---|
| | | Greater extent | | Some extent | | Not a problem | |
| | | No. | % | No. | % | No. | % |
| 1. | Inadequate knowledge on different enterprises | 49 | 45.0 | 50 | 45.0 | 11 | 10.0 |
| 2. | Training is not given on different enterprises | 60 | 55.0 | 37 | 34.0 | 13 | 11.0 |
| 3. | Subject Matter Specialists of the department do not have adequate knowledge on different enterprises | 19 | 17.0 | 85 | 78.0 | 6 | 5.0 |
| 4. | The officers of other departments do not co-operate with Department of Agriculture | 45 | 41.0 | 48 | 44.0 | 17 | 15.0 |
| 5. | Training needs of extension workers or not taken care by the department while giving training | 33 | 30.0 | 62 | 56.0 | 15 | 14.0 |
| 6. | Supplies and services hinder the transfer of technology | 57 | 52.0 | 45 | 41.0 | 8 | 7.0 |
| 7. | Approaching target group of farmers instead of contact farmer affects the effective communication of messages | 30 | 27.0 | 45 | 41.0 | 35 | 32.0 |
| 8. | Target achievement comes in the way of transfer of technology | 64 | 58.0 | 34 | 31.0 | 12 | 11.0 |
| 9. | Overburdened by giving multiple messages on different enterprises | 72 | 66.0 | 30 | 27.0 | 8 | 7.0 |
| 10. | Proper orientation training about BBES is not given to extension workers | 29 | 26.0 | 47 | 43.0 | 34 | 31.0 |

Table 28

Extent of problems encountered in BBES as perceived by AOs(SMSs)

(n = 40)

| Sl. No. | Problems | Degree of problem | | | | | |
|---|---|---|---|---|---|---|---|
| | | Greater extent | | Some extent | | Not a problem | |
| | | No. | % | No. | % | No. | % |
| 1. | Inadequate knowledge on different enterprises | 15 | 37.0 | 23 | 58.0 | 2 | 5.0 |
| 2. | Training is not given on different enterprises | 25 | 62.0 | 10 | 25.0 | 5 | 13.0 |
| 3. | Subject Matter Specialists of the department do not have adequate knowledge on different enterprises | 5 | 13.0 | 35 | 87.0 | 0 | |
| 4. | The officers of other departments do not co-operate with Department of Agriculture | 8 | 20.0 | 31 | 77.0 | 1 | 3.0 |
| 5. | Training needs of extension workers or not taken care by the department while giving training | 3 | 7.0 | 36 | 90.0 | 1 | 3.0 |
| 6. | Supplies and services hinder the transfer of technology | 29 | 72.0 | 9 | 23.0 | 2 | 5.0 |
| 7. | Approaching target group of farmers instead of contact farmer affects the effective communication of messages | 4 | 10.0 | 20 | 50.0 | 16 | 40.0 |
| 8. | Target achievement comes in the way of transfer of technology | 28 | 70.0 | 8 | 20.0 | 4 | 10.0 |
| 9. | Overburdened by giving multiple messages on different enterprises | 27 | 68.0 | 11 | 27.0 | 2 | 5.0 |
| 10. | Proper orientation training about BBES is not given to extension workers | 18 | 45.0 | 17 | 42.0 | 5 | 13.0 |

4.4.2 Problems encountered by extension functionaries in BBES

It is clearly brougnt out from Table 25 that tne AAOs were overburdened by giving multiple messages on different enterprises ranked first among various problems encountered by AAOs in BBES. It is closely followed by target achievement comes in the way of transfer of technology and supplies and services ninder the transfer of technology. The problems of approaching target group of farmers instead of contact farmers affects the effective communication of messages and proper orientation training about BBES is not given to extension functionaries are considered least important.

As regards AOs(SMSs), supplies and services hinder tne transfer of technology was rated first among various problems encountered by tnem in BBES. Next in tne order they were overburdened by giving multiple messages on different enterprises and target achievement comes in the way of transfer of technology. Training needs of extension functionaries were not taken care by tne department while giving training and approaching target group of farmers instead of contact farmers affects tne effective communication of messages were considered least important problems (Table 26).

# DISCUSSION

# V. DISCUSSION

The results of the study are discussed critically in this chapter under the following headings.

5.1 Subject matter areas covered by extension functionaries under BBES

5.2 Attitude of extension functionaries towards BBES

5.3 Relationship between selected socio-personal characteristics of extension functionaries and their attitude towards BBES

5.4 Infrastructural facilities available to extension functionaries and their problems in BBES

## 5.1 SUBJECT MATTER AREAS COVERED BY EXTENSION FUNCTIONARIES UNDER BBES

### 5.1.1 Subject matter areas on which extension functionaries delivered messages under BBES

Under BBES, the extension functionaries are required to deliver messages related to multi-subject matter. A great majority of both AAOs and AOs(SMSs) (95 to 100 per cent) delivered messages on agriculture, forestry and horticulture. It was closely followed by sericulture, animal husbandry, fisheries and agricultural engineering. Thus, messages are delivered by extension functionaries in all subject matter areas.

### 5.1.2 Number of messages delivered by extension functionaries in different subject matter areas under BBES

The extension functionaries, in general, delivered 100 to 200 messages in agriculture, 50 to 100 messages in horticulture, 25 to 50 messages in forestry, 15 to 25 messages in animal husbandry, 5 to 10 messages each in

agricultural engineering, sericulture and fisheries. The number of messages delivered in agriculture, horticulture and forestry are fairly high when compared to subject matter areas like animal husbandry, agricultural engineering, sericulture and fisheries. This may be due to less proficiency of the extension functionaries in these subject matter areas.

### 5.1.3 Perceived knowledge of extension functionaries on different subject matter areas

Most of the AAOs perceived that they had adequate knowledge in agriculture, horticulture and forestry. However, they feel that their knowledge in animal husbandry, agricultural engineering, sericulture and fisheries is inadequate. This may be due to the fact that AAOs are more trained in agriculture, horticulture and forestry than in other areas. The AOs(SMSs), in general, had adequate knowledge in all subject matter areas. The plausible reason may be that they are agricultural graduates.

