JOB COMPETENCE OF AGRICULTURAL OFFICERS IN THE STATE DEPARTMENT OF AGRICULTURE IN TAMIL NADU

By

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B.Sc.(Ag.)

THESIS SUBMITTED TO
ACHARYA N.G.RANGA AGRICULTURAL UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

(IN THE FACULTY OF AGRICULTURE)

DEPARTMENT OF EXTENSION EDUCATION
SRI VENKATESWARA AGRICULTURAL COLLEGE, TIRUPATI
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RAJENDRANAGAR, HYDERABAD – 500 030

July, 2005

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ACKNOWLEDGEMENTS

It is by the unfathomable grace and blessing of **Lord Venkateswara** who makes all the things possible. My respectful obeisances to **Lord Venkateswara** for his grace and blessings showered in each and every step of my life. This work is for his glory.

I deem it my privilege to surface out my genuflect love, unbound gratitude and sense of honour to my most beloved Parents **Sri.M.Duraisamy** and **Mrs.D.Lakshmi** who have given me life and affection which helped me in shaping my career, will go a long way throughout my life.

It's because of **Lord Venkateswara** blessings I got this opportunity to work under the inspiring and able guidance of **Dr.K.NAGI REDDY**, Professor, Department of Extension Education, S.V.Agricultural College, Tirupati Chairman of my Advisory Committee, for his impressing guidance and distinct supervision, dedication and empathy. He has devoted his valuable time patiently to mend majority thinking from conception to completion of this task. I owe him a huge dept of gratitude forever for all that I got from him.

I am highly indebted to **Dr.S.V.Prasad**, Associate Professor, Department of Extension Education, S.V.Agricultural College, Tirupati, Member of my advisory committee who has been kind enough to take keen interest in refining this thesis most explicitly to reckon with the set of standards.

I express my profound sense of gratitude to other member of my advisory committee **SDr.S.Ismail**, Professor and Head, Department of Statistics and mathematics, S.V.Agricultural College, Tirupati for his valuable advice during the course of this investigation.

I extend my heartfelt thanks to **Dr.T.P.Sastry** Professor and Head, Department of Extension Education, S.V.Agricultural College, Tirupati for his munificent acquiescence, solicitude attitude and constructive criticism during every stage of my

Post-graduation period. His sound word of advice has been always a matter of inspiration in shaping my career.

I have infinite pleasure in expressing my heartfelt thanks to **Dr.D.Ramachandra Reddy**, Principal Agricultural Information Officer, AI&CC, ANGRAU. Press, ARI, Hyderabad for his keen interest, abundant encouragement and support made to complete this endeavor successfully.

From the inner core of my heart I express my gratitude and special thanks to all the Agricultural Officers who were my respondents and other higher authorities for their valuable suggestions and co-operation during my research work. I thank **ICAR** for providing me with seat for my M.Sc. Programme.

My cordial thanks to my colleagues **Gopi Ramu, Ganesh,** and **Gopinath** for their affection and help rendered to me during my course of study. I extend my sincere thanks to my senior colleagues **Sajith, Natarajan, Sangeetha** and **Mohan** and my junior friends **Rahul, Kullayappa** and **Patalappa** for their cooperation and help rendered during the course of my study.

I feel elated to express my thanks to my friends **Manic, Sathy, Venkatesh, Murugesh, Sampath, Gnanesh, Pari, Biju, Sugan, Seer, Abbs, Sanjay** and **Bharathi** for their constant encouragement during my study period.

I thank **K.V.RAO**, Artist, **L.D.Chary**, Record Assistant and **G.Subrahmanyam**, Attender, Department of Extension Education S.V.Agricultural College, for their kind help during my stay in the campus.

(**VIJAIBABU D)**

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Title of the thesis	:	**JOB COMPETENCE OF AGRICULTURAL OFFICERS IN THE STATE DEPARTMENT OF AGRICULTURE IN TAMIL NADU**
Degree to which submitted	:	**Master of Science in Agriculture**
Faculty	:	Agriculture
Discipline	:	Extension Education
Major Advisor	:	**Dr. K.NAGI REDDY**
University	:	Acharya N.G.Ranga Agricultural University
Year of submission	:	2005

ABSTRACT

The study was conducted to measure the job competence of Agricultural Officers working in selected eight districts of Tamil Nadu.

The objectives of the study were to study the personal, socio-psychological and situational characteristics of respondents, to measure the job competence of Agricultural Officers, to study the relationship between selected independent variables with job competence of Agricultural Officers, and to elicit problems encountered by Agricultural Officers in relation to their job competence and their suggestions to overcome them.

Expost facto research design was followed in the present study.

The study was conducted with Agricultural Officers working in the State Department of Agriculture viz; Agricultural Officers working in T and V System which was the main responsibility for extension work. Most of the extension work was carried out through T and V System only. Out of 148 positions in the selected 141 positions were

occupied by the Agricultural Officers. So all the Agricultural Officers were taken for the study. Data was collected through mailing the questionnaire to each respondent by post. Out of 141 respondents only 102 responded by sending filled questionnaires.

Majority of respondents had medium experience, received medium level of training. Majority of Agricultural Officers were having medium rural orientation, perceived medium workload, medium achievement motivation and medium level of aspiration. Majority of Agricultural Officers had medium level of organizational commitment, medium level of morale, neutral attitude towards T and V System and towards farmers. Majority of Agricultural Officers felt that medium level of facilities and resources were available in the organization and medium level of organizational climate prevailed in the organization.

Majority of Agricultural Officers had medium level of job competence. Correlation analysis indicated that 8 independent variables were positively significant with job competence. They are achievement motivation, level of aspiration, organizational commitment, organizational climate, morale, attitude towards T and V System, attitude towards farmers and facilities and resources. Training received and workload were negatively significant with job competence. Experience was negatively non significant with job competence. Rural-urban background was non significant with job competence.

Prediction analysis showed that 12 variables explained 55.90 per cent variation in job competence. The partial regression coefficient of attitude towards farmers was positively significant with ‘t’ value and this variable contributed to most of the variation in job competence of Agricultural Officers. Workload was negatively and significantly influenced the job competence.

CHAPTER - I

INTRODUCTION

Gandhiji's vision of Indian village was a centrepiece of free India's political and socio-economic fabric. He considered that India really lives in the villages and that if the villages perish India too will perish. Basically, India is an agricultural country, with 69 per cent of people depending on agriculture. Agriculture provides employment to 65 per cent of the people, approximately contributes 24 per cent to national GDP (Gross Domestic Product), 14-15 per cent to export earnings and provides raw materials to many secondary and tertiary sectors.

By the time India became independent, the country was facing acute shortage of foodgrains and it was one of ship to mouth existence. Recognizing this, the late Prime Minister Jawaharlal Nehru in 1948 pronounced, "everything else can wait but not agriculture". After independence, governments made several efforts to produce food enough for the people by introducing a number of schemes starting with GMF (Grow More Food) campaign. Inspite of all the best efforts made by the government, the rate of growth in agricultural production was not commensurate to meet the food needs of the fast growing population. It was the great vision of late C.Subramanyam as the Food and Agricultural Minister during mid 60s which initiated High Yielding Varieties Programme that resulted in green revolution and India became self sufficient by 1970s.

By 2001, India's population grew to 102.7 millions, surpassing the global population of 960 millions in 1798, when Malthus propounded his theory of an imbalance between population growth and growth of foodgrains production. While it is so the country had also registered a record food grain production of 212 million tonnes and had a buffer stock of 70 million tonnes, and thus disproved the famous Malthusian theory. But maintaining this position will not be sufficient for future. In order to meet the requirements of the people we have to produce about 267 million tonnes of foodgrains by 2025 compared to the highest production of 206 million tonnes in 2004-2005. Lester Brown and Ifall Kahe of the World Watch Institute predicted a net deficit of 45 million tonnes (production will be 222 million tonnes) foodgrains by the year 2030 in the Indian context.

Although a lot of sophisticated know-how available on our research farms for increasing production, the per hectare yields of crops are still low compared to other countries in the world. This is primarily because there is considerable gap between the technology developed by the research stations and its application on farmers fields. This is due to the inefficient and insufficient implementation of agricultural extension programme and moreover, the programmes were implemented by perfunctory extension workers.

The reasons for ineffectiveness of extension programmes have been examined previously at various national and international fora by policy makers, extension experts and specialists and others concerned. The World Bank's Annual conference held at Nairobi (1970) identified some problems in agricultural extension programming and

implementation like lack of single, direct line of technical support and administrative control, dilution of efforts, poor mobility of extension workers due to excessive coverage of area, inadequate and outdated professional training, incompatibility of recommendations and inadequate and untimely supply of inputs.

Besides these, lack of proper monitoring and evaluation of programmes, coordination with supporting services such as irrigation, credit and input agencies, low morale and dissatisfaction of extension workers were other problems hindering the effectiveness of existing extension programmes. In order to take care of the afore said deficiencies Sir Daniel Benor suggested a model of extension system known as Training and Visit (T and V) System.

The Training and Visit system developed by Daniel Benor, a World Bank consultant, envisages overcoming of major deficiencies of normal or general extension systems functioning in developing countries. It was introduced in Sehyan Irrigation Project of Turkey in 1967 and then gradually introduced in other countries. In India, T and V System, which is otherwise known, as Intensive Agricultural Extension Programme (IAEP) was first introduced in command areas of Madhya Pradesh, Rajasthan and Andhra Pradesh simultaneously in June 1974. Later it was spread all over India.

The central element in this system was to provide full time agricultural extension worker by merging various specialized crop production technologies into a united extension service. This approach was sought to be achieved through “Trainings” and “Visits”. “Trainings” provide for the transfer of know-how from scientists to the

extension workers and “visits” provide for transfer of know-how from the extension workers to the contact farmers who in turn motivate their peers.

In Tamil Nadu, at state level, the T and V System is placed under the control of an Director/ Commissioner of Agriculture. At the district level, the Joint Director of Agriculture (JDA) is in-charge of the system assisted by three Deputy Directors of Agriculture (DDAs) for agronomy, plant protection and training. Each district is divided into Taluks. Each Taluk is manned by an Assistant Director of Agriculture supported by three Agricultural Officers (Subject Matter Specialists) in the disciplines of agronomy, plant protection and training. The Agricultural Officers (AOs) are placed at Block level (one Agricultural Officer in each block) under the supervision of Agricultural Development Officer (ADO) and Assistant Agricultural Officers are the lower level workers who assist the Agricultural Officers.

It is a great challenge before the social scientists, agricultural researchers, policy makers and administrators to diffuse the technology to the heterogeneous mass of end users. Riggs (1964) stated that failure to achieve development goals lies in the inadequacies of organizational and institutional structure in developing countries. The extension programmes in developing countries are faced with the problems of lack of infrastructure, ignorance or apathy of farmers, unfavourable incentives, outdated rural institutions and conflicts between different interests and objectives. (World Bank, 1978). Axinn (1985) also opined that the failure of extension was due to inability of extension workers to identify the needs of rural people in developing countries. Hence the challenge was focused more on the extension worker who is supposed to perform his work as

information carrier, friendly listener, motivator, process facilitator, skill teacher, programme administrator, group worker and institution builder in the social system for the sake of farmers. The research studies conducted by Perumal (1975), Janardhana (1979), Reddy (1990) revealed the same problems in the extension system.

1.1. NEED AND IMPORTANCE OF THE STUDY

The local level functionaries in the T and V System are the Assistant Agricultural Officers and the Agricultural Officers at village and block level respectively. The Assistant Agricultural Officer is the key person at the village level to implement agricultural development programmes and easily available to the target groups and thus forms a strategic link between the research, the extension organization and the farmers. The Agricultural Officer is no less important as he is the 'first' professional in the organization upon whom several other cadres of professionals, man the department. The scientific/ professional messages that trickle down from the higher ups are to reach the Assistant Agricultural Officers invariably through the Agricultural Officers only. The Agricultural Officer is to develop professional orientation and approach among the Assistant Agricultural Officers. So, the Agricultural Officer (AO) is a pivotal link in the Department of Agriculture and is to be considered equally important in relation to other positions.

Several studies have probed into various intricate and multifarious aspects of Agricultural Officers. Surprisingly, very few of them ventured to study the job competence of Agricultural Officers. The present study is, therefore designed to study the

'Job competence of the Agricultural Officers working in the State Department of Agriculture in Tamil Nadu.

1.2. OBJECTIVES OF THE STUDY

1. To study the personal, socio-psychological and situational characteristics of Agricultural Officers
2. To measure the job competence of Agricultural Officers
3. To study the relationship between the selected independent and dependent variables with job competence of Agricultural Officers
4. To elicit problems encountered by Agricultural Officers in relation to their job competence and their suggestions to overcome them.

1.3. SCOPE OF THE STUDY

The study is mainly intended to find out the job competence of Agricultural Officers working in the State Department of Agriculture in Tamil Nadu. Very few attempts heave been made to measure the job related features of Agricultural Officers. Among those, studies on job competence of Agricultural Officers are rare. The empirical outcomes of knowledge on this variable is supposedly be useful in formulating effective measures to achieve increments in the job competence. It is also believed that the study may help in understanding the existing mechanism of job competence by the development administrators, extension professional, educators, policy makers etc, who are concerned directly or indirectly with the transfer of technology in Tamil Nadu.

1.4. LIMITATIONS OF THE STUDY

1. The present study is a single student's research covering eight districts of Tamil Nadu.
2. The research is limited to the extent of time, financial and other resources at the behest of the prober.
3. The data were gathered by using mailed questionnaire method. Hence there was no scope to clarify obscure points.
4. The study was based on the expressed opinions of the respondents, dependent on their recall and individual bias and prejudice might have crept in.
5. As the study was restricted to a limited area and sample frame, the findings cannot be extrapolated to a wider geographical area. However, it is believed that the findings would be applicable to the areas where identical conditions prevail.

1.4.PRESENTATION OF THE STUDY

The study is divided in to six chapters. The first chapter is devoted to a brief introduction, need and importance, objectives, scope and limitations of the study. The second chapter 'Review of Literature' deals with the review of important related studies in the field of present investigation and conceptual representation of the study.

The third chapter is devoted to the ‘Materials and Methods’ including the locale of the study, research design, selection of respondents and measurement of variables, techniques used in the collection of the data and statistical tools used for the study. The fourth chapter deals with results, which is presented objective wise.

The fifth chapter covers the discussion based on the results of the study. Finally, the sixth chapter summarizes the study. At the end, the literature cited, a questionnaire used for data collection are appended.

CHAPTER II

REVIEW OF LITERATURE

A comprehensive review of literature is an integral part of investigation, as it not only gives an idea on the work done in the past and assist in delineation of problem area but also provides basis for interpretation and discussion of findings. Past studies pave the way for future research endeavors. An acquaintance with earlier pertinent studies has been felt necessary to develop good understanding of the present study.

Research studies on job competence of incumbents in a development organization like the Department of Agriculture were very limited. Reviews on Job competence were very scanty. The review would show what amount of work has been done on the problem and on related problems and what technical information is already available on the problem. The available review of literature is presented in comprehensive manner under the following sub headings.

2.1. Concept of job competence

2.2. Studies on job competence

2.3. Studies on selected personal, socio-psychological and situational variables in relation with job competence

2.4. Problems of extension functionaries and their suggestions to overcome them

2.5. Conceptual model of the study

Meaning of job competence:

To start with, the meanings that are related to job competence in the present investigation are: Sufficiency of qualification; capacity to deal adequately with a subject; adequate or sufficient in quality or degree; suitable, adequate or sufficient in amount or extent; possessing the requisite qualifications for, or to; the state of quality of being capable or competent; skill, ability, fitness, efficiency, capacity, sufficiency; (of persons) having ability, power, authority, skill, knowledge etc.

2.1 CONCEPT OF JOB COMPETENCE

Fotte and Cottrell (1955) in their work – "Identity and Interpersonal Competence" had tried to explain the concept of competence as follows:

"However long it may have been implicit in his own thinking and in that of others, the concept of competence in interpersonal relations was first explicitly stated by Dr. Harry Stack Sullivan (1947), though since then, attention to 'mastery' and 'coping behaviour' had become current among Neo-Freudians. As yet no clear conceptual definition of such competence has been formulated in these or other circles; so that definition of the term is one of the first tasks of any programme of research into the conditions of its development. It is also necessary to distinguish competence form other criteria or objectives of family functioning, such as adjustment or emotional maturity, that is, to make it plain to what it does not refer, and why. Like these other comprehensive notions, the concept of interpersonal competence needs to be broken down into its various components, if it is to be grasped in detail and utilized with precision in research".

