Introduction:-

Agricultural education existed in India even during medieval period. Agriculture was included in curricula of Nalanda and Takshila Universities as one of the eighteen arts. However, organized courses in agricultural education were started in the beginning of 20\textsuperscript{th} century where six agricultural colleges were established at Kanpur, Lyalpur, Coimbatore, Nagpur, Pune and Sabar (Bihar) India. Education plays the role as a means for human development, for sensitizing one's perceptions, awareness and for motivating and changing one's behavior to suit arising needs, demands and opportunities for survival, growth and development.

“A University stands for humanism, for tolerance, for reasons, for the adventure of ideas and for the search of truth. It stands for the onward march of the human race towards even higher objectives. If the universities discharge their duties adequately, then it is well with the nation and the people”. In 1948, there were only seventeen agricultural colleges in the country under the control of state departments of agriculture and animal husbandry to look after teaching activity. Research and extension programmes were not sufficient to meet the needs of farming community and food security of the country. Therefore, the need to reorganize the agricultural education system to increase food production through more efficient application of science and technology was felt in the period.

During the period of 42 years since the inception of the Agricultural University system, the different institutions have been able to provide required manpower for teaching, research and extension programmes under overall guidance of ICAR. These Agricultural Universities have made significant contribution in the field of education, research and extension justifying the investment of public fund in them. The scientists working in Agricultural Universities performs three fold functions namely teaching, research and extension.

The contribution of the scientific community is not always steady since there will be several ups and downs due to multi dimensional personal, socio psychological and organizational factors. In other words, the academic contribution of the farm scientists in the field of teaching, research and extension is greatly determined by his/her surroundings, promotional opportunities, procedures followed for recognizing good work freedom enjoyed, superior – subordinate relationship, loyalty to the institution, its security, respect in the society and so on so forth (Jhansi, 1985).
Organization is a social arrangement consisting of a number of individuals, with different tasks for each individual, interdependence and interaction of these individuals, aiming at the achievement of prefixed objectives. The behavioral scientists had a longstanding concern with the impact of specific behaviour of individuals and groups on the effectiveness of the organization. Hammer and organ stated that the capacity to influence organizational climate is perhaps the most powerful leverage point in the management system. Because climate properties could have profound effect on performance and satisfaction of employees. Organizational commitment is defined as the extent to which an extension worker has strong belief in and acceptance of organizational goals and values is willing to exert considerable effort on behalf of the organization and has a strong desire to stay in the organization. Any organization small or big needs constant studies and evaluation with a view to ascertain the measure necessary to improve areas of deficiency. So as to attain faster rate of growth and development towards achieving goals.

**Need for the study:-**

The internal working environment of every organization has certain commonly perceived psychological characteristics or traits which are collectively called its climate or culture. These traits generally vary from organization to organization, are relatively stable over time & influence the behavior of people in the organization. Thus, every organization has its own unique culture. Not only this, even different departments of the same organization may have different culture depending upon the perceptions of members of these departments. Various personal characteristics such as values, needs, attitudes, experience etc, determine the manner in which members are likely to perceive the various aspects of internal working of their department.

Management of human resources involves several important and complex issues in the form of multidimensional reactions involving employees’ perception of the organization climate, their personality background, the objective realization of organization culture, leadership systems and intergroup relationship. This concept has changed drastically since the days of scientific management (Heyel, 1973). Today the impact of modern behavioral sciences has new insights and approaches to the management of human resources. This new insight has highlighted the concept of motivating people in the organization as an important strategy. The main concern in the management of human resources is the improvement in the performance of the people working in the organization with a view of increasing their efficiency through motivation. The scientists working in the Agricultural Universities performs three fold functions, viz., teaching research and
extension and responsible for managing undergraduate, postgraduate, doctoral programmes, research programmes and extension programmes. Scientific studies on scientists and their working environment may prove to be not only the most basic but also among the most fruitful that can be accomplished in Science, since it can yield important implications for the entire scientific venture.