### 5.1.4 Number of demonstrations conducted by extension functionaries in different subject matter areas

Majority of extension functionaries conducted 25 to 50 demonstrations in agriculture. However, they conducted only 5 to 10 demonstrations each in forestry, horticulture, fisheries, sericulture and agricultural engineering. Since their parent department is agriculture, they have conducted more demonstrations in agriculture whereas the remaining subject matter areas are included only with the inception of

BBES. Therefore, the number of demonstrations are relatively less in these subject matter areas.

### 5.1.5 Number of field days arranged by extension functionaries in different subject matter areas under BBES

The extension functionaries, in general, arranged 5 to 15 field days in agriculture. It was followed by 5 to 10 field days in horticulture, animal husbandry, forestry, agricultural engineering, fisheries and sericulture. Number of field days are less in these subject matter areas. This may be due to the fact that the extension functionaries had less expertise in conducting field days in these subject matter areas.

### 5.1.6 Number of meetings conducted by extension functionaries for different subject matter areas under BBES

A great majority of extension functionaries conducted more than 100 meetings in agriculture. But, they conducted only 25 to 50 meetings in horticulture, 15 to 25 meetings each in agricultural engineering, forestry, sericulture and animal husbandry. As mentioned earlier, this may be due to their perceived inadequacy in these subject matter areas.

### 5.1.7 Number of farmers benefited by supplies and services arranged by extension functionaries in different subject matter areas under BBES

A large number of extension functionaries reported that 250 to 500 farmers were benefited by supplies and services in agriculture. Relatively less number of farmers

were benefited in horticulture, forestry, animal husbandry, agricultural engineering, sericulture and fisheries. This may be due to the fact that the farmers are not aware of the inclusion of these subject matter areas in the Department of Agriculture, with the inception of BBES.

## 5.2 ATTITUDE OF EXTENSION FUNCTIONARIES TOWARDS BBES

The extension functionaries, in general, had favourable attitude towards BBES. Majority of AAOs (67 per cent) had favourable attitude, 10 per cent of them had highly favourable attitude, 20 per cent had less favourable attitude and 3 per cent had unfavourable attitude towards BBES. In other words, while 77 per cent of the AAOs had positive attitude, only 23 per cent had negative attitude. Similarly, nearly half of the AOs(SMSs) (43 per cent) had favourable attitude, 32 per cent had less favourable attitude, a few (10 per cent) had highly favourable attitude and 15 per cent had unfavourable attitude. This indicates that when compared to AAOs, the percentage of AOs(SMSs) holding negative attitude was higher. The plausible reason for having favourable attitude might be due to the fact that multiple messages are delivered in BBES. Moreover, in BBES, extension functionaries had extension work throughout the year, the coordination of all line departments and unification of all land based activities.

These findings were in agreement with that of Dhillon and Samundri (1965), Mundra (1966), Nandkeolyar and Singh

(1974), Sharma et al. (1975), Prajapati and Patel (1984), Reddy (1986), Swamy (1986) and Reddy (1987).

Most of the extension functionaries [AAOs and AOs(SMSs)] have positive attitudes on issues like widening of extension functionaries' knowledge due to training in different subject matter areas, adequacy of guidance to extension functionaries, extension functionaries working all through the year, overall development of farmers, unification of all land-based activities and using several extension methods.

A majority of the extension functionaries [AAOs and AOs(SMSs)] have negative attitudes on issues like usefulness of sub-divisional training, publicity than work, weak technological base of Subject Matter Specialists, reduced efficiency due to additional work and overloading with different subject matter areas.

However, while most of the AAOs have positive attitudes on issues like more demonstrations and farm trails, other departments providing updated and relevant informations and solving all technical problems of the farmers, the AOs(SMSs) have negative attitude towards them. Conversely, while AOs(SMSs) have positive attitudes on issues like non-planning of visits according to the needs of farmers, importance to supplies and services than technology transfer,

replacing of BBES and benefiting only progressive and big farmers, the AAOs have negative attitude toward them.

Further, the study revealed that most of the AOs(SMSs) have no definite attitude (undecided) toward issues like usefulness of training programmes, benefiting only farmers benefited in T & V, co-operation from other departments and coming down of status and recognition.

Among the AAOs, a more or less equal per cent of respondents have expressed opposite attitudes on issues like benefiting only farmers benefited in T & V, other departments providing updated and relevant informations, benefiting only progressive and big farmers, co-operation from other departments and coming down of status and recognition. But no such differences were observed among AOs(SMSs) .

This may be due to lack of proper orientation to BBES about its concept, philosophy, principles etc. and problems they encounter in carrying out their duties.

## 5.3 RELATIONSHIP BETWEEN SELECTED SOCIO-PERSONAL CHARACTERISTICS OF EXTENSION FUNCTIONARIES AND THEIR ATTITUDE TOWARDS BBES

### 5.3.1 Socio-personal characteristics profile of extension functionaries

A big majority of both AAOs and AOs(SMSs) had low profile in job satisfaction and availability of funds for TA. Besides, AAOs had poor profile in coordination, mass media use, perceived workload, promotion and rural-urban

background. In addition, AOs(SMSs) had low profile in conveyance, job involvement, in-service training and morale.

5.3.1.1 **Job satisfaction**

The extension functionaries had low profile in job satisfaction. This may be due to monotony of repeating the same messages over a period of long time.

5.3.1.2 **Availability of funds for TA**

The extension functionaries had low availability of funds for TA. The reason may be delay in passing the bills by superiors and amount given is insufficient.

5.3.1.3 **Coordination**

The AAOs had low profile in coordination. This may be due to poor co-operation from the sister departments in providing updated and related informations to the extension functionaries.

5.3.1.4 **Mass media use**

The AAOs had low mass media use. This may be due to the fact that age had influence on mass media use. Majority of them were middle aged. They may lack interest in knowing new things.

5.3.1.5 **Perceived workload**

The AAOs maintained low profile in perceived workload. This may be due to personality factor rather than job factor alone. For a diligent and enthusiastic extension functionary

there are equal chances to keep himself busy catering to the demands of his job. Conversely, an apathetic extension functionary may while away his time and sleep over his duties. Hence, the perception of workload is dependent on the personality of the individual apart from the nature of the job he occupies.

5.3.1.6 **Promotional opportunities**

The AAOs had less promotional opportunities. Since more number of extension functionaries are in position, it gets delayed to be promoted to higher cadre.

5.3.1.7 **Rural-urban background**

Majority of the AAOs had urban background. General professional fit of the personnel into the organization is more important than the social system they represent from the point of view of organization's effectiveness.