Competence is a synonym for ability. It means a satisfactory degree of ability for performing certain implied kinds of tasks. Each of the abilities that could be included as components of interpersonal competence is found to some degree in any normal person regardless of his previous experience. Nevertheless, as with virtually all human abilities by practice and purposeful training wide differences result. In this sense, interpersonal competence although based upon inherited potentialities and direct contribution to self-conceptions, may be compared to acquired skills. To conceive of interpersonal relations as governed by relative degrees of skill in controlling the outcome of episodes of interaction is to diverge greatly for some other explanations of characteristic differences in behaviour (Foote and Cottrell, 1955).

Waslstrom (1989) educated on the concept of competence as follows: "As vocational educators, it is our obligation to apply new technologies to some basic principles of education when teaching post secondary students and adults. We need to recognize, acknowledge, and make the most of differences in experiences and maturity of our students. In our efforts to improve the ability of vocational education to reinforce academic and competency skills, we must be careful not to take the heart out of vocational programmes… in some educational systems, the trend is towards competency based education where a student is expected to perform certain skills before graduation. Competency and accountability are talked about at the same time. Let us look at two definitions"

i. Competence meaning a sufficiency of means for the necessities and conveniences of life.

ii. To be competent is having requisite or adequate ability or qualities and having the capacity to function or develop in a particular way.

Lettow (1989) opined on competence as “the word “competency” is not readily understood by all persons. Upon mentioning “competency” to one field manager, he very sharply replied, “No one is going to do competency testing of my people – that is my job”. Top management often feels that hiring, developing and motivating people is the job of management. The use of competencies in the education of new employees can assist significantly in this development and add some commonality to the process”.

“The competencies are now used in a variety of ways beyond identification of subject matter content for the training school. One field manager has taken a list of competencies and put them in the form of a questionnaire. This questionnaire provides the employee a change to “score” themselves on how comfortable they feel about their ability to perform each competency. The sales manager uses this same questionnaire to evaluate his personnel, based upon his personal observations. Others who work with his sales people are asked to score them and give feedback. So each person gets feedback from three directions – their boss, themselves and their peers/ customers. The real value of what this sales manager does is to help his people develop a very personalized improvement plan for those “competencies” needing the most improvement”

2.2. STUDIES ON JOB COMPETENCE

The researcher could not come across studies on job competence as it is. However, some related studies which delved on competence of personnel in industry,

education, interpersonal relations, and vocational agriculture were reviewed to arrive at meaningful understanding of this all important variable.

To develop "personnel rating scale by superiors", the Seventh Mental Measurement Year Book Volume (II) - 1972 contained 10 dimensions, viz., co-operation, quality of work, adaptability, dependability, emotional stability, quantity of work, sociability, persistence, initiative and work knowledge. Foote and Cottrell (1955) identified six components of interpersonal competence, viz., health, intelligence, empathy, autonomy, judgment and creativity.

Dauw (1968) studied creativity and vocational needs of various female workers, both White and Negro. Reduction of turnover among low paid female clerical personnel may be affected favourably by consideration of creativity and vocational needs.

Megginson (1968) emphasized that the effectiveness of a manager varies with his ability to empathize with his subordinates, to foresee and evaluate events objectively, and to adopt to changes in the environment. Hostility, resentment, conflict and lowered job satisfaction tend to be the result of a manager's faulty personal perceptions and empathy toward employees needs, abilities and weaknesses. He further explained that a manager is involved in many concurrent relationships, viz., relationships with: (1) himself, his family, and his immediate personal environment, (2) his superiors, (3) his subordinates, (4) his peers and colleagues, and (5) the total economic, technological, cultural, social, political, spiritual, and physical environment in which be works. Organizations have technical as well as social aspects, and formal and informal relationships.

Martin (1969) constructed "Employee competency scale as rated by superiors" using five components, viz., communication, dependability, attitude, job competence, leadership.

Chakraborthy (1972) identified Judgment, initiative, integrity, co-operation and loyalty as the competence factors in achieving higher productivity.

Sapru (1972) enumerated the factors that are likely to enhance production in an organization which are reflective of the competence of the personnel involved. They were discipline of the organization, personal contacts, pride in the Job, motivating human action, and justice.

Gleanings from the study entitled "Components of administrative competency as determined by Tennesse superintendents" (Collins, 1975) threw light that the problem was lack of delineation of those administrative competencies that superintendents of Tennesse school districts will need in the successful performance of their tasks. The purpose of the study was to provide information regarding educational, administrative competencies, which could be applied to a variety of practical situations. A modified Delphi Technique was used to collect data. The 11 categories of administrative competencies indicated in order of preference were: public relations, school law, personnel management, human relations, finance, curriculum, other, personnel evaluation, planning, non-personal evaluations and superintendent school board relations.

Glueck (1977) identified five categories of success or effectiveness criteria (which may be listed among the enterprise's objectives as well). They are:

1. Production (Effectiveness): the production of goods and services desired by society.

2. Efficiency: the ratios of benefits to costs, output to input that show that the enterprise uses its resources well.

3. Satisfaction: of employees, customers and clients.

4. Adaptiveness: the extent to which the enterprise can and does respond to changes.

5. Self-development: investing in training and development of employees and managers to help ensure the enterprises survival.

Mali (1981) forthrightly pondered over the effectiveness factors of managerial competence as follows: "The importance of competence in management practice cannot be underestimated. Keeping an organization vital and strong is no job for the lazy, complacent, sloven, or inaccurate. Good managers must be competent! Competence is the foundation of the excellent practice of management no matter where it is applied".

"But competence implies standards. Standards are effectiveness factors. Those who are deeply committed to management insist upon excellence and follow standards that guide them to that destiny. Managerial weaknesses become apparent in the lack of standards or the inability to meet a set of standards. The pursuit of excellence also requires revising standards periodically to reach pinnacles of performance never before experienced".

The following standards are those that make management practice effective. Each standard implies a range of degrees. Obviously, excellence occurs with the highest degree within each standard.

1. Achievement (Accomplishment): bring to a successful end a planned set of expectations or intended results. You keep your goals before you continually, to live with them so that they motivate you and direct your behaviour.
2. Accuracy (Correctness): acting and deciding without errors or faults that form barriers to getting results the first time. You may err the first time but never a second, for the same reason under the same conditions.
3. Productivity (Efficiency): consuming minimal resources and costs while reaching for the highest level of performance and results possible. You are ready and willing to take reasonable risks, realizing that performance stretches with minimal costs involves some degree of probability.
4. Proficiency (Skill): working smartly, drawing on talent, training, experience, and practice. You invest your time and energy in full measure to develop proficiency today because you are certain of harvesting the benefits tomorrow.
5. Creativity (Innovation): generating alternatives that bring about original and unique thought processes, projects, and directions. You are certain there is a better way to do just about everything. You have learned how to harness the flow of creative ideas.
6. Progress (Improvements): advancing and bettering past and present conditions to increase the quality of work life and its satisfaction. You know it is impossible to

stand still in a world of change. You give high priority to growth and advancement.

7. Honesty (Uprightness): showing fairness, truth, and justice in working and responding to the needs of people, the organization, and the government. You comfortably toss the ball to others on the team, knowing they will play honestly and openly.
8. Delivery (Timetable): shipping goods or services at the time agreed on with customers, clients, or buyers. You know you have put events into motion where others depend on you. Because you have expected pressure, you have learned how to use it to solicit constructive responses.
9. Reliability (Dependability): displaying consistent judgment, character, performance, or results that encourage confidence. You know that people depend on you, and that drift and doubt must be controlled.
10. Quality (Standard): attaining a grade or attribute distinct from others on the same level. You make super performance a personal mission for every task that is undertaken and every achievement that is pursued.
11. Flexibility (Adaptability): moving to new areas because of changed conditions in commitments and work processes. You are able to go over, around, and occasionally under obstacles, but you never halt when obstacles appear.
12. Self-development (Learning): growing to expand and advance perceptions, attitudes, talents, and skills for meeting new and formidable challenges. You know you can accomplish just about anything you set out to do, because you can assimilate the skills and talents needed.

13. Succession (Replacements): developing successors for key positions who will advance the firm to a better stage than that at which they found it. You know that you must pass the baton to the new runner with new energy, new trusts and new enthusiasms.
14. Satisfaction (Enjoyment): setting up conditions in the work place and work life for employees to gain contentment in the organization. Satisfaction yields smooth work, better relations, and greater achievements. Your enjoyment gives you a new perspective and a fresh outlook.
15. Renewal (Replenishing): restoring lost and unused ideals, perceptions, understandings, and skills so as to bring a manager back to his or her former position of competence. You know your batteries will run low, and you take actions early enough to prevent complete discharge and breakdown.

These fifteen effectiveness factors measure managerial competence at any level in the organization. They characterize manager who makes super performance a personal hallmark for every important decision to be made. The effectiveness factors make the road to super performance easy to travel.

Khanna (1980) observed that basic to the concept of growing talent are the effectiveness standards associated with every managerial job. These may not be explicitly written down or even known but they are always there to be taken note of. Indeed, effectiveness is not a quality that a manager brings to a situation. It is something a manager produces from a situation by managing it appropriately. As such, it represents output, not input, what matters is not what a manager does, but what he achieves.

Interestingly enough, even if both input and output are low, a manager could easily be hundred per cent efficient but zero per cent effective.

Though Khanna (1980) has not mentioned the factors, the standards referred relate to the competence of an incumbent. Pondering on the same subject Mali (1981) was more specific on this issue.

A follow up study on vocational agriculture programme completers conducted in the State of Arizona, Zurbrick (1989) reported.98 per cent of those graduates of the programme had developed occupational competencies in vocational agriculture, 91 per cent had used the developed competencies, and 96.1 per cent would re-enroll in vocational agriculture if they were able to replace their high school course of study in the light of their post-high school experience.

Brown (1989) emphasized that being competent in life not only makes you employable but also keeps you employed. More importantly, you will find satisfaction in your work and live a more enjoyable life. The focus of educational programme in agriculture is for the goal. Competency base is part of our very foundation. It has an effect upon every part of the curriculum. Professor Clarence Bundy once stated that, "the result of Supervised Occupational Experience Programmes was that, students in the first place developed a lot of competencies. Some of the skills they learned were managerial and some were manipulative (Rheault and Miller, 1983).

Lettow (1989) in his capacity as sales training manager, Pioneer Hybrid International described how a competency study was developed in their organization. It is succinctly quoted below.

The idea of job competency study was met with some skepticism by the Vice President of Sales, but after some consideration was given the "green light". Our next step was to present the idea to the regional sales managers. They all wanted a part of it. "After all, we do things a little different in the south", said the southern region sales manager".

"Four regional success groups consisting of successful sales representatives were formed. Each group dealt with the question of competence by answering the question. "What do you need to know and be able to do to be effective in your job?" The results from all four regions constituted a1ist of 535 competencies were then narrowed down to a workable list of 114".

"The next step in the study was to use a large sample of sales personnel in assessing each competency. Each person was asked to score each competency on a five-point scale indicating importance of the competency and frequency of use. Thus, the importance of each competency was established".

"Moving from the basic research to a usable training programme was the next step. An advisory council of sales managers and sales personnel helped the training department identify the desired training content and sequence. Consideration was given to what training the sales manager should provide and what skills could be developed through on-the-job experience. Also, consideration was given to training schools, self development materials and other sources of training for developing competencies. Not all competencies are developed in the same manner".

Lettow (1989) was also of the opinion that to be assured of success in the market place, an industry must hire new people with the right competencies, train them in the specific competencies of their job, and provide sound performance appraisals and continued self-development. Specific competencies must provide the framework for developing more knowledge, sharper skills and better attitudes than ever before.

Stressing' on Competency Based Instruction (CBI), McCormick (1989) explained that CB1 has been with the agricultural education profession for several years. As a result, "CBP has been and is stressed by agricultural educators in various degrees and in various locations. Writing on the need of "CBI", he mentioned that it has been said, “Good education teaches for the future ", thus good vocational education should also teach for the student’s occupational future. Vocational education, should prepare people (youth and adults) to be able to function in the future with competencies required for future occupational endeavours. CBI should promote the development of knowledge, skills and attitudes (competencies) associated with occupations. In the case of, vocational education in agriculture, these competencies should be associated with agricultural occupations. Furthermore, the competencies need to be carried to the application level so students "can do" following instruction and supervised occupational experience. If properly perceived and designed, CBI can be futuristic in both content and delivery.

From an educational point of view, CBI offers several values to the agricultural education profession assuming that the competencies taught are those required in the occupation(s) for which they are being prepared. CBI can be a vehicle:

- To determine the "must know" content to be taught and learned,

- To minimize the teaching of "nice to know" content,
- To make Supervised Occupational Experience (SOE) programme activities relevant and germane to the occupational area(s) for which students are being prepared,
- To provide an accountability system whereby what is professed to be delivered is actually delivered,
- To provide individual instruction to meet students' occupational needs,
- To help plan relevant FFA activities germane to the preparation programme,
- To contribute to the three domains of learning cognitive, psychomotor, and affective

A birds eye view of the reviews presented here indicate the ‘competence’ is a generic term, which is multidimensional in nature with psychological overtones. Hence, it is necessary to study the job competence under relevant components w1iich cumulatively explain it in it’s entirely.

Reddy (1990) found that majority (66.11%) of the Agricultural Officers possessed medium job competence while the percentage of Agricultural Officers who had high and low competence was near identical (18.33% and 15.56% respectively) which was reflected on the homogeneity of Agricultural Officers job competibility.

2.3 STUDIES ON SELECTED PERSONAL, SOCIO PSYCHOLOGICAL AND SITUATIONAL CHARACTERISTICS IN RELATION WITH JOB COMPETENCE

An exhaustive review of available literature, discussions with experts in agricultural extension had led the researcher to describe 12 antecedent variables that are presumed to have a bearing on the consequent variable "job competence". Further they were categorized into personal, socio-psychological and situational variables. In the review of literature depicted below, the first three variables represent personal characteristics, the next seven are socio-psychological characteristics and the later two represent situational characteristics.

2.3.1. Experience

Talukdar (1984) reported that there was no significant association between experience and productivity of agricultural development officers.

Jhansi (1985) found no significant relationship between experience and extension productivity of agricultural scientists.

Reddy (1990) found that there was no significant relationship between experience and job competence of Agricultural Officers.

Ravisankar (1998) reported that the great majority (86.66%) of the Agricultural Officers in coastal districts of Andhra Pradesh had medium service experience.

Roy (1999) revealed that majority (63.33%) of the Agricultural Officers fell under category of medium experience followed b 21.67 per cent with low experience and 15.00 per cent with high experience respectively.

2.3.2 Training received:

Kulhari (1980) reported a positive and significant correlation between training and knowledge possessed by VDO and VEOs on “improved Rice Production technology.

Jhansi (1985) found that there was no significant relationship between training received and extension productivity of agricultural scientists.

Prasad (1990) indicated that training received was negatively and non significantly related with the knowledge and skill training need of the VEOs.

Reddy (1990) concluded tat Agricultural Officers who have undergone more training were rich in competence than those belonging to medium and low. So there was significant relationship between training received and job competence.

Misra (1991) found that majority (88.00%) of the AEOs had undergone trainings in more than one subject and for more than one week period. Eight per cent had undergone training in one subject for one week period and above only 4.00 per cent of them were without any training.

Kumar (1993) found that majority (72.50%) of Agricultural Officers belonged to medium duration of group in training received while, 12.5 per cent to long duration and 15.00 per cent to short duration group.

2.3.3 Rural-urban background:

Saigaonkar and Patel (1970) showed that the VLWs from rural background were more effective in their job performance than those from the urban background.

Reddy (1983) explained that there was negative and non significant relationship between role performance and rural background of VEOs.

Talukdar (1984) indicated that there was no significant relationship between productivity of Agricultural Development Officers and rural-urban background.

Prasad (1990) reported that rural orientation were negative and significantly related with the knowledge training needs but negative and significantly related with skill training needs of the VEOs.

Redy (1990) explained that the Agricultural Officers group with high level of rural background had high mean job competence.

Mishra (1991) shown that rural orientation were non significantly related with both knowledge and skill training needs.

2.3.4 Workload:

Reddy (1983) revealed that 62.50 per cent of the VEOs in T and V System perceived their workload as average, 31.25 per cent as heavy, 3.75 per cent as very heavy whereas 1.25 per cent as light.

Jhansi (1985) observed that there was no significant relationship between perception of workload and extension productivity of agricultural scientists.

Reddy (1986) reported positive and highly significant relationship between perception of workload and productivity of VEOs.

Reddy (1990) concluded that there was no significant relationship between perceived and job competence.