**Objectives of the study:-**

1. To study the organizational climate as perceived by scientists.
2. To study the organizational commitment as perceived by scientists.
3. To analyse the socio economic, psychological and job related variables of scientists.
4. To know the problems encountered by scientists.

**Review of literature**

In order to develop a proper understanding of the research problem and to develop a conceptual framework to conduct the study, it is very essential on the part of the researcher to review the efforts made in the past by earlier researchers. In view of this fact the available literature was reviewed and is presented in following heads.

- Concept of Perceived organizational Climate
- Concept of Perceived Organizational commitment
- Personal, socio-economic and psychological characters of scientists
- Problems encountered by scientists

**Concept of Perceived Organizational Climate**

Forehand and Gilmer (1964) defined organizational climate as the set of characteristics that are specific to a particular organization that may be induced from the way that organization deal with its members and its environment. For the individual members within the organization, climate takes the form of a set of attitudes and expectancies, which describe the organization in terms of both static characteristics and behaviour outcome and outcome-outcome contingencies.

Taylor and Bowers (1970) defined organizational climate as the perceived traits of organizational stimuli which become group property through interpersonal interaction and which modify overall behaviour within the organization.

Scheinder and Snyder (1975) pointed out that each individual perceives or conceptualizes his organization in any number of ways depending upon his context and the set of information about the organization which is operative for the individual.
Koehler et al. (1976) felt that employee may experience the same climate differently at different times or different employees may perceive the same climate differently depending upon seniority, age or position in the hierarchy. It is therefore seen that perception of organisational climate is dynamic and variable.

Chattopadhyaya and Agarwal (1979) tried to understand the concept of organizational climate by examining the various available models. They explained organizational climate as a psychological environment prevailing in the organization, which is an outcome of a number of variables in the social system, organization and also of the individual members.

Rajeev (1988) found that 40.91 per cent of researchers in Kerala Agriculture University perceived the organizational climate as facilitating, while 31.82 and 29.27 per cent of the researchers perceived it as most facilitating and least facilitating, respectively.

Gogoi and Talukdar (1992) in the research study on organizational climate of the State Department of Agriculture, Assam considered the organizational climate as the measurable property of work environment prevailing in that organization.

Prasad (2000) revealed that organizational climate serves as the guideline for dealing with people and has a major influence on motivation and productivity of individuals as well as total work group. Further he explained that factors in organizational climate are organizational structure, individual responsibility, rewards, risk and risk taking, warmth and support, tolerance and conflict.

Manjunath (2004) in his study in Tamilnadu University of Agricultural Sciences revealed that majority (66.67%) of extension workers belonged to medium level of organizational climate, while 23.81 and 9.52 per cent of them experienced high and low level of organizational climate, respectively.

Sandic (2006) in his study in department of animal husbandry and veterinary sciences in Karnataka, revealed that majority (55.00%) of VOs belonged to medium level of organizational climate, while 15.00 and 30.00 per cent of them experienced high and low level of organizational climate respectively.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that majority of teachers (70.42%) perceived organizational climate as favourable as compared to researchers (39.58%) and extension workers (28.57%). whereas most favourable organizational perception was observed with 50% of extension workers followed by 43.56% of researchers and 13.26% of teachers.

**Concept of Perceived Organizational commitment**

Sheldon (1971) viewed organizational commitment as an attitude or an orientation towards the organization which links or attaches the identity of the persons to the organization.

Buchanan (1974) defined it as willingness of an employee to exert high levels of efforts on behalf of the organization, strong desire to stay with the organization, further he indicated that the
commitment to the organization, profession and role has wide attention in recent organizational behavior literature.

Porter et al. (1974) indicated that organizational commitment as the relative strength of an individual’s identification with and involvement in 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 organization and a strong desire to maintain membership in the organization.