5.3.1.8 **Conveyance facility**

The AOs(SMSs) had less conveyance facility. Conveyance (cycle) takes much of their transit time during visits and great deal of physical and mental exhaustion.

5.3.1.9 **Job involvement**

The AOs(SMSs) had less job involvement. This may be due to lack of interest, lack of new messages to pass to the farmers.

5.3.1.10 **In-service training**

The AOs(SMSs) had less in-service training. More importance is given for monthly training programmes, which is inbuilt as a methodology in BBES. Moreover, number or duration of training undergone has no relevance unless content and mode of training meet the real training needs.

5.3.1.11 **Morale**

The AOs(SMSs) had low morale. This may be due to lack of incentives like promotion, quarters for living and vehicles for mobility.

5.3.2 **Relationship between selected socio-personal characteristics of extension functionaries and their attitude towards** BBES

There was no significant relationship between attitude of AAOs and their age, education, mass media use, in-service training, work facility, conveyance facility, coordination, availability of funds for TA, residential accommodation, promotional opportunities, rural-urban background, achievement motivation, job satisfaction, organizational climate, morale and perceived work load.

Similarly there was no significant relationship between attitude of AOs(SMSs) and their age, education, mass media use, total experience, experience under T and V system, in-service training, work facility, conveyance facility, coordination, availability of funds for TA, residential accommodation, promotional opportunities, rural-urban

background, achievement motivation, job satisfaction, organizational climate, morale and perceived work load.

However, the variables which had significant relationship with BBES are discussed below.

5.3.2.1 Job involvement

Job involvement had positive and significant contribution to the variance in attitude of both AAOs and AOs(SMSs) towards BBES. This may be because of the fact that job involvement increases interest and enthusiasm, sincerity of purpose, sympathetic approach, greater understanding of the basic tenets of the BBES which ultimately leads to favourable attitude towards BBES.

5.3.2.2 Total experience

Total experience had negative and significant contribution to the attitude to AAOs towards BBES. This may be due to the fact that many experienced people show the symptom of disinterest due to an exposure to the same nature of development work at the grassroots level over a period of long time. Lack of promotional opportunities for a long time may also be a factor.

5.3.3.3 Experience under T & V system

Experience under T & V system had negative and significant contribution to the attitude of AAOs towards BBES. In general, more experience under T & V system should necessarily help to improve his attitude towards BBES. The

experienced AAO can better communicate with the people, can understand and solve the farmers problems effectively. In addition, repetition of the same messages and extension methods leads to expertise in the knowledge and techniques. All these, in general, should enhance their attitude towards BBES. But the length of experience may not improve their attitude at the same proportion. Most of the AAOs felt that giving multiple messages without training on different enterprises was a problem. This problem would have generated a negative attitude among them towards BBES. However, a positive relationship, though not significant, was observed in the case of AOs(SMSs).

## 5.4 INFRASTRUCTURAL FACILITIES AVAILABLE TO EXTENSION FUNCTIONARIES AND THEIR PROBLEMS IN BBES

### 5.4.1. Infrastructural facilities

The extension functionaries, in general, lived in workplace. This may be due to the fact that living in workplace helps to acquaint with the situation and understand farmers' problems. Moreover, messages will be accepted by farmers more quickly due to 'we feeling' developed among them.

Majority of the extension functionaries resented that residential facilities were not available, accommodation was inadequate and repairs were not being attended. This may be due to the fact that innumerable number of extension functionaries are working in the Department of Agriculture

and it becomes an herculean task for the department to provide quarters for all and maintain them.

Extension functionaries, in general, possessed cycle for mobility. This may be due to the fact that the cycle is convenient to travel on the ill-maintained, mud roads of the villages and less cost of maintenance.

5.4.2 Problems encountered by extension functionaries

The extension functionaries, in general, perceived various problems in BBES. The problem of overburdened by giving multiple messages on different enterprises, ranked first among various problems. The psychological feeling of overburdened may be due to the fact that there is a shift from simple messages in T & V to multiple messages in BBES. This problem can be easily solved by giving training on the advantages of BBES.

The problem of target achievement comes in the way of transfer of technology ranked second. It is followed by supplies and services hinder the transfer of technology. This may be due to the fact that lack of availability of inputs at appropriate time and adequate quantity. This leads to problems in disposing the inputs which affects the targeted crop production and area coverage. Thus, the main component transfer of technology, is pushed back by the complementing and supplementing components, namely supplies and services and target achievement.

The problem of training is not given on different enterprises and inadequate knowledge on different enterprises, ranked fourth and fifth, respectively.

# SUMMARY

# VI. SUMMARY

India has launched various developmental programmes like Community Development Programme, Intensive Agricultural District Programme, T & V system and of late, BBES, to develop its agricultural productivity and to bring about suitable socio-economic changes in the rural areas. The Government of Tamil Nadu has introduced the BBES in April, 1991 and it entered into an agreement with the World Bank through Government of India for implementing the project for seven years from 1991. The project is named as Tamil Nadu Agricultural Development Project (TNADP).

The BBES is envisaged to make good the deficiencies of the T and V system. The BBES is intended to provide additional messages suitable for agriculture and allied activities like crop production, horticulture, animal husbandry, agricultural engineering, forestry, sericulture, fisheries, etc., to the farmers. In other words, the philosophy of BBES lies in formulating and delivering composite messages to the farmers to meet the needs of their full agricultural enterprises.

It is a well known fact that the attitude of an individual towards his profession has a significant influence upon his role performance in that profession. This being so, the efficiency of an extension worker in discharging of responsibilities is largely influenced by his attitude towards the extension system with which he is

associated. AAO is the operational person in TNADP, who is in the lowest rung of the organizational ladder, responsible for carrying out the multiple messages right at the farmer's doorstep.

AOs(SMSs) is the person who provides the messages to be delivered to the farmer and trains the AAO. Hence, it is necessary to evaluate objectively the attitude of the AAOs and AOs(SMSs) towards the BBES. Considering this, the present study was undertaken with the following specific objectives.

1. To know the different subject matter areas covered under broad based extension system.
2. To measure the attitude of different types of extension functionaries towards broad based extension system.
3. To find out the relationship between the selected socio-personal characteristic of extension functionaries and their attitude towards broad based extension system.
4. To identify the problems faced by extension functionaries in broad based extension system.