Venkaiah (1991) reported that 53.85 per cent of Agricultural Officers hade an average workload followed by heavy (41.03%) and very heavy (5.12%) workload.

Reddy (1998) revealed that great majority (89.71%) of the Agricultural Officers perceived medium workload, while 7.35 per cent and 2.94 per cent perceived that they had high and low workload respectively.

Roy (1999) reported that majority (68.33%) of the respondents were having medium level of workload followed by 16.67 per cent with high workload and 15 per cent with low workload.

2.3.5. Achievement motivation:

Mc Clelland and Winter (1969) defined achievement motivation as a spontaneously expressed desire to do something well for its own sake rather than to gain power or love, recognition or profit.

Laharia (1978) observed that achievement motivation had positive relationship with only one productivity indicator (publication score) of agricultural scientists.

Christian (1979) pointed out that the subjects need for achievement was unaffected by age, socio-economic status, rural urban background, fear of failure and hope of success concern.

Rao (1984) stated that more than half of the extension personnel of Department of Agriculture had high (52.05%) followed by low (47.50%) achievement motivation.

Jhansi (1985) found that there was no significant relationship between achievement motivation and extension productivity of agricultural scientists.

Reddy (1986) noted that the achievement motivation was positively and significantly correlated with the productivity of VEOs.

Reddy (1990) accounted that Agricultural Officers who possessed high amount of achievement motivation had relatively more competability than those with medium and low levels.

Reddy (1998) identified that majority (61.76%) of Agricultural Officers had medium achievement motivation followed by high and low achievement motivation with 22.06 per cent and 16.18 per cent respectively.

Roy (1999) found that majority of (65.00%) of Agricultural Officers fallen under medium category of achievement motivation followed by 18.73 per cent of the respondents with low achievement motivation and 16.67 per cent with high achievement motivation.

2.3.6 Level of aspiration:

It was defined as the level of future performance in a familiar task, which an individual after knowing the level of past performance in his task, explicitly undertook to reach.

Venkaiah (1991) revealed that majority (50.00%) of Agricultural Officers had low level of aspiration.

Bharathi (1994) found that about 45.33 per cent of the teachers of ANGRAU had average level of aspiration followed by high and low levels of aspiration respectively.

2.3.7 Organizational commitment:

Grusky (1966) found that organizational commitment increased with years spent in an organization. It was suggested that service invested becomes a valued resource in itself, while the privileges associated with length of service make the learner to derive additional rewards.

Porter *et al.* (1974) indicated that organizational commitment as the relative strength of an individual's identification with and involvement in a particular organization. It can be characterized by at least three factors such as a strong belief in and acceptance of the organizational goals and values, willingness to exert considerable effort on behalf of the organization and a strong desire to maintain membership in the organization.

Jauch *et al.* (1978) explained that those researchers in a hospital with strongest professional commitment had high research productivity, whereas loyalty was found to be unrelated to productivity.

Reddy (1986) observed positive and highly significant relationship between organizational commitment and productivity of VEOs.

Reddy (1990) indicated that higher the organizational commitment, higher was the job competence.

2.3.8 Morale

Morale of an individual is an overt manifestation of the level of motivation embedded in him. Measurement of morale leads to the appraisal of motivation in organizational settings.

Mathur (1972) found significant relationship between morale and efficiency of an organization.

Scott and Mitchell (1972) defined morale as one's overall feelings towards his job.

Minocha (1977) noted that morale influences performance positively.

Talukdar (1984) observed that morale had positive and significant relationship with the productivity of agricultural development officers. He further concluded that morale had positive and significant relationship with organizational health, attitude and conformity.

Reddy (1986) reported that 69.44 per cent of VEOs had medium level of morale and remaining had high and low morale groups. He also reported that the morale had positive and highly significant relationship with the productivity of VEOs.

Reddy (1990) revealed that there was positive and significant influence of morale on job competence.

2.3.9 Attitude towards T and V System:

Ghose (1978) observed that 63.34 per cent of the extension officials had moderate to less factorable attitude and 26 per cent had unfavourable attitude towards T and V System.

Pandey (1979) concluded that 72.00 per cent of the VEOs were favorably disposed towards T and V System, 20.00 per cent neutral and 8.00 per cent were unfavourable disposed in a study conducted in Rajasthan.

Prajapathi and Patel (1980) revealed that only 15.00 per cent of the extension workers had favourable attitude and majority (62.50%) of hem had neutral attitude and 22.50 per cent had a favourable attitude towards selected aspects of T and V System.

Talukdar (1984) found positive and significant relationship between the attitude of agricultural development officers and their productivity.

Manandhar (1987) came out with positive and highly significant relationship between attitude of T and V System extension functionaries in Nepal and their communication behaviour.

Reddy (1990) found that better attitude towards T and V System invariable boosted up the job competence of an Agricultural Officer working under T and V System.

Khalil (1998) revealed that majority of the extension personnel (70.00%) had average attitude while remaining one third had fallen low (20.00%) and high (10.00%) attitude towards job.

2.3.10 Attitude towards farmers:

John (1966) and Kherde (1971) reported that VLWs attitude towards the villagers was highly and positively associated with their role performance.

Reddy (1986) found the attitude of VEOs of T and V System towards farmers was positively and highly significantly related with their productivity.

Reddy (1990) found that the variable attitude towards farmers had experienced significant influence on job competence.

Scanty availability of the reviews in this connection necessitates further investigation on its influence on consequent variables.

2.3.11 Facilities and resources:

Gondi and Gowda (1983) observed that there is certain lacuna with regard to the facilities available in lecture hall, certain equipments required for the smooth conduct of monthly workshops.

Reddy (1983) found no significant association between facilities and resources and communication behaviour.

Talukdar (1984) attempting to investigate on the productivity of agricultural development officers reported significant relationship between general facilities and their productivity.

Jhansi (1985) reported no significant relationship between extension productivity of agricultural scientists.

Reddy (1986) through his study on the productivity of VEOs in T and V System found positive and significant relationship between their productivity and facilities and resources available at their command.

Reddy (1987) found that there was no significant correlation between work facility and job effectiveness of VEOs.

Reddy (1990) stressed that there was significant and positive relationship between the independent variable facilities and resources and dependent variable job competence and facilities they had.

2.3.12 Organizational climate:

Miles (1975) viewed organization as inseparable intertwined people and process into what is currently referred to as a socio technical system. People in the organization operate the technology, run the process, but they in turn as part of the process, have much of their behaviour determined by the system they operate.

An organization is the planned coordination of the activities of a number of people for the achievement of some common, explicit purpose or goal, through division of labour and function, and through hierarchy of authority and responsibility (Schien 1983).

Talukdar (1984) showed that organizational health and positive and significant relationship with the productivity of agricultural development officers.

Jhansi (1985) reported no significant relationship between organizational climate and extension productivity of agricultural scientists.

Reddy (1987) reported that there was positive and highly significant relationship between organizational climate and productivity of Village Extension Officers of T and V System in Andhra Pradesh.

Reddy (1990) suggested that there was significant and positive relationship between organizational climate and job competence.

Sampath Rao (1996) reported that there was significant and positive relationship between job satisfaction and organizational climate.

2.4. PROBLEMS OF EXTENSION FUNCTIONARIES AND THEIR SUGGESTIONS TO OVERCOME THEM

2.4.1 Problems of extension functionaries:

Reddy (1986) noticed the problems as perceived by the village extension officers. They were the lack of transport 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.

Reddy (1990) reported the problems encountered by AOs were lack of qualified VEOs, lack of inputs in time, political interference and additional charge of other posts in that order in terms of intensity.

Pankajasree (1995) noticed the problems faced by the Department of Agriculture staff personnel were like lack of supervision, lack of minimum physical facilities, heavy workload etc.

2.4.2 Suggestions to overcome the problems in organization

According to Jhansirani (1985) increased promotional avenues, better salaries, training, provision and adequate budget, deputation for higher education, provision of congenial atmosphere for work, provision of residential accommodation etc, were the suggestions given by scientists of Andhra Pradesh Agricultural University for improving the job productivity.

Reddy (1987) found the suggestions given by the VEOs were providing proper transport facilities, providing sufficient funds at appropriate time, plant protection equipment should be provided at appropriate time and providing teaching aids for educational used as the major suggestions in their effective functioning.

2.5. CONCEPTUAL MODEL OF THE STUDY

2.5.1 Conceptual model of the study:

In the light of inferences derived from recorded evidences in the literature, conceptual framework has been developed for the study, which diagrammatically presents the important dimensions and postulated relationships among the variables (Fig. 1).

Conceptual model is a diagrammatic representation outlining the dominant elements of a system and their interrelationships with respect to a criterion variable. It represents the researcher's understanding of a particular set of circumstances and of the simplifications, which he feels, may be made to inherently complex relationships. The present investigation is a serious attempt to study the job competence of Agricultural Officers in the State Department of Agriculture of Tamil Nadu.

There is a need to understand the relationship between the selected independent variables and job competence and here it is given in an understandable way.

Job competence refers to the innate qualities of a job incumbent. Competence acts as the precursor to an individual's performance. The competence of a person leads to varying proportions of performance at different times and situations.

The conceptual model gives a comprehensive idea about the job competence in relation with a set of selected independent variables representing personal, scio-psychological and situational characteristics of Agricultural Officers. These variables were selected based on the review of literature and consultation with experts and examined. The relationship was diagrammatically represented in Fig. 1.

2.5.2 Hypotheses of the study:

Basing on the objectives, review of literature and theoretical orientation of the study, the following hypotheses were generated for empirical testing of the variables.

Null hypothesis:

There will be no significant relationship of personal, socio-psychological and situational factors on job competence of Agricultural Officers.

Empirical hypothesis:

There will be significant relationship of personal, socio-psychological and situational factors on job competence of Agricultural Officers.

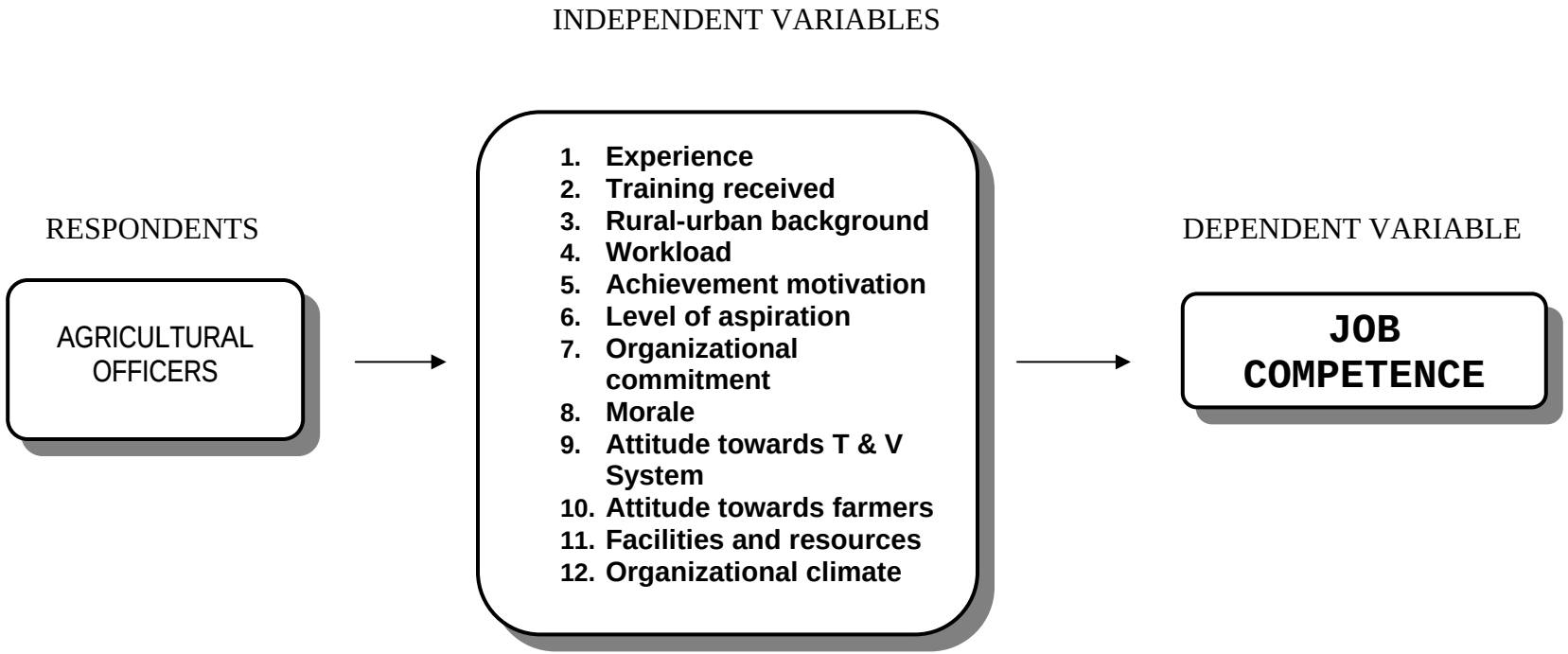

Fig.: 1 Conceptual model of the study

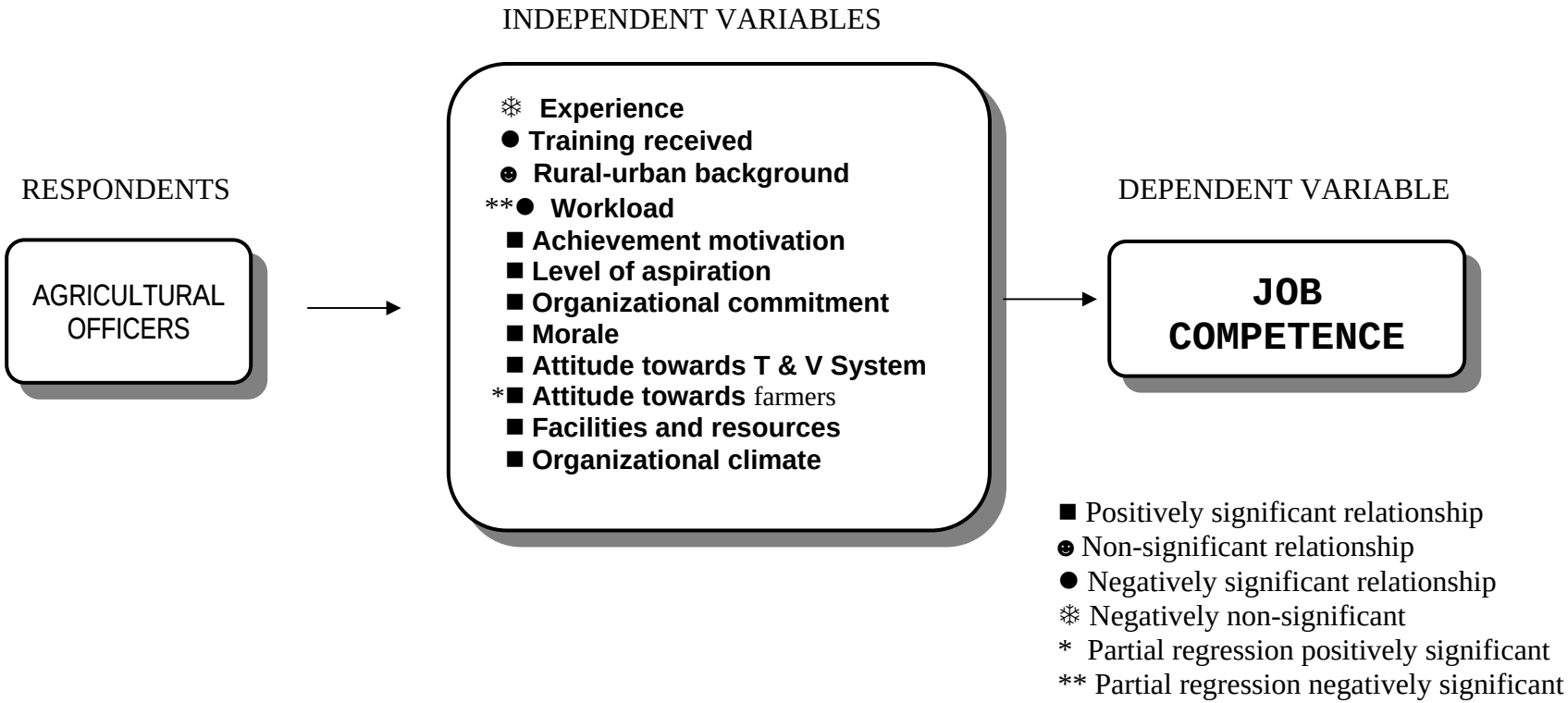

Fig. 16 : Empirical model of the study

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MATERIALS AND METHODS

In this chapter, the type of research design, locale of the study, the procedure followed in sampling, empirical measurement of the variables, collection of data and statistical methods used in the analysis of the data are described.