Smith et al. (1983) had slightly modified the definition of Porter et al. (1974) and stated that commitment means dedication and defined as the extent to which an employee has strong belief in and acceptance of organizations goals and values, is willing to exert considerable effort on behalf of the organization and has a strong desire to stay in the organization.

Malvia and Kumar (1984) conducted a study on Home Science Teachers of Agricultural University and Traditional University and found that Home Science Teachers in Agricultural Universities had higher commitment than those in Traditional Universities and functionally concluded that irrespective of the fact to which University system the faculty belonged, the commitment towards rural orientation of home science education did not seem to vary so much.

Manjunath (2004) in his study in Tamilnadu University of Agricultural Sciences revealed that majority (80.96%) of extension workers belonged to medium level of organizational Commitment, while 14.29 and 4.76 per cent of them experienced high and low level of organizational Commitment, respectively.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that more number of teachers (58.16%), researchers (41.66%) and (28.51%) extension workers belonged to medium level of organizational commitment, whereas 35.71% of extension workers, 29.16% of researchers and 28.57% of teachers belonged to high level of organizational commitment, while high percentage of 29.16% of researchers, 21.49% of extension workers and 13.27% of teachers belonged to low level of organizational commitment.

**Personal, Socio-economic and Psychological characters of scientists**

**Age**

Chhabra (1979) in his study level of job satisfaction among the scientific worker of an ICAR institute reported that scientists who were younger in age were found to be more satisfied with their jobs.

Hegde (1984) in his study found that 41.3 per cent of Agricultural Assistants working under Training and Visit system in Karnataka were in the age group of less than 36 years, closely followed by 37.5 per cent and 21.75 per cent of Agricultural Assistants in middle age (36-45 years) and high (above 45 years) age group, respectively.
Patel et al. (1994) reported that 49 per cent of Rural Agricultural Extension Officers working under Training and Visit system in Madhya Pradesh belonged to the age group of 31-45 years, while 37 per cent were below 30 years of age and 14 per cent were above 35 years of age.

Mohan (2000) in his study on job performance and job satisfaction of Assistant Agricultural Officer in Northern district of Karnataka revealed that 51.21 per cent of AAOs were in the age group of 35-50 years while 12.68 per cent were above 50 years of age. Remaining were below 35 years of age.

Sandic (2006) in his study in department of animal husbandry and veterinary sciences in Karnataka revealed that majority (54.00%) of VOs belonged to middle age group, while 12.00 and 34.00 per cent of them high and low level of age group.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that majority of the scientists (58.13%) belonged to middle age group followed by 21.25% & 20.63% belonged old & young age group respectively. It is further indicated that majority of the teachers (64.29%) followed by extension workers and researchers of (50.00%) and (47.92%) belonged to middle age group and most of extension workers (28.57%) followed by 25.00 per cent of researchers and 18.36 per cent of teachers belonged to old age group, while 27.08 per cent followed by 21.43 per cent and 17.35 per cent of researchers, extension workers and teachers belong to young age group respectively.

**Education**

Chhabra (1979) in his study level of job satisfaction among the scientific worker of an ICAR institute revealed that the researchers having higher formal education had a lot of say in the affairs of the institute. It seems that the researchers having high education and better involvement in research work were heard more honorably and effectively in the institute.

Patil et al. (1994) in his study on perception of farmers & extension personnel of department of agriculture, Karnataka, revealed that 67 per cent of Rural Agriculture Extension Officers working in Training and Visit system in Madhya Pradesh had low level of education qualification (upto higher secondary level), while 33 per cent had high educational qualification (graduation and above).

Mohan (2000) in his study on job performance and job satisfaction of Assistant Agricultural Officer in Northern district of Karnataka revealed that a majority (60.97%) of the AAOs were matriculate, 3.65 per cent had received education upto pre university level while 6.09 per cent were basic arts/science graduates, remaining were either B.Sc.(Agri.) or M.Sc.(Agri.) graduates.