The investigation was carried out in the purposefully selected six taluks viz., Cuddalore, Chidambaram, Panruti, Vridhachalam, Kattumannar Koil and Tittagudi of South Arcot district of Tamil Nadu state during 1993-94. All the AAOs from the six taluks and all the AOs(SMSs) of the district were selected for the study. The total sample consisted of

110 AAOs and 40 AOs(SMSs). Attitude of extension functionaries towards BBES was the dependent variable and age, education, mass media use, total experience, experience under T & V system, in-service training, work facility, conveyance facility, coordination, availability of funds for TA, residential accommodation, promotional opportunities, rural-urban background, acnievement motivation, job satisfaction, job involvement, organizational climate, morale and perceived workload were the independent variables for the study.

A scale was developed to quantify the attitude of extension functionaries towards BBES. With respect to selected independent variables, either scnedules were developed for the purpose or adapted scales were used to measure them.

The data were collected during December, 1993 - January, 1994, through a structured interview schedule distributed to AAOs during their monthly sub-divisional level training programme and questionnaire mailed to AOs(SMSs). Frequencies, percentages and multiple linear regression were used for data analysis. The salient findings are succinctly presented below.

1. The extension functionaries delivered messages in agriculture, horticulture, forestry, animal nusbandry, agricultural engineering, sericulture and fisneries.

2. The extension functionaries delivered 100 to 200 messages in agriculture, 50 to 100 messages in horticulture, 25 to 50 messages in forestry, 15 to 25 messages in animal husbandry, 5 to 10 messages each in agricultural engineering, sericulture and fisheries in the past one year.

3. A great majority of extension functionaries had adequate knowledge in agriculture, horticulture and forestry and had less knowledge in animal husbandry, agricultural engineering, sericulture and fisheries.

4. Majority of extension functionaries conducted 25 to 50 demonstrations in agriculture, 5 to 10 demonstrations each in forestry, horticulture, fisheries, sericulture and agricultural engineering in the past one year.

5. The extension functionaries arranged 5 to 15 field days in agriculture and 5 to 10 field days each in horticulture, animal husbandry, forestry, agricultural engineering, fisheries and sericulture in the past one year.

6. A great majority of extension functionaries conducted more than 100 meetings in agriculture, 25 to 50 meetings in horticulture and 15 to 25 meetings each in agricultural engineering, forestry, sericulture and animal husbandry in the past one year.

7. Majority of extension functionaries reported that 250 to 500 farmers were benefited by supplies and services in

agriculture, whereas relatively less number of farmers were benefited in horticulture, forestry, animal husbandry, agricultural engineering, sericulture and fisheries in the past one year.

8. Majority of AAOs (67 per cent) had favorable attitude, whereas 10 per cent of them had highly favourable attitude, 20 per cent of them had less favourable attitude and 3 per cent had unfavourable attitude towards BBES.

9. Nearly half of the AOs(SMSs) (43 per cent) had favourable attitude, 32 per cent had less favourable attitude, a few (10 per cent) had highly favourable attitude and 15 per cent had unfavourable attitude towards BBES.

10. Most of the extension functionaries [AAOs and AOs(SMSs)] have positive attitudes on issues like widening of extension functionaries' knowledge due to training in different subject matter areas, adequacy of guidance to extension functionaries, extension functionaries working all through the year, overall development of farmers, unification of all land-based activities and using several extension methods.

11. A majority of the extension functionaries [AAOs and AOs(SMSs)] have negative attitudes on issues like usefulness of sub-divisional training, publicity than work, weak technological base of Subject Matter Specialists, reduced efficiency due to additional work and overloading with different subject matter areas.

12. While most of the AAOs have positive attitudes on issues like more demonstrations and farm trails, otner departments providing updated and relevant informations and solving all technical problems of the farmers, the AOs(SMSs) have negative attitude towards them.

13. While AOs(SMSs) nave positive attitudes on issues like non-planning of visits according to the needs of farmers, importance to supplies and services tnan technology transfer, replacing of BBES and benefiting only progressive and big farmers, the AAOs have negative attitude toward them.

14. Most of the AOs(SMSs) nave no definite attitude (undecided) toward issues like usefulness of training programmes, benefiting only farmers benefited in T & V, co-operation from other departments and coming down of status and recognition.

15. More or less equal per cent of AAOs have expressed opposite attitudes on issues like benefiting only farmers benefited in T & V, other departments providing updated and relevant informations, benefiting only progressive and big farmers, co-operation from other departments and coming down of status and recognition. But no such differences were observed among AOs(SMSs) .

16. Job involvement had positive and significant contribution to the variance in attitude of AAOs towards BBES whereas total experience and experience under T & V system

had negative and significant contribution to the variance in attitude.

17. Job involvement had positive and significant contribution to the variance in attitude of AOs(SMSs) towards BBES

18. Majority of extension functionaries expressed that they lived in workplace, residential facilities were not available, possessed cycle for mobility, inadequate accommodation and repairs were not done.

19. The important problems of extension functionaries in BBES as perceived by them were as follows.

i) Overburdened by giving multiple messages on different enterprises.

ii) Target achievement comes in the way of transfer of technology.

iii) Supplies and services hinder the transfer of technology.

iv) Training is not given on different enterprises.

v) Inadequate knowledge on different enterprises.

**Implications of the findings of the study for effective implementation of BBES**

The study was an attempt to know the extent of different subject matter areas covered under BBES, to measure the attitude of extension functionaries and to know the problems encountered by them in their job.

The study revealed that the subject matter areas like agriculture, horticulture and forestry were covered to the maximum extent possible, whereas animal husbandry, agricultural engineering, sericulture and fisheries were given relatively low coverage. There is a lot of scope to strengthen these subject matter areas and thereby farmer's income will be sustained all through the year and increased.

The construction and standardization of measurement device designed for quantifying attitude of extension functionaries towards BBES in this investigation might serve as a rational and feasible tool to the fiendish research fraternity in case of similar probes elsewhere. The administrators in the department can make use of this scale in attitude appraisal.

Majority of extension functionaries had favourable attitude towards BBES. However, some extension workers had 'less favourable' and 'unfavourable' attitude. Therefore, extension functionaries should be given training on the concepts, philosophy, principles, objectives, etc., of the BBES to reorient their attitude.