The details of the methodology followed in the present investigation are presented under the following heads.

3.1. Research design

3.2. Sampling procedure

3.3. Variables and their empirical measurement

3.4. Categorization of the respondents

3.5. Techniques used in data gathering

3.1. RESEARCH DESIGN

The research design adopted for this study was Ex-post-facto since the phenomenon had already occurred. According to Kerlinger, ex-post facto research is a systematic empirical inquiry in which the scientists do not have direct control of independent variables because their manifestation have already occurred or because they are inherently not manipulable.

SAMPLING PROCEDURE

3.2.1 Locale of the study:

The state of Tamil Nadu was chosen as the locale of the study since the researcher belonged to the state and was familiar with the working system of Department of Agriculture, the respondents and local language. Hence building up of the rapport with respondents and others concerned was easier.

3.2.2 Selection of the districts:

Systematic random sampling procedure was used for selecting the districts. Systematic random sampling: When a complete list of the population is available a common method of selecting a sample is to take every n^{th} item from this list. This method is called systematic or quasi random sampling.

The procedure followed in selection of the districts.

The Chennai district is contained to city only in which the number of Agricultural Officers were negligible in number, hence by leaving Chennai district the method was followed for other districts.

Except Chennai remaining 29 districts in Tamil Nadu were arranged in alphabetical order. Each district was assigned number from 1 to 29 in order. First was marked with number 1 and then 7 districts were selected at 3 number intervals. The districts thus selected were a. Coimbatore (1), b. Erode (5), c. Krishnagiri (9), d. Perambalur (13), e. Sivaganga (17), f. Tiruchy (21), g. Tiruvarur (25) and h. Virudhunagar (29) as shown in Fig. 2.

3.2.3 Selection of respondents:

State Department of Agriculture has the main responsibility for doing extension work in the state. Most of the extension works are carried out through Training and Visit system. In T and V System, Agricultural Officers play major role in transfer of technology. So it was decided to take the Agricultural Officers (T&V) carrying out extension work as sample for this research work.

All the Agricultural Officers doing extension work in selected 8 districts were chosen as sample for the study. Out of 148 actual positions in the selected 8 districts 141 were occupied by Agricultural Officers. All the available Agricultural Officers (T & V) were chosen as respondents.

3.2.4 Variables selected for the study:

The variables for the study have been chosen based on literature available on the subject, consultation with the experts and previous studies taken upon the related subjects. Those variables which were found to have relevance to the present investigation were thus included in the present study. The instruments used to measure the variables together with the detailed procedure followed has been described in detail in following pages.

3.3 VARIABLES AND THEIR EMPIRICAL MEASUREMENT:

Based on review of literature and opinion of experts in the field of extension education the following variables were selected for the study.

Table 1: VARIABLES AND THEIR EMPIRICAL MEASUREMENT

S.No.	Variables	Empirical Measurement
A.	**Dependent variable**	
1.	Job competence	Index developed for the study
B.	**Independent Variables**	
1.	Experience	Schedule developed for the study
2.	Training received	Schedule developed for the study
3.	Rural-urban background	Scale developed by Sushil Kumar (1984) with suitable modifications
4.	Workload	Scale developed by Srinivasa Rao (2002) with suitable modifications
5.	Achievement motivation	Schedule developed for the study
6.	Level of aspiration	Scale developed by Kilpatrich and Cantril (1960) with suitable modifications
7.	Organizational commitment	Scale developed by Porter *et al.* (1974) with suitable modifications
8.	Morale	Scale developed by Talukdar (1984) with suitable modifications
9.	Attitude towards T & V System	Scale developed by Kulhari (1980) with suitable modifications
10.	Attitude towards farmers	Scale developed by Supe (1969) with suitable modifications
11.	Facilities and resources	Scale developed by Sharma (1969) with suitable modifications
12.	Organizational climate	Scale developed by Srinivasa Rao (2002) with suitable modifications

3.3.1 Operationalization and measurement of variables:

The researchers attempt was to measure the job competence of Agricultural Officers as dependent variable along with 12 other independent variables, which were

presumed to have a bearing on the selected dependent variable. Scales developed by different researchers were adopted for measuring independent variables. Details of scales used, operationalization and measurement of all the variables find place in the succeeding parts of the chapter.

3.3.1.1 Operationalization and measurement of dependent variable:

3.3.1.1.1 Job competence:

In this study job competence has been operationalized as 'sufficiency or adequacy of the abilities or qualities possessed by a job incumbent which aid him in achieving the intended results'.

In this study the scale developed by Reddy (1990) for job competence has been used with suitable modifications, which consisted 10 dimensions and 63 items. They are a. Technical knowledge, b. Guidance, c. Communicative ability, d. Adaptability, e. Self development, f. Creativity, g. Empathy h Mental agility, i. Initiative and j. Judgment. Job competence is divided in to 10 dimensions for clarity of concept(s) to the respondents.

Scoring technique:

Each of the 63 items in the final version of the scale contained a five point continuum of response. The weightages were assigned for different levels of perception as given below.

Level of Perception	Scoring
A great deal	4
Fairly much	3

To some degree	2
Comparatively little	1
Not at all	0

The range of score that could be possible on the scale in case of each respondent was a minimum of zero and a maximum of 252.

Rating on job competence:

Review of literature indicated that the ratings on consequent variables like job performance, productivity, job effectiveness etc, were obtained from different types of informants via; respondents themselves, superiors, peers, subordinates and clientele. The ratings of superiors and subordinates of Agricultural Officers were not taken due to lack of time, finance and the constraints. So in the present study the possible ratings were taken form the Agricultural Officers themselves (self rating) only.

3.3.2 Operationalization and measurement of independent variables:

The independent variables have been classified into three groups viz; personal, socio-psychological and situational variables and their operationalization and measurement are discussed hereunder.

Personal variables:

3.3.2.1 Experience

Experience relates to the number of completed years of service in the Department of Agriculture, Tamil Nadu, both inside and out side the T and V System. For one year of service in T and V System a score of two and for a year of service out side the system a score of one was given.

3.3.2.2 Training received:

It is the acquisition of knowledge and skills by the extension functionaries, which is characterized by pre-service and in-service training. Each week's training received a score of one

3.3.2.3 Rural-urban background:

Rural urban background was operationalized to subsume aspects such as father's occupation, native place, place of primary education, place of secondary education, place of college education, liking towards rural life, interest to work in rural area and cultivable land owned. Item wise weightages are detailed below.

	Item	**Score**
a)	Father's occupation	
i)	Farming	2
ii)	Non farming	1
b)	Native place	
i)	Village	3
ii)	Town	2
iii)	City	1
c)	Place of primary education	
i)	Village	3
ii)	Town	2
iii)	City	1
d)	Place of secondary education	
i)	Village	3
ii)	Town	2
iii)	City	1
e)	Place of college education	

i)	Village	3
ii)	Town	2
iii)	City	1
f)	Liking towards rural life	
i)	More liking	3
ii)	Moderate liking	2
iii)	Less liking	1
g)	Interest to work in rural areas	
i)	More interested	3
ii)	Interested	2
iii)	Less interested	1
h)	Cultivable land owned	
i)	Wet (One acre)	2
ii)	Dry (One acre)	1

Socio-psychological variables:

3.3.2.4 Workload:

It was operationalized as the degree to which the respondents have comprehended the nature and quantum of work and its relation to the quality of their performance. A scale developed by Srinivasa Rao (2002) was used with suitable modifications. The scale 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 five point response categories from strongly agree to strongly disagree

3.3.2.5 Achievement motivation:

It was operationalized as the value associated with an individual, which drives him to excel in his activities to attain a sense of personal accomplishment. Schedule was developed by including a scale of Reddy (1976). In all, seven items comprised the scale with a minimum score of 7 and maximum score of 35. It was measured on a five point continuum, viz; strongly agree, agree, undecided, disagree and strongly disagree carrying respective weightages from 5 to 1. There were no negative statements.

3.3.2.6 Level of aspiration:

Level of aspiration was operationally defined as goal statements concerning present and future level of attainment.

In the earlier studies the level of aspiration was measured by the projective technique (Pareek and Chatopadhyaya, 1960) but the most popular technique is measurement through Control Pictorial Self Anchoring Ladder Scale (Kilpatrick and Cantril 1960). The same scale was used in the study with suitable modifications. The original scale provides anchoring points from 0 to 10 for self rating with reference to past, present and future. In the present study it was decided to use the anchoring points from 1 to 9 for self rating with reference to past, present and future.

The respondents were asked to indicate the step in the ladder which they feel standing at present and where they were five years ago and where they will stand after five years from now. The total scores ranged from 3 to 27.

3.3.2.7 Organizational commitment:

It was defined as the extent to which an individual has a strong belief in and acceptance of organization's goals and values, willing to exert considerable effort on behalf of the organization and has a strong desire to stay in the organization. Measurement of organizational commitment of Agricultural Officers was possible through the scale developed by Porter *et al.* (1974) with suitable modifications. Possible score ranged from 14 to 42 since the scale comprised of 14 items. The responses were obtained on a three point continuum agree, somewhat agree and disagree with the score weightings of 3, 2 and 1 for positive and 1, 2 and 3 for negative statements.

3.3.2.8 Morale:

Morale was defined as a state of mind and emotions, affecting the attitude and willingness to work, which in turn affects individual and situational objectives (Towle 1962).

In this study, morale was operationalized as the mental state with regard to spirit and confidence. The scale developed by Talukdar (1984) with slight modifications was used to measure morale. The 14 statements in it were expected to yield a sore range of 14 to 70. The positive statements attracted a score of 5, 4, 3, 2 and 1 on five point response categories and the score was reversed for negative statements.

3.3.2.9 Attitude towards T and V System:

It refers to the degree of positive or negative feeling of the respondent towards the T and V System. The attitude of Agricultural Officers in this regard was approximated

through the scale developed by Kulhari (1980) with minor modifications, which was reflected in 16 statements. The score variation among the items was 16 to 80, each statement was provided with five response categories namely strongly agree, agree, undecided, disagree and strongly disagree with a weightage of 5, 4, 3, 2 and 1 respectively for positive statement and the reverse for negative one.

3.3.2.10 Attitude towards farmers:

Attitude towards farmers was operationalized as the positive or negative affect of the Agricultural Officers towards the farmers. This was quantified by utilizing the scale developed by Supe (1969) with the suitable modifications. The instrument had six statements and the score possible varied from 6 to 30. Each statement was provided with five response categories namely strongly agree, agree, undecided, disagree and strongly disagree with a weightage of 5, 4, 3, 2 and 1 respectively for positive statement and the reverse for negative one.

Situational variables:

3.3.2.11 Facilities and resources:

Facilities and resources refer to the availability of men, money, materials and methods at one's disposal which aid in successful accomplishment of work assigned. A scale developed by Sharma (1969) was employed in measuring the variable. A score range of 8 to 40 was possible on this variable, which had eight statements.

3.3.2.12 Organizational climate

Organizational climate refers to the perception of an extension worker about his work place, facilities, co-workers etc. It was measured by the scale constructed by Srinivasa Rao (2002) with suitable modifications.

It consisted seven statements with a possible score range from 0 to 14 on a three point continuum. There were six positive and one negative statement.

3.4 CATEGORIZATION OF RESPONDENTS:

The respondents were categorized into low, medium and high groups in respect of both antecedent and consequent variables basing on the following criteria.

High	=	Above mean + 1 S.D.
Medium	=	Between mean $\pm$ 1 S.D.
Low	=	Below mean – 1 S.D.

The nomenclature of low, medium and high was changed to some meaningful way in case of variables like experience, training received, attitude towards T and V System and the attitude towards farmers.

3.5 TECHNIQUES USED IN DATA GATHERING:

3.5.1 Development of questionnaire:

Based on relevant literature, discussion with researchers, extension specialists and field extension personnel a questionnaire was prepared to collect the data from the respondents. The final version used for the investigation is appended in appendices. The

questionnaire was developed for the collection of data to measure the independent variables as well as dependent variable.

3.5.2 Administration of the questionnaire:

All the questionnaires were given code numbers for identification and to keep the respondents name anonymous. Since the respondents were spread over in all 8 districts comprising 148 blocks, meeting each one of them for data collection was considered to be unfeasible due to time and resource constraints. To overcome this difficulty, it was decided to collect the data through mailing. For which a requisition letter was attached with each questionnaire. In the requisition letter the respondents were requested to fill the responses in the appropriate space provided against each item in the questionnaire, and assurance was also given that the furnished information would not be disclosed to any one and would be kept very confidential. The investigator traveled to all the Joint Director of Agriculture offices in selected districts for gathering addresses of the Agricultural Officers. Later the researcher sent the questionnaires to all the Agricultural Officers (T & V) in the selected districts.

3.5.3 Statistical procedures used in analysis of data:

The data thus collected was coded and analyzed with the help of the following statistical methods.

3.5.3.1 Frequencies and Percentages

Some of the data were also subjected to and interpreted in terms of their frequencies and percentages.

3.5.3.2 Arithmetic mean (x):

The arithmetic mean is the quotient that results when sum of all items in the series is divided by the number of items, the formula is

$$\bar{x} = \frac{\Sigma x}{n}$$

Where,

$\bar{x}$ = Mean

Σx = sum of squares

n = Number of respondents

3.5.3.3 Standard Deviation:

Standard deviation is the square root of the mean of the squares of the deviation from the means of the distribution, which is calculated with the formula given below:

$$\sigma = \sqrt{\frac{1}{n}\left(\sum x^2 - \frac{(\sum x^2)}{n}\right)}$$

Where σ = Standard deviation

X^2 = Sum of squared deviations from the mean

n = Number of items

3.5.3.4 Correlation coefficient (r):

This was used to find out the extent of the relationship between the scores of independent variables and score of dependent variable of the study.

$$r = \frac{\sum xy - \frac{(\sum x)(\sum y)}{n}}{\sqrt{\sum x^2 - \frac{(\sum x)^2}{n}} \sqrt{\sum y^2 - \frac{(\sum y)^2}{n}}}$$

Where

r = Co-efficient of correlation between x and y

$\sum x$ = Sum of independent variable x

$\sum y$ = Sum of dependent variable y

$\sum x^2$ = Sum of squares of x variable

$\sum y^2$ = Sum of squares of y variable

n = Size of the sample

The computed 'r' values were then compared with the tabulated values at 1 and 5 per cent level of significance.

3.5.3.5 Regression analysis:

Multiple regression analysis was employed to find out the contribution of various independent variables, in combination on dependent variable. In other words, the influence of various independent variables on the dependent variable job competence was obtained by regression analysis.

A. Multiple regression analysis

Multiple regression provides an analysis of the relations among two or more predictor variables and the single criterion variable Y. The regression coefficient b_x may be interpreted as the change in Y corresponding to a unit increase in x_1 when all the other

variables are held constant. The multiple regression coefficient 'R' is the highest possible correlation between least squares of the independent variables and the observed dependent variable and R^2 is the portion of the variance in the criterion variable.

The regression equation may be written as

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 \ldots\ldots\ldots b_k x_k$$

Where a = intercept

b_1 = The partial regression coefficient represents the amount of change in Y that can be associated with a unit change in x_1 the remaining independent variables held constant

xi = ith independent variable for i = 1,2, … K

B. Programme organization

The programme was organized to calculate the mean and standard deviations of the variables and work out the correlation matrix. The partial regression coefficient (bx), SE of b, 't' value of b, multiple regression (R) and coefficient of determination (R^2) were worked out for each variable. In the next step it deleted the variable which had the least computed t– value.

Thus the predictive power of the each of the multiple regression equations was evaluated with the help of multiple correlation co-efficient (R) and the square of the multiple regression coefficient (R^2). The multiple regression coefficient (R) represents zero order correlation between the actual dependent variable (r) score and the predicted dependent variable score from the independent variable under consideration. If the

predicted dependent variable for each respondent would correspond exactly to his actual dependent variable score obtained in the study, then the multiple regression would be unity or 1.00.

The significance of each of the partial regression coefficients in multiple regression equation was determined by student's t-test.

$$t = \frac{b}{\text{SE of (b)}}$$

Where

b = Partial regression coefficient

SE of (b) = Standard error of the partial regression coefficient

CHAPTER IV

RESULTS

This chapter highlights the findings of the investigation with reference to the objectives of the study. The data collected were coded, analyzed, interpreted and the results were presented under the following heads.

4.1 Personal, socio-psychological and situational characteristics of Agricultural Officers.

4.2 Job competence of Agricultural Officers

4.3 Relationship between personal, socio-psychological and situational characteristics and their job competence

4.4 Problems encountered by Agricultural Officers and their suggestions to overcome them

4.5 Empirical model of the study

4.1 PERSONAL, SOCIO-PSYCHOLOGICAL AND SITUATIONAL CHARACTERISTICS OF AGRICULTURAL OFFICERS

The distribution of respondents into different categories based on their selected personal, socio-psychological and situational characteristics were presented in the following tables and interpreted through frequencies, percentages, mean and standard deviation.

4.1.1 Experience

Table:2 Distribution of respondents according to their experience

(n = 102)

SL.No	Level of experience	Frequency	Percentage
1.	More	18	17.65
2.	Medium	71	69.60
3.	Less	13	12.75
	Total	102	100.00
		Mean: 28.89	S.D. 11.15

Results presented in Table 2 (Fig. 3) indicate that majority (69.60%) of the respondents had medium level of experience followed by more (17.65%) and less (12.75%) level of experience.

4.1.2 Training received

Table:3 Distribution of the respondents according to their training received

(n = 102)

SL.No	Training received	Frequency	Percentage
1.	More	11	10.78
2.	Medium	91	89.22
3.	Less	0	0.00
	Total	102	100.00

It is evident from the Table 3 (Fig. 4) reveals that majority (89.22%) of the respondents had received medium training followed by more (10.78%) training received. Nobody had fallen in the less category.

4.1.3 Rural-urban background

Table:4 Distribution of the respondents according to their rural-urban background

(n = 102)

SL.No	Rural-urban background	Frequency	Percentage
1.	High	22	21.57
2.	Medium	61	59.80
3.	Low	19	18.63
	Total	102	100.00
		Mean: 25.45	S.D. 10.50

A cursory glance of Table 4 (Fig. 5) indicates that majority (59.83%) of the Agricultural Officers were having medium rural-urban background followed by those with high (21.57%) and low (18.63%) Rural-urban background respectively

4.1.4 Workload

Table:5 Distribution of the respondents according to their workload

(n = 102)

SL.No	Workload	Frequency	Percentage
1.	High	11	10.78
2.	Medium	78	76.48
3.	Low	13	12.74
	Total	102	100.00
		Mean: 10.19	S.D. 2.42

It could be comprehended from the Table 5 (Fig. 6) that majority (76.48%) of respondents perceived medium workload followed by low (12.74%) workload and high (10.78%) workload respectively.

4.1.5 Achievement motivation

Table:6 Distribution of the respondents according to their achievement motivation

(n = 102)

SL.No	Achievement motivation	Frequency	Percentage
1.	High	20	19.60
2.	Medium	72	70.58
3.	Low	10	9.80
	Total	102	100.00
		Mean: 26.08	S.D. 4.11

It could be seen from the Table 6 (Fig. 7) indicate that majority (70.58%) of the respondents had medium achievement motivation followed by high (19.60%) and low (9.80%) levels of achievement motivation respectively.

4.1.6 Level of aspiration

Table:7 Distribution of the respondents according to their level of aspiration

(n = 102)

SL.No	Level of aspiration	Frequency	Percentage
1.	High	11	10.78
2.	Medium	83	81.38
3.	Low	8	7.84
	Total	102	100.00
		Mean: 18.48	S.D. 3.65

Table 7 (Fig. 8) reveals that majority (81.38%) of the Agricultural Officers had medium level of aspiration followed by high (10.78%) and low (7.84%) levels of aspiration.

4.1.7 Organizational commitment

Table:8 Distribution of the respondents according to their organizational commitment

(n = 102)

SL.No	Organizational commitment	Frequency	Percentage
1.	High	12	11.77
2.	Medium	75	73.53
3.	Low	15	14.70
	Total	102	100.00
		Mean: 33.50	S.D. 3.99

Table 8 (Fig. 9) reveals that 73.53 per cent of the subjects had medium organizational commitment followed by those with low (14.70%) and high (11.77%) organizational commitment.

4.1.8 Morale

Table:9 Distribution of the respondents according to their morale

(n = 102)

SL.No	Morale	Frequency	Percentage
1.	High	28	27.45
2.	Medium	58	56.87
3.	Low	16	15.68
	Total	102	100.00
		Mean: 55.00	S.D. 5.65

Results figured from Table 9 (Fig. 10) show that majority, 56.87 per cent of the respondents had medium morale followed by categories having high (27.45%) and low (15.68%) morale respectively.

4.1.9 Attitude towards T and V System:

Table:10 Distribution of the respondents according to their attitude towards T and V System

(n = 102)

SL.No	Attitude towards T and V System	Frequency	Percentage
1.	Favourable	18	17.65
2.	Neutral	69	67.65
3.	Unfavourable	15	14.70
	Total	102	100.00
		Mean: 57.00	S.D. 6.71

Results of the Table 10 (Fig. 11) indicate that majority, 67.65 per cent of the Agricultural Officers had neutral attitude towards T and V System followed by those with

favourable (17.65%) and unfavourable (14.70%) attitude towards T and V System respectively.

4.1.10 Attitude towards farmers

Table: 11 Distribution of the respondents according to their attitude towards farmers

(n = 102)

SL.No	Attitude towards farmers	Frequency	Percentage
1.	Favourable	21	20.58
2.	Neutral	66	64.71
3.	Unfavourable	15	14.71
	Total	102	100.00
		Mean: 26.74	S.D. 2.99

The findings that embellished Table 11 (Fig. 12) reveal that majority 64.71 per cent of the respondents had neutral attitude towards farmers followed by those with favourable (20.58%) and unfavourable (14.71%) attitude towards farmers respectively

4.1.11 Facilities and resources

Table:12 Distribution of the respondents according to satisfaction with available facilities and resources

(n = 102)

SL.No	Facilities and resources	Frequency	Percentage
1.	High	19	18.62
2.	Medium	71	69.61
3.	Low	12	11.77
	Total	102	100.00
		Mean: 27.51	S.D. 5.72

An examination of Table 12 (Fig. 13) throws light that majority (69.61%) of the Agricultural Officers perceived that medium level of facilities and resources were available followed by high (18.62%) and low (11.77%) categories of respondents who perceived the availability of facilities in that order respectively.

4.1.12 Organizational climate

Table:13 Distribution of the respondents according to their organizational climate

(n = 102)

SL.No	Achievement Motivation	Frequency	Percentage
1.	High (Most facilitating)	12	11.76
2.	Medium (Facilitating)	73	71.57
3.	Low (Less facilitating)	17	16.67
	Total	102	100.00
		Mean: 26.81	S.D. 3.04

A bird's eye view of Table 13 (Fig. 14) shows that majority (71.57%) of the respondents felt that medium level of organizational climate which was facilitating was found in their organization followed by those categories who felt low (16.67%) and high (11.76) organizational climate respectively.

4.2 JOB COMPETENCE OF AGRICULTURAL OFFICERS

4.2.1 Job competence

Table:14 Distribution of the respondents according to their job competence

(n = 102)

SL.No	Job competence	Frequency	Percentage
1.	High	16	15.68
2.	Medium	68	66.67
3.	Low	18	17.65
	Total	102	100.00

Mean: 210.40 S.D. 23.65

It was clearly evident from the Table 14 (Fig. 15) that majority (66.67%) of the Agricultural Officers had medium level of job competence followed by low (17.65%) and high (15.68%) levels of job competence respectively.

4.3 RELATIONSHIP BETWEEN PERSONAL, SOCIO-PSYCHOLOGICAL AND SITUATIONAL CHARACTERISTICS AND THEIR JOB COMPETENCE

4.3.1 Relationship between personal, socio-psychological and situational characteristics and their job competence

This section deals with nature of relationship of selected twelve independent variables with that of dependent variables i.e. job competence of Agricultural Officers. In order to study the relationship between the dependent and independent variables, the correlation coefficient (r) was computed for each independent variable. The values of correlation coefficient (r) were then tested for their statistical significance. The results were presented here under.

Null hypothesis:

There will be no significant relationship between job competence and personal, socio-psychological and situational characteristics of the Agricultural Officers.

Empirical hypothesis:

There will be significant relationship between job competence and personal, socio-psychological and situational characteristics of the Agricultural Officers.

Table:15 Relationship between the selected independent variables and job competence of the respondents about recommended practices

(n = 102)

S.No	Independent variable	Correlation coefficient (r) values
1.	Experience	-0.1253 NS
2.	Training received	-0.1989 *
3.	Rural-urban background	0.1311 NS
4.	Workload	-0.3465 **
5.	Achievement motivation	0.3187 **
6.	Level of aspiration	0.3012 **
7.	Organizational commitment	0.2741 **
8.	Morale	0.5798 **
9.	Attitude towards T & V System	0.2354 *
10.	Attitude towards farmers	0.5713 **
11.	Facilities and resources	0.2407 **
12.	Organizational climate	0.2119 **

* : Significant at 0.05 level of probability

** : Significant at 0.01 level of probability

NS : Non-significant

4.3.1.1 Job competence Vs Experience

It could be observed from Table 15 (Fig. 16) that the computed coefficient of correlation value ('r'= -0.1253) was found non significantly related with job competence of the respondents. Hence, the null hypothesis was accepted and empirical hypothesis was rejected. Therefore it could be inferred that there was no significant relationship between experience and job competence of the respondents

4.3.1.2 Job competence Vs Training received

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= -0.1989) was negatively and significantly related with job competence of the respondents. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a negative and significant relationship between training received and job competence of the Agricultural Officers.

4.3.1.3 Job competence Vs Rural-urban background

A bird's eye of Table 15 (Fig. 16) indicates that the computed coefficient of correlation value ('r'= 0.1311) was found non significantly related with job competence of the respondents. As such, the null hypothesis was accepted and empirical hypothesis was accepted. Therefore it could be reported that there was a non significant relationship between job competence and rural-urban background of the respondents.

4.3.1.4 Job competence Vs Workload

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= -0.3465) was negatively and significantly related with job competence of the

respondents. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a negative and significant relationship between workload and job competence of the respondents.

4.3.1.5 Job competence Vs Achievement motivation

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= 0.3187) was positively and significantly related with job competence of the respondents. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a positive and significant relationship between achievement motivation and job competence of the Agricultural Officers.

4.3.1.6 Job competence Vs Level of aspiration

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= 0.3012) was positively and significantly related with job competence of the respondents. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a positive and significant relationship between Level of aspiration and job competence of the respondents.

4.3.1.7 Job competence Vs Organizational commitment

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= 0.2741) was positively and significantly related with job competence of the respondents. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a positive and significant

relationship between organizational commitment and job competence of the Agricultural Officers.

4.3.1.8 Job competence Vs Morale

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= 0.5798) was positively and significantly related with job competence of the respondents. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a positive and significant relationship between morale and job competence of the Agricultural Officers.

4.3.1.9 Job competence Vs Attitude towards T & V System

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= 0.2354) was positively and significantly related with job competence of the respondents. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a positive and significant relationship between attitude of the Agricultural Officers towards T & V System and job competence.

4.3.1.10 Job competence Vs Attitude towards farmers

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= 0.5713) was positively and significantly related with job competence of the respondents. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a positive and significant relationship between respondents attitude towards farmers and their job competence.

4.3.1.11 Job competence Vs Facilities and resources

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= 0.2407) was positively and significantly related with job competence of the Agricultural Officers. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a positive and significant relationship between facilities and resources and job competence of the respondents.

4.3.1.12 Job competence Vs Organizational climate

From Table 15 (Fig. 16) it is evident that the computed coefficient of correlation value ('r'= 0.2119) was positively and significantly related with job competence of the respondents. Hence, the null hypothesis was rejected and empirical hypothesis was accepted. Therefore it could be confirmed that there was a positive and significant relationship between organizational climate and job competence of the Agricultural Officers.

4.3.2 Combined Effect of All the Selected Independent Variables on job competence of the Respondents

In order to determine the combined effect of all the selected independent variables in explaining the variation in the job competence of respondents, Multiple Linear Regression analysis was carried out. The calculated coefficient of determination (R^2) value with partial regression coefficient 'b' values and their corresponding 't' values are given in Table 16. The 'R^2' and 'b' values were tested statistically for their significance.

Table:16 Multiple linear regression analysis of the selected independent variables with job competence of the respondents

Sl.No.	Independent Variable	Partial regression coefficient values (b)	Computed 't' values
1.	Experience	-0.099	-1.251 NS
2.	Training received	-0.132	-1.742 NS
3.	Rural-urban background	0.137	1.627 NS
4.	Workload	-0.165	-2.006 *
5.	Achievement motivation	-0.025	-0.277 NS
6.	Level of aspiration	0.078	0.906
7.	Organizational commitment	0.129	1.510
8.	Morale	0.188	1.779
9.	Attitude towards T & V System	-0.088	-1.055
10.	Attitude towards farmers	0.426	4.938**
11.	Facilities and resources	0.171	1.758
12.	Organizational climate	0.098	0.978

* Significant at 0.05 level of probability

** Significant at 0.01 level of probability

NS Non significant

$R^2 = 0.5590$

Table 16 reveals that the coefficient of determination '$R^{2'}$ value was significant, as the value of 'F' was found significant. The '$R^{2'}$ value of 0.5590 indicated that all the selected 12 independent variables put together, explained about 55.90 per cent variation in job competence of the respondents. Hence, it could be stated that the variables selected, to a large extent explained the variation in job performance of the respondents.

The partial regression coefficients given in Table 16 further revealed that the independent variable workload was negatively significant at 0.05 level of probability and independent variable attitude towards farmers was positively significant at 0.01 per cent level of probability as evident from their ‘t’ values.

This implied that, attitude towards farmers and workload contributed to most of the variation in job competence of Agricultural Officers.

4.4 PROBLEMS ENCOUNTERED BY AGRICULTURAL OFFICERS AND THEIR SUGGESTIONS TO OVERCOME THEM

4.4.1 Problems encountered by Agricultural Officers:

An attempt was made to understand the intensity of the problems faced by Agricultural Officers in discharging their duties. There are certain problems which are organizational and political that effects the functioning of the Agricultural Officers. Delving in to available literature and after thorough discussion with extension personnel, nine problems which are likely to be face by Agricultural Officers were identified. They start from lack of inputs at appropriate time, lack of transport facilities, less opportunities for promotion, political interference, additional charge of other posts, lack of advanced training, lack of scientific literature, lack of qualified AAOs and inadequate office accommodation. Then the respondents were asked to rank the problems in order of their importance. To measure he intensity of the problems, the scores of 9, 8, 7, 6, 5, 4, 3, 2 and 1 were given for the ranks 1, 2, 3, 4, 5, 6, 7, 8 and 9 respectively. The total score was obtained for each problem separately. Then the obtained total score was divided by maximum possible score and multiplied with 100 to arrive at intensity of the problem.

The list of the nine problems of various dimensions are arranged in the descending order of intensity and presented in Table 17. As reflected by the intensity scores, political interference appear to be the most baffling problem followed by lack of office accommodation, less opportunities for promotion, lack of inputs at proper time, additional charge of other posts, lack of transport facilities, lack of qualified AAOs, lack of scientific literature and lack of advanced training. Lack of scientific literature and lack of advanced training appear to be less severe with intensity scores of less than 20.

Table:17 Intensity of the problems encountered by Agricultural Officers

SL.No.	Problems	Total score	Intensity score
1.	Political interference	808	88.01
2.	Lack of office accommodation	688	74.94
3.	Less opportunities for promotion	633	68.95
4.	Lack of inputs at proper time	605	65.90
5.	Additional charge of other posts	559	60.89
6	Lack of transport facilities	532	57.95
7.	Lack of qualified AAOs	431	46.94
8	Lack of scientific literature	174	18.95
9	Lack of advanced training	119	12.96

4.4.2 Suggestions for obviating problems encountered:

The Agricultural Officers have come up with the following suggestions for their problems.

1. Political interference: the problem of political interference is not specific to Tamil Nadu alone. It is ubiquitous. The Agricultural Officers have suggested negating bureaucracy with politics for which there is no short cut method. It was suggested that the officers at the higher echelons should be given powers and they must be given some autonomy insulating them from political machinations.

2. Lack of office accommodation: This also is a perennial problem, which causes inconvenience to Agricultural Officers and clientele farmers. The suggestion extended was to allot monies for office accommodation. This item may be taken care of during tenth five year plan in which 250 districts in the country are going to come under the diocese of extension reforms of Government of India where in ATMA (Agricultural Technology Management Agency) model is going to be replicated in the next one year to come.