The study indicated that job involvement, total experience and experience under T & V system contributed significantly to the variance in attitude of extension functionaries towards BBES. This implies that these factors which are influencing their attitude should be considered and

strengthened by suitable manipulation to increase their effectiveness in the organization. Therefore, more studies should be conducted to ascertain such factors which are influencing the attitude of extension functionaries in a more rigorous way.

The extension functionaries expressed various problems which they are facing in carrying out their day to day job in the organization. These problems really affect the performance of these very important functionaries who are responsible for transferring technical know-how to the farmers. Hence, it is necessary that top level management in the organization of the Department of Agriculture should initiate appropriate measures to solve these problems.

Suggestions for future research

The study was limited to only South Arcot district of Tamil Nadu. It is necessary that further investigations may have to be taken up to cover the remaining districts of the state. This will help to draw some general conclusion about the attitude of extension functionaries and other aspects related to BBES. Attitude of extension functionaries, in other line departments, towards BBES may be probed. Further, studies to measure the attitude of different personnel in the Department of Agriculture, may be carried out. Attitude of farmers towards BBES is also worthwhile to be probed.

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* Original not seen

# APPENDIX

APPENDIX -I

FINAL FORMAT OF THE ATTITUDE SCALE

| Rank | Statements | 't' value |
|---|---|---|
| 1. | In the new extension system, programmes of visits of extension functionaries are never planned according to the seasonal needs and convenience of the farmers. | 7.88 |
| 2. | The knowledge of extension functionaries is widened due to the training received by them in different subject matter areas. | 7.66 |
| 3. | In Broad Based Extension System , sub-divisional level training programme does not serve any useful purpose. | 6.68 |
| 4. | There is adequate guidance to extension functionaries under Broad Based Extension System. | 6.60 |
| 5. | Extension functionaries are engaged in extension work throughout the year unlike in the T and V system. | 6.35 |
| 6. | The number of demonstrations and farm trails under Broad Based Extension System have increased. | 6.33 |
| 7. | Broad Based Extension System is doing more publicity than actual work. | 6.19 |
| 8. | In Broad Based Extension System more importance is given for supplies and services than transfer of technology. | 6.02 |
| 9. | Only those farmers who got benefits of T and V system earlier are now getting the benefits of the Broad Based Extension System . | 5.98 |
| 10. | The various training programmes organised for extension functionaries under Broad Based Extension System are useful. | 5.73 |
| 11. | Broad Based Extension System helps for the overall development of the farmer since he gets advice on horticulture, sericulture, forestry, fisheries, and animal husbandry. | 5.60 |

| Rank | Statements | 't' Value |
|---|---|---|
| 12. | The Broad Based Extension System has to be replaced by some other system in the interest of the rural communities. | 5.25 |
| 13. | All land based activities are unified under Broad Based Extension System. | 4.84 |
| 14. | The technological base of subject matter specialists is weak in the new extension system and no adequate attention is being paid to this aspect. | 4.61 |
| 15. | In Broad Based Extension System only progressive farmers and big farmers get the benefit of advice by the extension functionaries. | 4.38 |
| 16. | The heads of other departments at taluk/district level provide relevant and updated technical information to extension functionaries of the agricultural department on different subject matter areas. | 4.35 |
| 17. | All technical problems of farmers pertaining to agriculture and allied activities are solved by extension functionaries under Broad Based Extension System | 3.85 |
| 18. | Compared to T & V system, additional items of work assigned to extension functionaries under Broad Based Extension System has reduced their effective functioning. | 3.49 |
| 19. | The extension functionaries are overloaded with different subject matter areas under Broad Based Extension System. | 3.14 |
| 20. | Extension functionaries use several extension methods to educate the farmers about the new technology in agriculture under Broad Based Extension System. | 2.73 |
| 21. | Compared to T & V system the status and recognition of the extension functionaries has come down under Broad Based Extension System. | 2.71 |
| 22. | There is very good co-operation from other departments like horticulture, sericulture, forestry, fisheries, etc., under Broad Based Extension System. | 2.24 |

APPENDIX-II

Title of the study: A Study on Broad Based Extension System in Tamil Nadu

## QUESTIONNAIRE

## DIRECTIONS

1. Please read through the items carefully.
2. Record your first reaction to each item.
3. Though some of the statements may seem apparently meaningless or irrelevant they have been included with specific purpose.
4. Do not leave out any item, without complete information, the research will remain inconclusive.
5. The information provided by you will be kept strictly confidential.
6. It will be used only for research purposes.
7. The success of the research programme depends entirely on your good will and co-operation.

## Part A - General

Name of the official :
Official Address :

1. Age : _____ years
2. a) Please state your educational level and year of passing by putting a mark ( ) against the correct response.

| | Educational Level | Year of passing |
|---|---|---|
| i) | Up to S.S.L.C | |
| ii) | S.S.L.C + Diploma in Agriculture | |
| iii) | H.Sc. | |
| iv) | H.Sc. + Diploma in Agriculture | |
| v) | Graduate | |
| vi) | Post graduate | |

b) Please indicate the year of passing of the examination in response of the educational level (ticked above).

3. Rural-Urban background: [Mark ( ) against each answer]
   a) Father's occupation: _____ Farming _____ non-farming.
   b) Place of your birth: _____ Village _____ Town _____ City.

c) Where did you complete your primary, nigh school and higher secondary education?

i) Primary School: ___ Village ___ Taluk Head Quarters
(1st to 5tn std.) _____ District Head Quarters

ii) High School : ___ Village ___ Taluk Head Quarters
(5tn to 10th std.) ____ District Head Quarters

iii) Higher Secondary: __ Village __Taluk Head Quarters
(11th to 12tn std.) __District Head Quarters

4. Of the following sources of information, which do you consult? Put a ( ) mark against them.

i)
_____ a) Newspapers
_____ b) Magazines
_____ c) Journal on Agriculture
_____ d) Scientific Journals
_____ e) Books on Agriculture
_____ f) Extension literature
_____ g) Any other (Please specify) _____

ii) Frequency of reading newspaper, put ( ) mark against your answer.
_____ a) Daily
_____ b) Weekly once or twice
_____ c) Monthly once or twice

iii) Do you listen to radio programmes on agriculture?
_____ yes _____ No
If yes,
_____ a) Daily
_____ b) Weekly once or twice
_____ c) Montnly once or twice

iv) Do you see Television programmes?
_____ yes _____ No
If yes,
_____ a) Daily
_____ b) Occasionally