3. Less opportunities for promotion: Lack of quick promotions is one of the de-motivating factors to turn out work. The suggestion propelled was to give time scale instead of real promotions. To satisfy the disgruntled incumbents the government may think of giving rewards and perks for the dedicated, disciplined and diligent extension functionaries.

4. Lack of inputs at proper time: Lack of supply of inputs at appropriate time is an issue, which is going to be never ending unless government concentrates with interest. With so many private and public stakeholders involved in agricultural sector this problem is becoming un addressed as desired. In case of seed front the farmers may be trained to produce their own seed in rice, groundnut etc, because it works out cheaper. The concept of 'seed village' is to be popularized as in case of Andhra Pradesh. Even though other inputs are available to some extent getting credit in time is the casualty, which hinders and delays agricultural operations. To alleviate this credit problem the government institutions should develop a mechanism to extend credit in time.

5. Additional charge of other posts: With the dwindling financial resources in the doffers of the state governments, the Department of Agriculture is unable to fill up the vacancies. It is suggested that the pivotal bread providing Department of Agriculture may be spared from financial and human resource crunch.

6. Lack of transport facilities: Lack of such facility hinders the whole process of agricultural development. The job incumbents spend considerable time in commuting to villages and such transit time some times exceeds time spent on the real extension work. This amounts to mountain of effort expended resulting in anthill of results. The Department of Agriculture may think of providing transport facility or POL (Petrol, oil and lubricants) charges to the officers by giving soft loans to purchase two wheelers on their own.

7. Lack of qualified AAOs: Lack of qualified manpower hinders the diffusion process since the strength of the chain is decided by it's weakest link. The government may consider updating the qualifications of non technical staff by deputing them for higher education/ training. The other suggestion elicited was to sent the AAOs to refresher trainings/ orientation trainings as often as possible, in case deputation to higher education is not a possibility in near future.

8. Lack of scientific literature: Some literature is given in terms of messages or impact points through T and V workshops about which the participants should enlighten the lower staff. One is apprehensive to what extent this is happening in Tamil Nadu. Adding to this no agricultural office is subscribing for journals and magazines. The suggestion mooted was to earmark some funds for getting literature from the publishers etc.

9. Lack of advanced training: In 'Results' chapter 'training received' is negatively correlated with job competence. Perhaps it is a natural corollary that it is again got expressed here. The suggestion advanced by Agricultural Officers is to send them for higher education or else to depute them to training at reputed institutes. If this is not forthcoming in the near future some useful and cohesive literature may be provided to update their knowledge.

4.5 EMPIRICAL MODEL OF THE STUDY

The conceptual model formulated earlier (Fig.1) for this research study was tested based on the results and empirical model was developed and presented in Fig. 16. This model was hopefully conceived to give an objective assessment of job competence and the selected independent variables of respondents. This model was tested with the help of correlation analysis and regression analysis to find out the relationship between independent and dependent variables.

The independent variables namely achievement motivation, level of aspiration, organizational commitment, morale, attitude towards T and V System, attitude towards farmers, facilities and resources and organizational climate had a positive and significant relationship, whereas training received, workload had a negatively significant relationship, experience had negatively non significant and rural-urban background had non significant relationship with the job competence. Prediction analysis showed that 12 variables explained 55.90 per cent variation in job competence. The partial regression coefficient of attitude towards farmers was positively significant with 't' value and this variable contributed to most of the variation in job competence of Agricultural Officers. Workload was negatively and significantly influenced the job competence.

Thus it was quite evident that all the selected independent variables indicated in the conceptual model could not correlate with the dependent variables and did not explain 100 per cent variation. As such it could be concluded that there might be some other variables, which were not fitted, in the conceptual model, responsible for predicting the dependent variables.

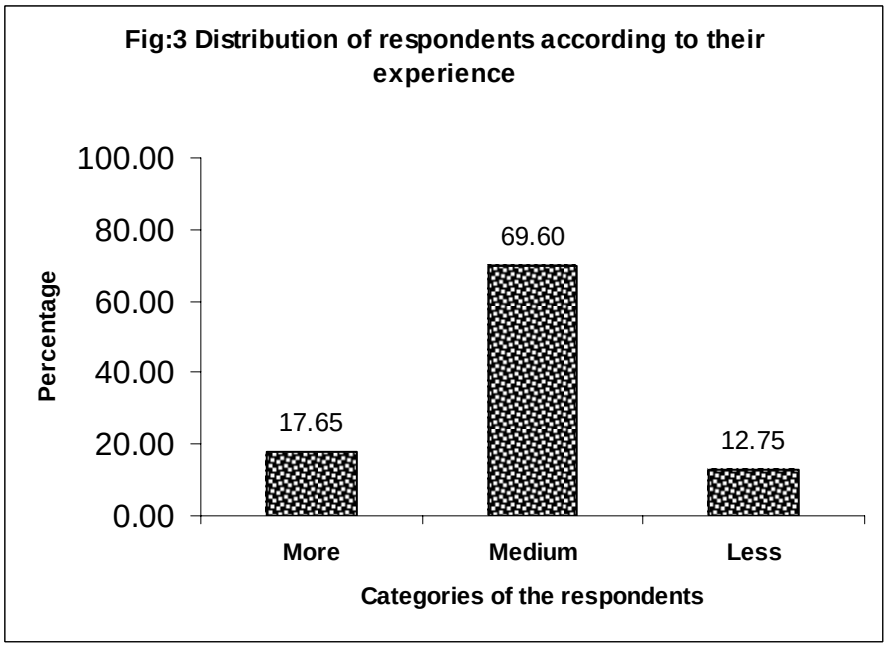


Fig:3 Distribution of respondents according to their experience
100.00
80.00
60.00
40.00
20.00
0.00
Percentage
69.60
17.65
12.75
More
Medium
Less
Categories of the respondents

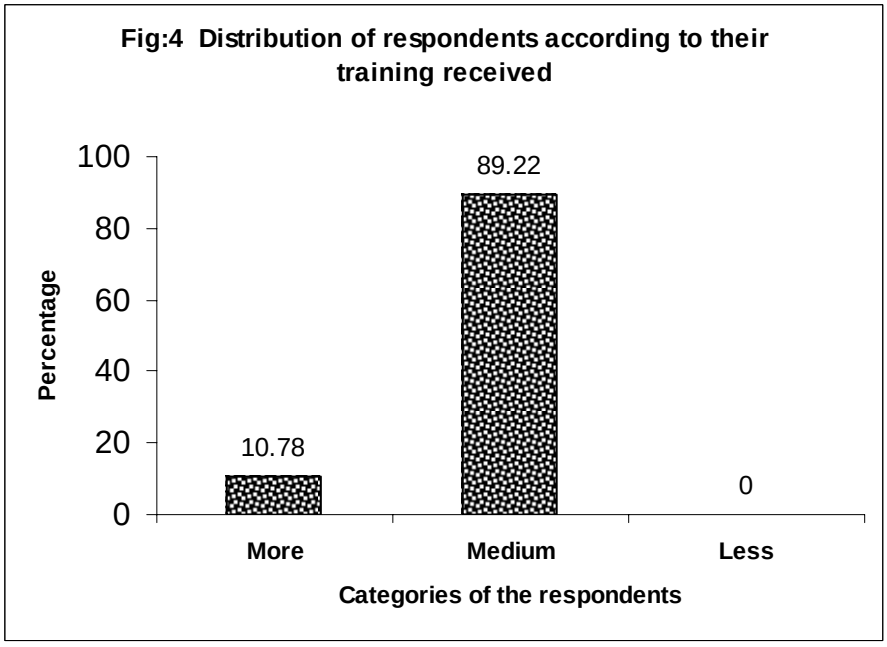


Fig:4 Distribution of respondents according to their training received
100
80
60
40
20
0
Percentage
89.22
10.78
0
More
Medium
Less
Categories of the respondents

Fig:5 Distribution of respondents according to their rural urban background

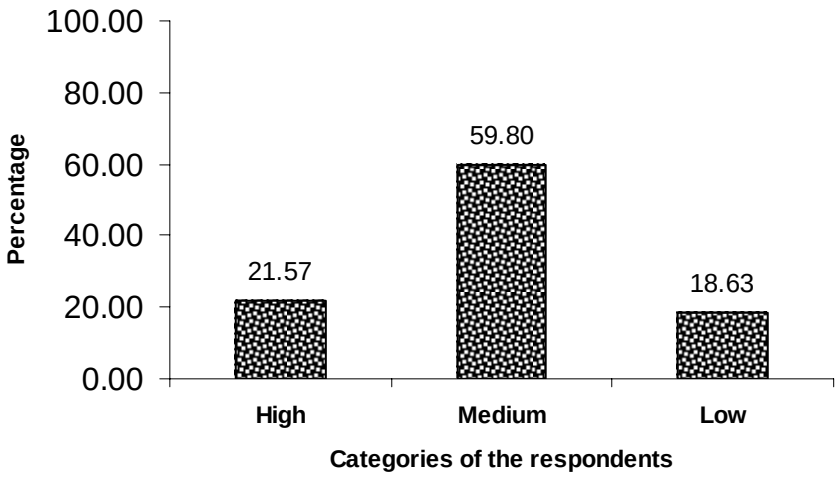
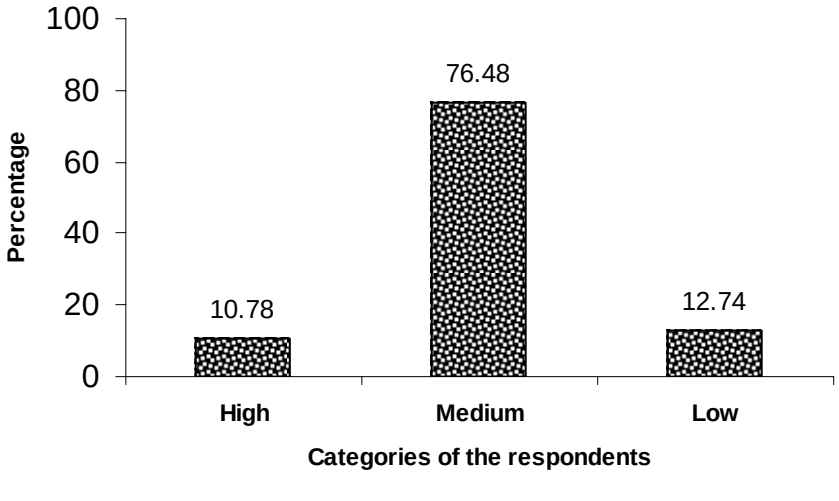


Fig:6 Distribution of respondents according to their workload



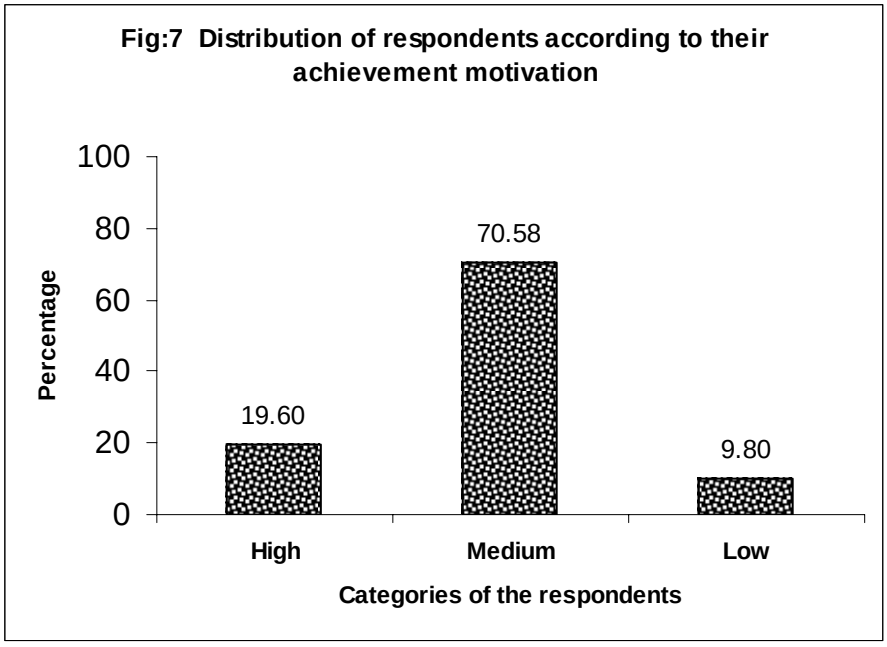


Fig:7 Distribution of respondents according to their achievement motivation
100
80
60
40
20
0
Percentage
19.60
70.58
9.80
High
Medium
Low
Categories of the respondents

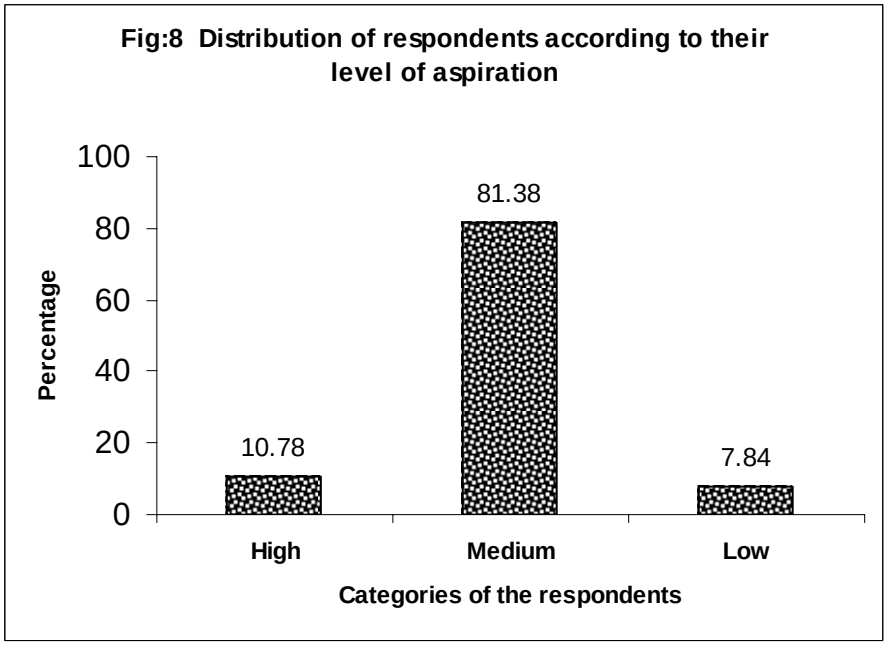


Fig:8 Distribution of respondents according to their level of aspiration
100
80
60
40
20
0
Percentage
10.78
81.38
7.84
High
Medium
Low
Categories of the respondents

Fig:9 Distribution of respondents according to their organizational commitment

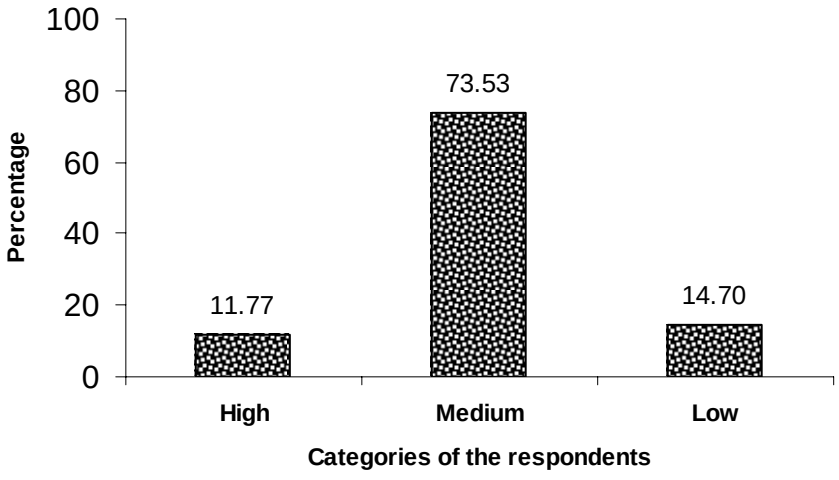


Fig:10 Distribution of respondents according to their morale

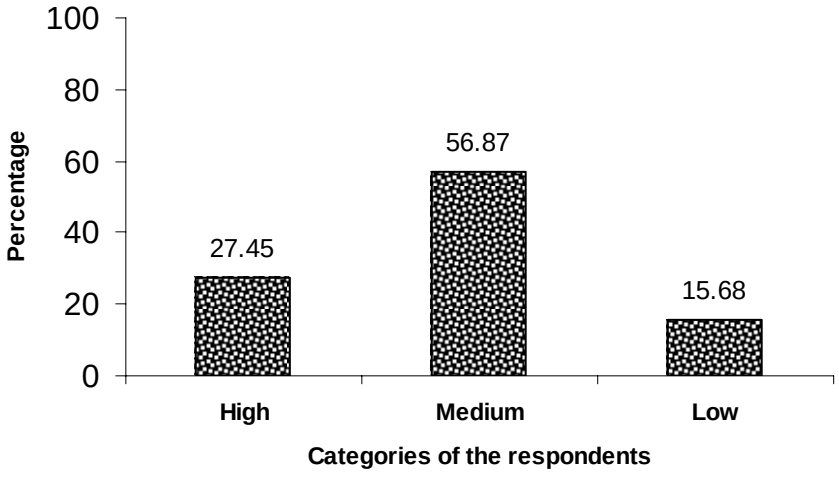


Fig:11 Distribution of respondents according to their attitude towards T and V System