5. Total experience: _____ years _____ months
6. Experience under T and V system: _____ years _____ months.
7. In-service training (please give details on special training programmes attended by you during the last 10 years. Mention name and duration of each one)

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Name of the Training Undergone Duration Year

Part B: Details on Broad Based Extension System

1. Do you feel tnat you have adequate knowledge in the following subject matter areas in order to transfer technology to the farmers?

| SL. NO. | Subject matter areas | Knowledge | | |
|---|---|---|---|---|
| | | I have adequate knowledge | I nave less knowledge | I have no knowledge |
| i) | Agriculture | | | |
| ii) | Horticulture | | | |
| iii) | Animal husbandry | | | |
| iv) | Agricultural Engineering | | | |
| v) | Forestry | | | |
| vi) | Sericulture | | | |
| vii) | Fisheries | | | |

2. What are the subject matter areas on which you gave messages under the Broad Based Extension System? please mark (/) against appropriate columns

| SL.No. | Subject matter area | Response |
|---|---|---|
| i) | Agriculture | |
| ii) | Horticulture | |
| iii) | Animal husbandry | |
| iv) | Agricultural Engineering | |
| v) | Forestry | |
| vi) | Sericulture | |
| vii) | Fisheries | |

3. Number of messages given in different subject matter areas under Broad Based Extension System in the past two years

| SL.No. | Subject matter area | No. of Messages given |
|---|---|---|
| i) | Agriculture | |
| ii) | Horticulture | |
| iii) | Animal husbandry | |
| iv) | Agricultural engineering | |
| v) | Forestry | |
| vi) | Sericulture | |
| vii) | Fisheries | |

4 Please give the details of messages given (Technology transferred) (last two years)

i) Agriculture
ii) Horticulture
iii) Animal Husbandry
iv) Agricultural engineering
v) Forestry
vi) Sericulture
vii) Fisheries

5. Number of demonstrations conducted in different subject matter areas under Broad Based Extension System during the past one year.

| Sl. NO. | Subject matter area | No. of demonstrations conducted |
|---|---|---|
| i) | Agriculture | |
| ii) | Horticulture | |
| iii) | Animal husbandry | |
| iv) | Agricultural Engineering | |
| v) | Forestry | |
| vi) | Sericulture | |
| vii) | Fisheries | |

6. Number of meetings conducted for different subject matter areas under Broad based extension system in past one year.

| SL. No. | Subject matter area | No. of meetings conducted |
|---|---|---|
| i) | Agriculture | |
| ii) | Horticulture | |
| iii) | Animal husbandry | |
| iv) | Agricultural Engineering | |
| v) | Forestry | |
| vi) | Sericulture | |
| vii) | Fisheries | |

7. Number of field days arranged under different subject matter areas under Broad Based Extension System in past one year.

| SL. NO. | Subject matter area | No. of field days arranged |
|---|---|---|
| i) | Agriculture | |
| ii) | Horticulture | |
| iii) | Animal husbandry | |
| iv) | Agricultural Engineering | |
| v) | Forestry | |
| vi) | Sericulture | |
| vii) | Fisheries | |

8. Supplies and Services arranged by you under broad based extension system for past one year in different subject matter areas.

| SL. NO. | Subject matter area | Materials suoplied | No. of farmer benefited |
|---|---|---|---|
| i) | Agriculture | | |
| ii) | Horticulture | | |
| iii) | Animal husbandry | | |
| iv) | Agricultural Engineering | | |
| v) | forestry | | |
| vi) | Sericulture | | |
| vii) | Fisheries | | |

Part-C : Attitude of extension functionaries towards broad based extension system.

Direction: Please indicate your extent of agreement for the statements on Broad Based Extension System by marking ( ) under appropriate column.

| SL. NO. | Statement | Strongly agree | Agree | Un-decided | Dis-agree | Strongly dis-agree |
|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1. | The Knowledge of extension functionaries is widened due to the training received by them in different subject matter areas under broad based extension system. | | | | | |
| 2. | In Broad Based Extension System, programmes of visits of extension functionaries are never planned according to the seasonal needs and convenience of the farmers. | | | | | |
| 3. | There is adequate guidance to extension functionaries under Broad Based Extension System. | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 4. | In Broad Based Extension System , sub-divisional level training programme does not serve any useful purpose. | | | | | |
| 5. | Extension functionaries are engaged in extension work throughout the year unlike in the T and V system. | | | | | |
| 6. | Broad Based Extension System is doing more publicity than actual work. | | | | | |
| 7. | The number of demonstrations and farm trails under Broad Based Extension System have increased. | | | | | |
| 8. | In Broad Based Extension System more importance is given for supplies and services than transfer of technology. | | | | | |
| 9. | The various training programmes organised for extension functionaries under Broad Based Extension System are useful. | | | | | |
| 10. | Only those farmers who got benefits of T and V system earlier are now getting the benefits of the Broad Based Extension System. | | | | | |
| 11. | Broad based extension system helps for overall development of the farmer since he gets advice on horticulture, sericulture, forestry, fisheries, agricultural engineering and animal husbandry. | | | | | |
| 12. | The Broad Based Extension System has to be replaced by some other system in the interest of the rural communities. | | | | | |
| 13. | All land based activities are unified under Broad Based Extension System. | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 14. | The technological base of subject matter specialists is weak in the Broad Based Extension System and no adequate attention is being paid to this aspect. | | | | | |
| 15. | The heads of other departments at taluk/district level provides relevant and updated technical information to extension functionaries of the agricultural dept. on different subject matter areas. | | | | | |
| 16. | In Broad Based Extension System only progressive farmers and big farmers get the benefit of advice by the extension functionaries. | | | | | |
| 17. | All technical problems of farmers pertaining to agricultural and allied activities are solved by extension functionaries under Broad Based Extension System. | | | | | |
| 18. | Compared to T and V system, additional items of work assigned to extension functionaries under Broad Based Extension System has reduced their effective functioning. | | | | | |
| 19. | Extension functionaries use several extension methods to educate the farmers about the new technology in agriculture under broad based extension system. | | | | | |
| 20. | The extension functionaries are overloaded with different subject matter areas under Broad Based Extension System . | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 21. | There is very good co-operation from other departments like horticulture, sericulture, forestry, fisheries, etc. under Broad Based Extension System. | | | | | |
| 22. | Compared to T and V system the status and recognition of the extension functionaries has come down under Broad Based Extension System. | | | | | |

Part - D: Information on Psychological and organizational variables

1. Job satisfaction: How much satisfied are you on the various aspects of your job? Please mark ( ) under the most appropriate alternative to the items given below:

| SL. NO. | Item | Very much satisfied | Satisfied | Partially satisfied | Dis-satisfied | Very much dis-satisfied |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | Your present salary. | | | | | |
| 2. | Job security. | | | | | |
| 3. | Praise and recognition for good work. | | | | | |
| 4. | Physical facilities. | | | | | |
| 5. | Residential facilities. | | | | | |
| 6. | Opportunity to work with team spirit. | | | | | |
| 7. | Help, guidance and encouragement from superiors. | | | | | |
| 8. | Opportunity for self-development. | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 9. | Promotion policy of the Department. | | | | | |
| 10. | Freedom to pursue original ideas. | | | | | |
| 11. | Freedom for flexibility in work. | | | | | |
| 12. | Status and prestige as a person in the Department. | | | | | |
| 13. | Type of work done by you. | | | | | |
| 14. | Scope to prove your merit and excellence. | | | | | |

2. Achievement Motivation: Please indicate what is your feeling about these statements by indicating the degree of your agreement or disagreement. Mark ( ) against each statement in the appropriate column which indicates your degree of agreement.

| SL. NO. | Statements | Strongly agree | Agree | Un-decided | Dis-agree | Strongly disagree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | One should enjoy work as much as play. | | | | | |
| 2. | One should work like a slave at everything one undertakes until he is satisfied with the result. | | | | | |
| 3. | One should succeed in his occupation even if one has to neglect his family. | | | | | |
| 4. | One should have determination and driving ambition to achieve certain things in life even if these qualities make one unpopular. | | | | | |
| 5. | Work should come first even if one cannot get rest. | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 6. | Even when one's own interests are in danger, he should concentrate on his hob and forget his obligations to others. | | | | | |
| 7. | One should set difficult goals for oneself and try to reach them. | | | | | |

3. Job involvement: Please indicate how involved you are with your job by marking ( ) against the appropriate response category

| SL. NO. | Statement | Response category: Strongly agree | agree | Un-decided | Dis-agree | Strongly disagree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | I shall stay overtime to finish a job, even if I am not paid for it. | | | | | |
| 2. | We can measure a person pretty well by how good a job he does. | | | | | |
| 3. | The major satisfaction in my life comes from my job. | | | | | |
| 4. | For me mornings at work really go off quickly. | | | | | |
| 5. | I usually go for work a little early to get the things ready. | | | | | |
| 6. | The most important things that happen to me involve my work. | | | | | |
| 7. | Sometimes I keep myself awake at night thinking ahead to the next day's work. | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 8. | I am really a perfectionist about my work. | | | | | |
| 9. | I feel depressed when I fail at something connected with my work. | | | | | |
| 10. | I have other activities more important than my work. | | | | | |
| 11 | I live, eat and breath my job. | | | | | |
| 12. | I would keep working even if I do not get money. | | | | | |
| 13. | Quite often I feel like staying at home instead of going for work. | | | | | |
| 14 | To me, my work is only a small part of my life. | | | | | |
| 15. | I am very much involved personally in my work. | | | | | |
| 16. | I avoid taking extra duties and responsibilities in my work. | | | | | |
| 17. | I used to be more ambitious about my work than I am now. | | | | | |
| 18. | Most things in life are more important than work. | | | | | |
| 19. | I used to care more about my work, but now other things are important to me. | | | | | |
| 20. | Sometimes I would like to kick myself for the mistakes I make in my work. | | | | | |

4. Morale: Given below are the statements connected with your morale. Kindly mark ( ) in the column against each which best expresses the situation.

| Sl. NO. | Statement | Strongly agree | Agree | Un-decided | Dis-agree | Strongly disagree |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | The extension functionaries enjoy working for the betterment of farmers. | | | | | |
| 2. | The superiors consider the welfare of the extension functionaries as their own. | | | | | |
| 3. | The superiors feel extension functionaries as inseparable part of the department. | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 4. | For extension functionaries the future of the dept. is their future. | | | | | |
| 5. | If some farmers come after working hours the extension functionaries do not mind attending to their needs. | | | | | |
| 6. | The extension functionaries enjoy being the part of the farming community. | | | | | |
| 7. | Superiors always keep the interest of extension functionaries in view. | | | | | |
| 8. | It is felt that the development of the farmer is a joint venture in which each one has to perform his duty effectively. | | | | | |
| 9. | Most of the extension functionaries have no emotional attachment with the department. | | | | | |
| 10. | The extension functionaries are willing to do everything for getting good name to the department. | | | | | |
| 11. | The extension functionaries do not mind to spend extra time and efforts for the farmers. | | | | | |
| 12. | There is strong "We" feeling among the extension functionaries. | | | | | |
| 13. | The extension functionaries should not bother about the image of the department which has given nothing to them. | | | | | |
| 14. | The extension functionaries inspite of absence of recognition, do not mind working for extension. | | | | | |

5 Perceived work load: What is your opinion about your work load? Given below are four statements. Please indicate your opinion by marking ( ) in the appropriate column against each statement.

| SL. NO. | Statement | Strongly agree | Agree | Un-decided | Dis-agree | Strongly disagree |
|---|---|---|---|---|---|---|
| 1. | I feel busy or work load is heavy. | | | | | |
| 2. | I feel pressurized. | | | | | |
| 3. | I feel that the amount of work I did interfered with how well it got done. | | | | | |
| 4. | I feel that the number of requests, complaints or problems dealt with was more than expected. | | | | | |

6. Work facility: Indicate your degree of satisfaction or dissatisfaction against the following items with respect to the facilities available at your work place.

| SL. NO. | Items | Satisfied | Some what satisfied | Not satisfied |
|---|---|---|---|---|
| 1. | Supply of inputs at local level:<br>a) Seeds<br>b) Fertilizers<br>c) Pesticides | | | |
| 2. | Supply of plant protection equipment. | | | |
| 3. | Repairs and maintenance of plant protection equipment. | | | |
| 4. | Timely technical information. | | | |
| 5. | Proper supervision and guidance from superiors. | | | |
| 6. | Transportation facility. | | | |
| 7. | Availability of demonstration equipment and teaching aids. | | | |