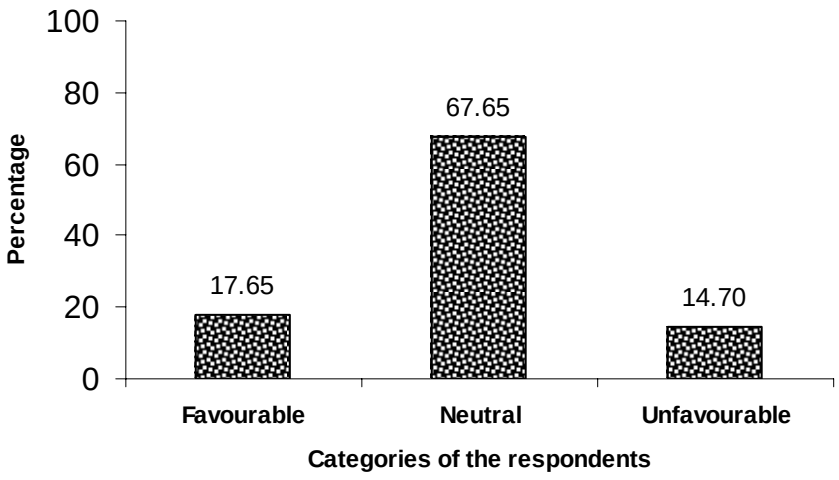
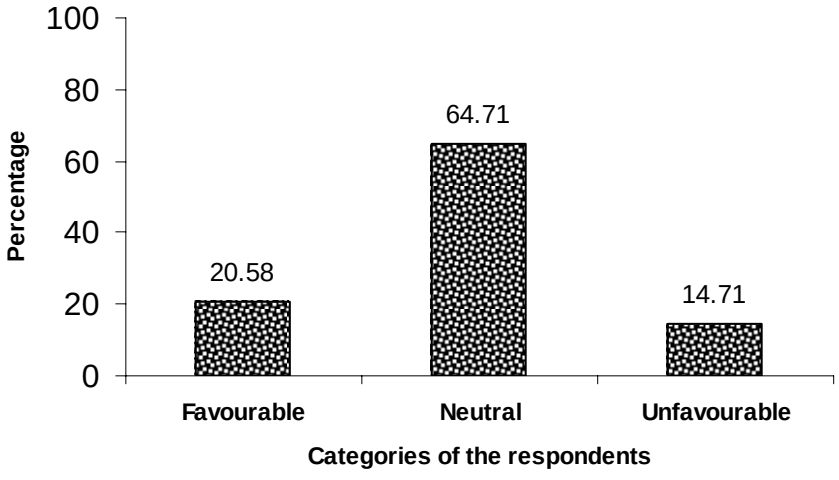


Fig:12 Distribution of respondents according to their attitude towards farmers



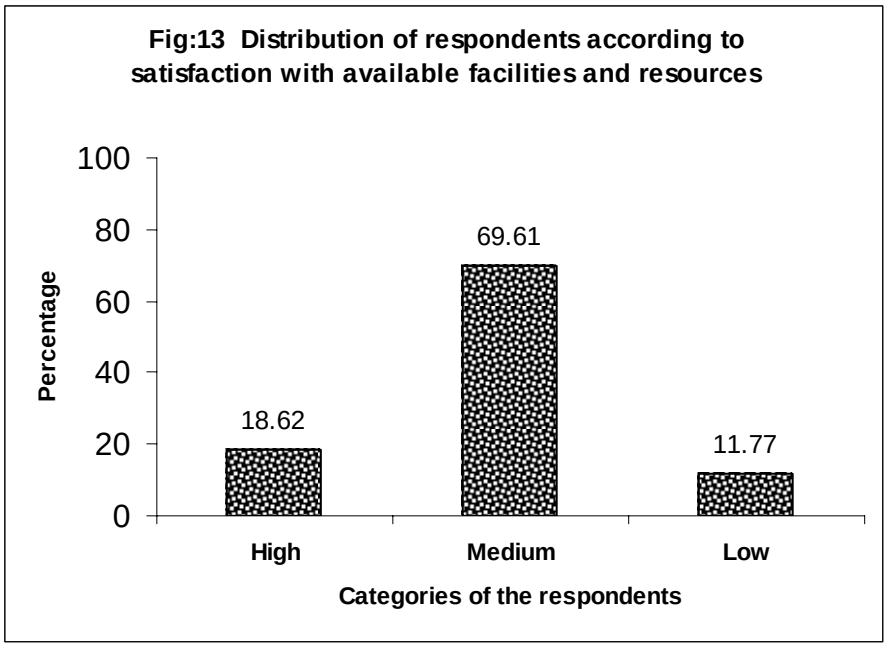


Fig:13 Distribution of respondents according to satisfaction with available facilities and resources
100
80
60
40
20
0
Percentage
69.61
18.62
11.77
High
Medium
Low
Categories of the respondents

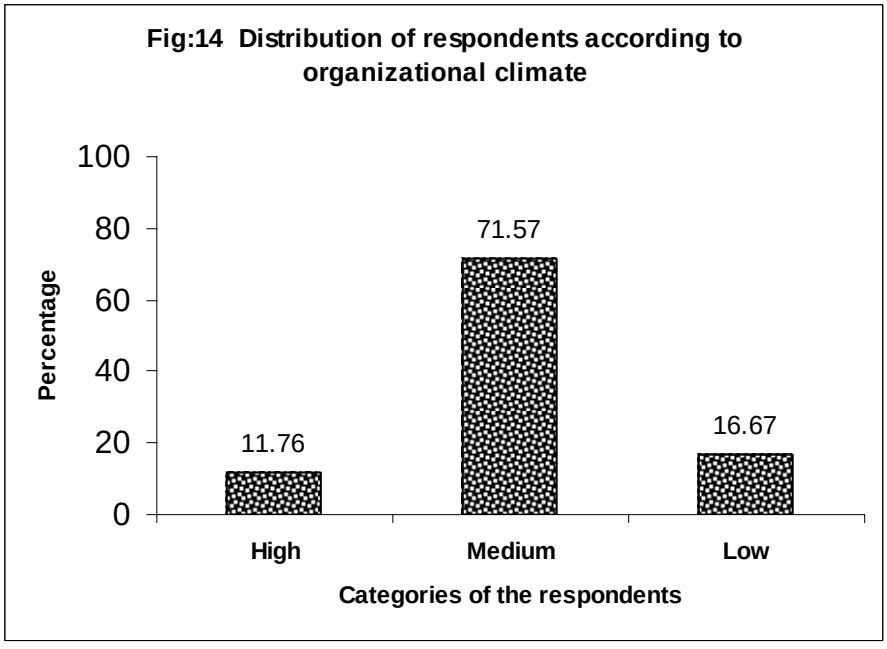
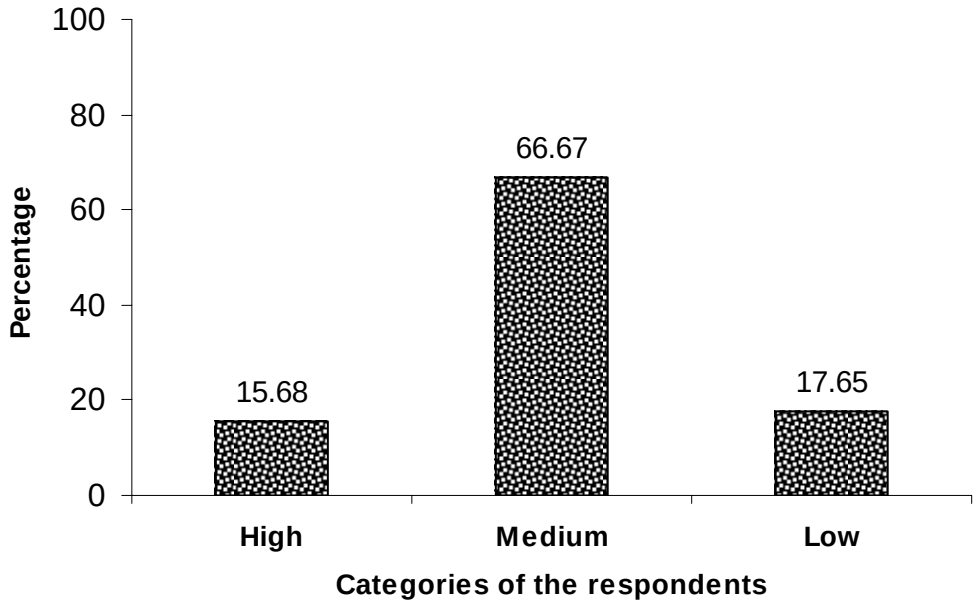


Fig:14 Distribution of respondents according to organizational climate
100
80
60
40
20
0
Percentage
71.57
11.76
16.67
High
Medium
Low
Categories of the respondents

Fig:15 Distribution of respondents according to their job competence



CHAPTER V

DISCUSSION

In this chapter, the results were discussed and meaningful conclusions were drawn for which the contents of chapter IV were used as raw material. Discussions on the results of the study were presented under the following heads.

5.1 Personal, socio-psychological and situational characteristics of the Agricultural Officers

5.2 Job competence of Agricultural Officers

5.3 Relationship between the personal, socio-psychological and situational characteristics and job competence

5.4 Problems encountered by agricultural officers and their suggestions to overcome them

5.1 PERSONAL, SOCIO-PSYCHOLOGICAL AND SITUATIONAL CHARACTERISTICS OF THE AGRICULTURAL OFFICERS

5.1.1 Experience:

An insight of Table 2 and Fig. 3 it was notice that majority of the respondents had medium level of experience.

This is so because, many of the Agricultural Officers might be medium aged hence they had medium level of experience in their jobs.

This was in agreement with the finding of Ravisankar (1998) and Roy (1999).

5.1.2 Training received

It was evident from Table 3 and Fig. 4 that majority of the respondents had received medium training. This trend suggests that there is need for improving abilities of Agricultural Officers by conducting training. Since, trainings develop impetus for the development of Agricultural Officers.

This finding was in accordance with the finding of Kumar (1993).

5.1.3 Rural urban background

It was evident form Table 4 and Fig. 5 that majority of the Agricultural Officers were having medium rural urban background. This trend might be due to the fact that majority of Agricultural Officers got admission in B.Sc.(Ag.) course under farmers quota.

This finding was in concurrence with the findings of Prasad (1990).

5.1.4 Workload:

I was noticed from Table 5 and Fig. 6 that majority of the respondents perceived medium workload followed by low and high workload respectively.

The possible reason for the above trend may be because of assignment of other duties like writing reports, non technical works and some clerical work.

This finding was in line with findings of Reddy (1983) and Reddy (1998).

5.1.5 Achievement motivation

From Table 6 and Fig. 7 it was evident that majority of the respondents had medium achievement motivation followed by high and low achievement motivation respectively.

This may be because of their orientation towards hard work and service to the farmers.

This finding was in tune with the findings of Reddy (1998) and Roy (1999).

5.1.6 Level of aspiration:

It was noticed from the Table 7 and Fig. 8 that majority of respondents had medium level of aspiration followed by high and low levels.

This might be due to the fact that Agricultural Officers were government employees and it is not possible to get quick promotions as in case of private jobs. So it is desirable to develop high level of aspiration by providing incentives, rewards and required financial assistance for fulfilling their needs.

This finding was in line with the finding of Bharathi (1994).

5.1.7 Organizational commitment:

It was inferred from Table 8 Fig. 9 that majority of respondents had medium organizational commitment followed by low and high levels.

The probable reason might be strong relations were found between the farmers and Agricultural Officers and also compulsion inbuilt in the job chart as they were government employees might have made the Agricultural Officers to be more interested in doing service. Hence the above trend was noticed.

5.1.8 Morale:

It is evident from Table 9 and Fig. 10 that majority of the respondents had medium morale followed by high and low levels.

The probable reason might be due to most of the respondents had medium rural orientation and they know the severe problems faced by the farmers. So they might be more interested in working for the farmers.

This finding was in line with finding of Reddy (1986).

5.1.9 Attitude towards T and V System:

Table 10 and Fig. 11 shows that majority of respondents had neutral attitude towards T and V System followed by favourable and unfavourable attitude towards T and V System.

The probable reason might be due to most of the respondents had medium level of most of the independent variables and according to their job chart there were more contacts with farmers and they were not getting more incentives for their work. Because of which they might have perceived in that manner.

This finding was in line with findings of Prajapathi and Patel (1980) and Khalil (1998).

5.1.10 Attitude towards farmers:

Table 11 and Fig. 12 indicate that majority of respondents had neutral attitude towards farmers followed by those with favourable and unfavourable attitude towards farmers respectively.

This might be due to majority of the respondents had medium level of rural orientation. They were moderately interested in working in the rural area. So majority of the respondents had neutral attitude towards farmers.

5.1.11 Facilities and resources

From Table 12 and Fig. 13 that majority of the respondents perceived that medium level of facilities and resources were available followed by high and low number of respondents who perceived the availability of facilities in that order respectively.

This might be due to the fact that T and V System comes under the government from which high amount of facilities and resources cannot be expected, and fund allotment might be less, which might have resulted the above trend.

5.1.12 Organizational climate:

It is evident from Table 13 and Fig. 14 that majority of respondents felt that medium level of organizational climate was found in their organization followed by those categories that felt low and high organizational climate respectively.

As Department of Agriculture was among the biggest organizations and mainly serving farmers and they had to set up a model functional structure for other service organizations in the state. Hence the above trend was observed.

5.2 JOB COMPETENCE OF AGRICULTURAL OFFICERS

It was observed from the Table 14 and Fig. 15 that majority of Agricultural Officers working in the Department of Agriculture in Tamil Nadu had medium level of job competence followed by low and high levels of job competence respectively.

The probable reason for majority of Agricultural Officers possessing medium job competence might be due to similar working environment , with uniform organizational climate, agent client ratio, facilities and resources. Majority of Agricultural Officers had medium achievement motivation, level of aspiration, organizational commitment etc, which might had influenced the job competence of Agricultural Officers.

High competence was not found due to lack of promotional avenues, lack of proper training, absence of rewards and incentives for diligent workers.

This result was in line with the findings of Reddy (1990).

5.3 RELATIONSHIP BETWEEN THE PERSONAL, SOCIO-PSYCHOLOGICAL AND SITUATIONAL CHARACTERISTICS AND JOB COMPETENCE

To study the relationship between personal, socio-psychological and situational characteristics and job competence of Agricultural Officers, the correlation coefficient (r) was computed and the findings were presented in Table 15 and Fig. 16.

Table 15 and Fig. 16 indicated that out of 12 independent variables, 10 independent variables were correlated significantly out of which two were negatively correlated. Two variables were non significantly related, which were experience and rural-urban background.

5.3.1 Experience Vs Job competence

It was evident from Table 15 and Fig. 16 that experience of Agricultural Officers found to have negatively non significant relationship with job competence. Experience does not necessarily develop the needed impetus in an individual if he is slovan and slothful. The Agricultural Officers might have preferred to be busy with table work. Routine work and less scope for improvement of job competence over a period of time also might have a bearing on this outcome.

This finding was in line with finding of Reddy (1990)

5.3.2 Training received Vs Job competence

It was evident form the Table 15 and Fig. 16 that the training received had negative and non significant relationship with job competence which is a startling revelation of late, the trainings in T and V System have become routine run-of-the-mill type where in the content is not given much credence. Due to participation of Agricultural Officers in manifold training programmes they must have developed a sort of apathy to absorb the content. These might be the possible reasons for negative relationship. Further this lax is indicated by the problems expressed by the respondents i.e. lack of advanced training.

5.3.3 Rural-urban background Vs Job competence

From Table 15 and Fig. 16 it was evident that rural urban background was positively and non significantly related with job competence of the Agricultural Officers.

This may be due to job competence mostly depends on the individual's ability and dependent on environment, basic school and college studies and some organizational factors. So there may be no significant relationship between rural urban background and job competence.