7. Coordination: Please indicate the extent of co-ordination you had with other departments and agencies while implementing the departmental programme during the preceding one year (Coordination refers to timely and sequential assistance and help received from them).

| SL. NO. | Name of the Dept/Agency | Degree of coordination | | | | |
|---|---|---|---|---|---|---|
| | | To a vary greater extent | Greater extent | Some extent | Limited extent | Not at all |
| 1. | Dept. of Horticulture | | | | | |
| 2. | Dept. of Animal Husbandry | | | | | |
| 3. | Dept. of Agricultural Engineering | | | | | |
| 4. | Dapt. of Forestry | | | | | |
| 5. | Dept. of Sericulture | | | | | |
| 6. | Dept. of Fisheries | | | | | |
| 7. | Input supply agencies | | | | | |
| 8. | Financial institutions | | | | | |
| 9. | Co-operative institutions | | | | | |
| 10. | T N A U | | | | | |

8. Organizational climate: The statements below are designed to get an insight into the organizational climate in the Dept. of Agriculture. Against aach statement there is a five point continue i.e., Almost always, Usually, Sometimes, Rarely and Almost never, you are requested to put mark ( ) in the appropriate column, which best characterize your dept.

| SL. NO | Statement | Almost always | Usually | Some times | Rarely | Almost never |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | Atmosphere in tha organization friendly | | | | | |
| 2. | Supariors take quick decisions and communicate the same to the persons concerned. | | | | | |
| 3. | There is freedom to talk to superiors about the job. | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 4. | Efficiency in work is rewarded | | | | | |
| 5. | The superiors and SMSs take pains to help an extension functionary who wants to learn more about his job. | | | | | |
| 6. | Confidence and trust is prevalent in the personnel | | | | | |
| 7. | There is sufficient work to do in the system to improve a lot of farmers | | | | | |
| 8. | Extension functionaries can approach the SMSs at any time to get solutions to the problems faced in the field | | | | | |
| 9. | Extension functionaries schedule of visits for the fortnight is decided in advance. | | | | | |
| 10. | Any special activity under taken by the extension functionary for the benefit of the farmers is appreciated. | | | | | |
| 11. | As an extension functionary one thinks his job is very important in the system. | | | | | |
| 12. | Extension functionaries in this organization are helpful to each other | | | | | |
| 13. | The extension functionaries abilities are fully utilised in this system | | | | | |
| 14. | There is scope for informal discussion with superiors and Subject Matter Specialists | | | | | |
| 15. | Every individual in the organizational is accountable for the job done, even though there is freedom of operation. | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 16. | Group discussion making process involved in sub-divisional meeting enthuse the extension functionary to act. | | | | | |
| 17. | The priorities of work are identified in the system. | | | | | |
| 18. | Technical Knowledge and guidance is given sufficiently to the extension functionaries through sub-divisional level training programmes | | | | | |
| 19. | The line of command is well defined in this system. | | | | | |
| 20. | Job security is there in this organization as it is Government organization. | | | | | |
| 21. | The subject matter information given in the training programmes is precise and problem oriented. | | | | | |
| 22. | In broad based extension system the field problems of the extension functionaries are given due consideration in training programmes. | | | | | |
| 23. | Constant supervision by the superiors in this system facilities taking corrective measures at the appropriate time. | | | | | |
| 24. | Communication is both vertical and horizontal in the broad based extension system. | | | | | |
| 25. | Impact points on various aspects of agriculture are well developed and used by the extension functionaries in their educational activities | | | | | |

9. Availability of funds for traveling allowances (TA): (Mark the correct response)

| | | | |
|---|---|---|---|
| 1. | Availability of funds for TA | : | Very much Adequate/ Adequate/Not Adequate |
| 2. | Passing superior of TA bills by the | : | Very fast/Fast/ Delay |
| 3. | Amount of TA given | : | Enough/not enough |

10. Residential facility: (Mark the correct response)

1. Living in work place:

a) I live in my work place.
b) I do not live in my work place but 5 kms away.
c) I live 10 kms away from my work place.
d) I live 15 kms away from my work place.
e) I live 25 kms away from my work place.
f) I live beyond 25 kms away from my work place.

2. Availability of Government residential facilities at the place of work. : Available/not available

If available:

a) The accommodation given : Adequate/ not adequate

b) Annual repairs done by the Government to the house.
: i) One in a year
: ii) Once in 2-3 years
: iii) Once in 4-5 years
: iv) Not done at all

11. Conveyance you have : None/Cycle/Moped/Motor cycle

12. Promotional opportunities : (Please mark against appropriate response)

a) I get my first promotion

i) After 15 years of service
ii) After 20 years of service

b) I do not get my first promotion at all.

c) I get my second promotion
i) After 25 years of service
ii) After 30 years of service

d) I do not get my second promotion at all
e) When did you get your last promotion?
f) When are you expecting your next promotion?
g) Are you happy with the promotional opportunities available in your department?

Part E : Problems faced by extension functionaries under broad based extension system.

The following might be the possible problems that extension workers face under Broad Based Extension System . Please state to what extent you have faced them by marking ( ) against appropriate column.

| SL. NO. | Problem | Degree of problem | | |
|---|---|---|---|---|
| | | To a greater extent | To some extent | Not a problem |
| 1 | 2 | 3 | 4 | 5 |
| 1. | Inadequate knowledge on different enterprises. | | | |
| 2. | Training is not given on different enterprises. | | | |
| 3. | SMSS of the dept. do not have adequate knowledge on different enterprises. | | | |
| 4. | The officers of other depts like Horticulture, Animal husbandry, Agricultural engineering, Forestry, Fisheries, Sericulture etc. at Taluk/Dist. level do not co-operate with agri-cultural department | | | |
| 5. | Training needs of exten-sion workers are not taken care by the dept. while giving training. | | | |
| 6. | Supplies and services hinder the transfer of technology. | | | |
| 7. | Approaching target group of farmers instead of contact farmer affects the effective communication of messages. | | | |
| 8. | Target achievement comes in the way if transfer of technology. | | | |

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| 9. | Overburdened by giving multiple messages on different enterprises. | | | |
| 10. | Proper orientation training about broad based extension system is not giving to extension workers. | | | |
| 11. | Any other problem (Please specify and write). | | | |