This finding was contrary to the finding of Reddy (1990).

5.3.4. Workload Vs Job competence

It was notice from the Table 15 and Fig. 16 that workload was negatively significant with the job competence.

This might be due to a supervisory job like that of an Agricultural Officer's flexibility with respect to duties and responsibilities for a diligent and enthusiastic Agricultural Officer.

5.3.5 Achievement motivation Vs Job competence

From Table 15 and Fig. 16 it was evident that achievement motivation was positively significant with job competence.

The Agricultural Officers must be having an intrinsic desire to achieve something worthwhile through their job. Perhaps the targets fixed for achievement and subsequent appraisals to know whether they are complied with or not might have motivated them to excel in their job, hence the above trend was observed.

5.3.6 Level of aspiration Vs Job competence

From Table 15 and Fig. 16 it was evident that level of aspiration was positively significant with job competence of the Agricultural Officers.

The level of aspiration is positively and significantly related with job competence. As the thumb rule goes, the level of aspiration of any one manning a job acts as the precursor to goal achievement. In case one has got abundance of level of aspiration, it is

likely to act as a precursor to attain higher order job competence. Hence, the present investigation has yielded such positive outcome.

5.3.7 Organizational commitment Vs Job competence

From Table 15 and Fig. 16 it was evident that organizational commitment was positively significantly related with job competence of the respondents.

The Agricultural Officers in the T and V System might have possessed attributed like value consideration, loyalty, social interaction by virtue of working in the T and V System, which in turn must have influenced their job competence.

5.3.8 Morale Vs Job competence

From Table 15 and Fig. 16 it was evident that morale had positive and significant relation with job competence of the Agricultural Officers.

A study conducted by Mathur (1972) evinced a clove relationship between morale and efficiency of an organization. Minocha (1977) observed positive influence of morale on the performance. It is needless to say that the job competence is the harbinger of performance efficiency. Hence before influencing these consequent variables, morale would have certainly invigorated the job competence inherently embedded in those who formed the subjects of about studies.

5.3.9 Attitude towards T & V System Vs Job competence

From Table 15 and Fig. 16 it was evident that attitude towards T and V System was positively and significantly related with job competence of the respondents.

Favourable attitude of the extension personnel is one of the vital aspects that kindles enthusiasm and interest to function in a better way. Further the enthusiastic and interested Agricultural Officers reaped rich dividends in terms of gaining more competence.

This finding is in line with finding of Reddy (1990).

5.3.10 Attitude towards farmers Vs Job competence

From Table 15 and Fig. 16 it was evident that attitude towards farmers had positive and significant relation with job competence of the Agricultural Officers.

As a sequel to complying with T and V structures, the Agricultural Officers are bound to make periodical visits to farmers. Once the Agricultural Officers develop positive attitude, they try to serve their target audience better and this in turn motivate the Agricultural Officers to procure more competence.

This finding was in ling with the finding of Reddy (1990).

5.3.11 Facilities and resources Vs Job competence

From Table 15 and Fig. 16 it was evident that facilities and resources were positively and significantly related with job competence of the respondents.

Facilities and resources usually aid in achieving higher performance or effectiveness. Better facilities and resources at the disposal of an Agricultural Officer would influence his psychic domain which constitutes his job competence. The out come in this study is a natural corollary of the above assumption.

5.3.12 Organizational climate Vs Job competence

From Table 15 and Fig. 16 it was evident that achievement motivation was positively and significantly related with job competence of the Agricultural Officers.

Rigid rules and regulations, redundant levels of hierarchy, favoritism, undercutting and many other short comings are common characters of government organizations. In this situation only people with remarkable psychological stability and positive attitude of mind may be able to perceive the organizational climate would naturally fit well into the job of an Agricultural Officer. This forms the justification that under lined the above finding which might have led to higher competence.

This finding was in ling with the finding of Reddy (1990).

5.3.13 Combined effect of all the selected independent variables on job competence of Agricultural Officers.

On perusal of Table 16 indicates that all the selected 12 independent variables put together explained about 55.90 per cent variation in the job competence as indicated by the R^2 value which was significant.

Thus it could be concluded that the variables selected to a large extent explained the variation in the job competence. In other words variables selected for the study were relevant to the problem selected.

When partial regression coefficients were tested it further revealed that the partial regression coefficient of attitude towards farmers was positively significant as indicated in 't' values. It indicated that the independent variable attitude towards farmers had positively and significantly contributed to most of the variation in job competence of Agricultural Officers. As a sequel to complying with T and V structures, the Agricultural Officers are bound to make periodical visits to farmers. Once the Agricultural Officers develop positive attitude, they try to serve their target audience better and this intent in turn motivate the Agricultural Officers to procure more job competence. Workload was negatively significant to the job competence. A supervisory job of an Agricultural Officer offers flexibility with respect to duties and responsibilities. An apathetic Agricultural Officer may while away his time and sleep over his duties. These may reduce his competence. Thus workload contributed negatively to the job competence.

5.4 PROBLEMS ENCOUNTERED BY AGRICULTURAL OFFICERS AND THEIR SUGGESTIONS TO OVERCOME THEM

5.4.1 Problems encountered by the Agricultural Officers:

A close examination of Table 17 revealed that a vast majority of the farmers perceived the problems in the order of political interference, lack of office accommodation, less opportunities for promotion, lack of inputs at proper time, additional charge of other posts, lack of transport facilities, lack of qualified AAOs, lack of scientific literature, lack of advanced training.

Political interference has become one of the elements that make the job situation insecure, while the sincere officers are involved in troublesome situations and places whereas other takes the advantage of support by the leaders. That is why majority of the Agricultural Officers perceived the political interference as the most irritant factor in relation to the job competence. Lack of proper accommodation effects the training of farmers, conduct of meetings and discussions. Less opportunities for promotion is one factor which is reflecting the monotony and deterioration of values in terms of finance as compared to the fast moving jobs of recent times which made the Agricultural Officers to perceive like that.

Lack of inputs at proper time deters the motivation of the farmers and also extension officers in spite of taking all the efforts the results will be poor. Additional charge of other posts, lack of transport facilities makes the Agricultural Officers disinterested in their job, lack of qualified AAOs makes the Agricultural Officers to be involved in the work of AAOs instead of doing his own duties which made the

respondents to perceive in that manner. Lack of scientific literature and lack of advanced training can not satisfy the want of new ways of learning of the Agricultural Officers which a basic need is for every one when they are interested in their job hence the respondents perceived them as problems.

5.4.2 Suggestions given by the Agricultural Officers to obviate the problems.

The problem of political interference can be negated by giving suitable freedom to the officers at the higher echelons and they should be given powers and autonomy to make sincere efforts to curb the indecency in job situation and supporting the sincere workers.

Lack of accommodation can be dealt by allotting finance for office accommodation in a strategic way in the new models of extension like ATMA (Agricultural Technology Management Agency).

The problem of lack of quick promotions can be overcome by giving time scale instead of real promotions. Lack of inputs at appropriate time can be mitigated by encouraging the farmers to produce their own seed in major crops, because it works out cheaper and by feasible laws and regulations.

The problem of additional charge of other posts should be dealt by recruitment of supporting staff and filling up the vacancies. Lack of transport facilities can be dole out by providing transport facilities in the form of POL (Petrol, oil and lubricants) charges to the officers and by giving soft loans to purchase vehicles on their own.

The quandary of lack of qualified AAOs can be lessened by sending them to short courses and other forms of in-service training. Some funds can be earmarked some funds for getting literature from the publishers etc and the Agricultural Officers should be sent for higher education or specific training programmes for dealing with the problems like lack of scientific literature and lack of advanced training.

CHAPTER VI

SUMMARY

India had registered a record level grain production of 212 million tones in 2003-04 and had a buffer stock of 70 million tones. But maintaining this position will not be sufficient for future. In order to meet the requirements of the people we have to produce about 267 million tones of food grains by 2025 compared to the highest production of 206 million tones in 2004-05. Lester Brown and Hall Kahe of the World Watch Institute predicted that India will face a net deficit of 45 million tones of food grains by the year 2030.

The magnitude of dependence on agriculture and backwardness of the people in India have led to the implementation of umpteen developmental and poverty mitigation programmes since independence. But they had their own merits and demerits. As a measure of augmenting agricultural production, the Training and Visit System was made operational to overcome the inherent weakness that existed in the extension systems adopted hereto fore. The state Department of Agriculture in Tamil Nadu charged with the responsibility of agricultural development has been doing the service in that direction. In the hierarchy of the department, the Agricultural Officer who is an extended arm of the top management serves as the first professional between the field functionaries and Assistant Directors of Agriculture. In the capacity of an Agricultural Officer one is destined to perform several activities in the pursuit of agricultural development. This invariably asks for a great deal of job competence. Job competence is one of the most

important behavioural dimensions required by the Agricultural Officers to efficiently execute their duties. Considering the importance of the job competence in relation to functioning of Agricultural Officers, the present investigation was ideated with the prime purpose of studying the job competence of Agricultural Officers in the State Department of Agriculture in Tamil Nadu with the following objectives.

6.1 OBJECTIVES OF THE STUDY

1. To study the personal, socio-psychological and situational characteristics of Agricultural Officers
2. To measure the job competence of Agricultural Officers
3. To study the relationship between the selected independent and dependent variables with job competence of Agricultural Officers
4. To elicit problems encountered by Agricultural Officers in relation to their job competence and their suggestions to overcome them.

6.2 RESEARCH DESIGN

Ex-post-facto research design was used in the present investigation.

6.3 SAMPLING PROCEDURE

The state of Tamil Nadu was chosen as the locale of the study since the researcher belonged to the state and was familiar with the working system of Department of Agriculture, the respondents and local language. Systematic random sampling procedure was used for selecting the districts. The districts thus selected were a. Coimbatore, b.

Erode, c. Krishnagiri, d. Perambalur, e. Sivaganga, f. Tiruchy, g. Tiruvarur and h. Virudhunagar.

All the Agricultural Officers doing extension work in selected 8 districts were chosen as sample for the study.

6.4 VARIABLES SELECTED FOR THE STUDY

6.4.1 Dependent Variable

Job competence of Agricultural Officers was considered as the dependent variable for the study.

6.4.2 Independent variables

The independent variables selected for the study were experience, training received, rural-urban background, workload, achievement motivation, organizational commitment, organizational climate, morale, attitude towards t & v system, attitude towards farmers, facilities and resources and level of aspiration.

6.5 COLLECTION OF DATA

The data was collected by using a pre-tested questionnaire developed for the study which was mailed to the respondents by post. The collected data was coded, tabulated and analyzed statistically and the results were interpreted accordingly.

6.6 RESULTS

6.6.1 Distribution of respondents based on their personal, socio-psychological and situational characteristics

6.6.1.1 Experience

Majority of the Agricultural Officers had medium level of experience.

6.6.1.2 Training received

Majority of the Agricultural Officers had medium training.

6.6.1.3 Rural-urban background

Majority of the Agricultural Officers had medium rural urban background.

6.6.1.4 Workload

Majority of the Agricultural Officers perceived medium workload

6.6.1.5 Achievement motivation

Majority of the Agricultural Officers had medium achievement motivation.

6.6.1.6 Organizational commitment

Majority of the Agricultural Officers had medium organizational commitment.

6.6.1.7 Organizational climate

Majority of the Agricultural Officers had medium organizational climate.

6.6.1.8 Morale

Majority of the Agricultural Officers had medium morale.

6.6.1.9 Attitude towards T & V System

Majority of the Agricultural Officers had medium attitude towards T and V System.

6.6.1.10 Attitude towards farmers

Majority of the Agricultural Officers had medium attitude towards farmers.

6.6.1.11 Facilities and resources

Majority of the Agricultural Officers had medium facilities and resources.

6.6.1.12 Level of aspiration

Majority of the Agricultural Officers had medium level of aspiration

6.6.2 Distribution of the respondents according to their job competence

Majority of the Agricultural Officers had medium job competence.

6.6.3 Relationship between selected independent variables and job competence of Agricultural Officers

Achievement motivation, level of aspiration, organizational commitment, morale, attitude towards T and V System, attitude towards farmers, facilities and resources and organizational climate had a positive and significant relationship, whereas training received, workload had a negatively significant relationship, experience had negatively non significant and rural urban background had non significant relationship with the job competence.

6.6.3.1 Combined effect of all the selected independent variables on job competence of the Agricultural Officers

All the selected 12 independent variables put together explained about 55.90 per cent variation in job competence of Agricultural Officers. Attitude towards farmers had

positively and significantly contributed to most of the variation in the job competence of Agricultural Officers.

6.6.4 Problems encountered by Agricultural Officers and suggestions to overcome the problems

6.6.4.1 Problems encountered by Agricultural Officers

The problems felt by the Agricultural Officers were in the rank order of political interference, lack of office accommodation, less opportunities for promotion, lack of inputs at proper time, additional charge of other posts, lack of transport facilities, lack of qualified AAOs, lack of scientific literature and lack of advanced training.

6.6.4.2 Suggestions to overcome the problems

The Agricultural Officers suggested that, the problem of political interference can be negated by giving suitable freedom to the officers at the higher echelons and they should be given powers and autonomy.

Lack of accommodation can be dealt by allotting finance for office accommodation in a strategic way. The problem of lack of quick promotions can be overcome by giving time scale instead of real promotions. Lack of inputs at appropriate time can be mitigated by encouraging the farmers to produce their own seed in major crops. The problem of additional charge of other posts should be dealt by recruitment of supporting staff and filling up the vacancies. Lack of transport facilities can be dole out by providing transport facilities in the form of POL (Petrol, oil and lubricants) charges to the officers and by giving soft loans to purchase vehicles on their own.

The other suggestions given by the Agricultural Officers were that, the quandary of lack of qualified AAOs can be lessened by sending them to short courses and other forms of in-service training. Some funds can be earmarked some funds for getting literature from the publishers etc and the Agricultural Officers should be sent for higher education or specific training programmes.

6.7 IMPLICATIONS OF THE STUDY:

1. Majority of Agricultural Officers had medium level of experience, had received medium training and perceived medium workload, there by suggesting that workload may be reduced in order to increase the skill in particular work and motivate the Agricultural Officers towards their duties by filling all vacancies. Opportunities may be provided to Agricultural Officers to undergo sufficient and relevant training instead of bulkiness to reduce the traveling and accommodation problems.

2. Majority of Agricultural Officers were from rural areas and had medium level of aspiration, medium organizational commitment and medium level of achievement motivation. The Agricultural Officers may be motivated highly by giving incentives, rewards etc.

3. Correlation analysis of the data revealed that achievement motivation, level of aspiration, organizational commitment, morale, facilities and resources, organizational climate were positively and significantly related to job competence

of Agricultural Officers. So Department of Agriculture may provide more facilities and resources. By selecting suitable and potential persons to the job the organizational climate can be maintained smoothly. So that the job competence of Agricultural Officers can be ensured and in turn subsequent work turnout will be more.

4. Independent variables i.e. morale, attitude towards T and V System, attitude towards farmers had positive and significant relationship with job competence of Agricultural Officers. So there is enough scope to boost up the job competence of Agricultural Officers by conducting counseling by awarding and rewarding potential and efficient workers.

5. Prediction analysis of the data revealed that attitude towards farmers and workload had contributed most of the variation in the job competence. Workload was negatively and significantly contributed to the variation in the job competence. Department of Agriculture may fill up all the vacancies and reduce the workload of Agricultural Officers so that Agricultural Officers may improve their skills in different technical aspects and in turn ensure their competence. Attitude towards farmers had contributed most of the variation to the job competence. Attitude towards farmers can be increased by conducting result demonstrations, minikit trials etc, on the farmers fields. So that job competence of Agricultural Officers can be still more improved.

6. The indicators emerged out of the study could be of immense help for programme planners and administrators to make objective assessment of the job competence of Agricultural Officers working in the State Department of Agriculture.

6.8 SUGGESTIONS FOR FUTURE RESEARCH

The current study had limited its jurisdiction of investigation to the Agricultural Officers only. Neither the size of the sample (n=102) nor the depths of the tools of assessment of independent variables studied here permit us to state that the results reported can be extrapolated with conviction to the entire population. To arrive at conclusive evidences on the obscure aspects of job competence, studies covering other functionaries over a wider area seem imperative. This would help in making generalizations regarding the job competence of Agricultural Officers and overall job competence of extension personnel in the T and V System.

As regard to job competence some more dimensions reflecting the competence of Agricultural Officers may be included in future studies. Further superior, subordinate and clientele ratings on Agricultural Officers may be taken up in addition to the self rating attempted in this study. Studies can be conducted in other areas with more respondents including more variables.

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