Manjunath (2004) from the study in Tamilnadu University of Agricultural Sciences on analysis of job perspective and scientific productivity of scientists reported that majority (71.43%) of extension workers belonged to medium education category, whereas, 23.81 per cent and 4.76 per cent of them belonged to low and high educational categories, respectively.

Nagananda (2005) in his study of organizational climate perception of Assistant Directors of Agriculture & Agricultural Officer of KSDA, University of Agricultural Sciences,
Dharwad reported that the majority (70.00%) of Assistant Director of Agriculture as compared to Agriculture Officers (30.00%) were M.Sc. Graduates.

Sandic (2006) in his study in department of animal husbandry and veterinary sciences in Karnataka, revealed that majority (51.00%) of VOs belonged to medium level of educational qualification, while 20.00 and 29.00 per cent of them high and low level of educational qualification.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that around 13.75 per cent of overall scientists and among overall technical 6.12 per cent of teachers, 27.10 per cent of researcher and 21.40 per cent of extension workers belonged to Master degree category where as majority of overall scientists (86.25%), 93.88 per cent of teachers, 72.90 per cent of researchers and 78.60 per cent of extension workers belonged to Doctorate and other higher education level category.

Experience

Chhabra (1979) in his study level of job satisfaction among the scientific worker of an ICAR institute reported that scientists with less experience were found to be more satisfied with their job.

Rao and Sohal (1982) in his study on Performance appraisal of extension workers reported that 32, 35 and 33 per cent of Veterinary Assistant Surgeons in Andhra Pradesh were equally distributed in low (below 4 years), medium (4-11 years) and high (above 11 years) experience groups respectively.

Prasannakumar (1985) in his study on Assistant Agricultural Officers working under Training and Visit system in Karnataka found 27 per cent of Assistant Agricultural Officers had medium service, while 26 per cent and 47 per cent had low and high service respectively.

Manjunath (2004) in Tamilnadu University of Agricultural Sciences reported that majority (95.24%) of extension workers belonged to medium experience category, whereas, only 4.76 per cent of them belonged to high experience category. It was found that none of the extension workers belonged to low experience category.

Nagananda (2005) in his study of organizational climate perception of Assistant Directors of Agriculture & Agricultural Officer of KSDA, University of Agricultural Sciences, Dharwad found that majority of the Assistant Directors of Agriculture (58.30%) belonged to medium job experience category as compared to Agriculture Officers (50.00%).

Sandic (2006) in his study in department of animal husbandry and veterinary sciences in Karnataka, revealed that majority (71.00%) of VOs belonged to medium level of experience category, while 10.00 and 19.00 per cent of them high and low level of experience category.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that majority of overall scientists (52.5%) per cent and among overall scientists 57.14 per cent of teachers, 43.75 per cent of researchers and 50 per cent of extension workers belonged to medium experience category. 25 per cent of overall scientists and its categories teachers (23.47%), researchers (29.17%) and extension workers (21.43%) belonged to low level of experience.
category. And 22.5 per cent of overall scientists as well as 19.39 per cent of teachers, 27.08 per cent of researchers and 28.57 per cent of extension workers belonged to high experience category.

**Annual Income**

Anonymous (1970) found that salary was reported to act as satisfier.

Chhabra (1979) in his study level of job satisfaction among the scientific worker of an ICAR institute reported that scientists with higher income were found to be satisfied with their job.

Vinod Kumar (1984) in his study of role performance and job satisfaction of village extension workers in training and visit system in Karnal district, Haryana reported that pay scale had significant relationship with job satisfaction.

Alka et al. (1994) in her study on factors in job satisfaction of women entrepreneurs reported that experience, annual income and annual turnover have indicated their association with job satisfaction on the part of entrepreneurs, but it appears that entrepreneurs were expecting and putting efforts for something more than that. This may be due to the fact that women entrepreneurs in view of their ambitious nature and level of aspirations were after the name and fame in the area of their work.

Shankara Rao and Sudharshana Rao (1998) in his study on Job Satisfaction of Village Extension Officers in Andhra Pradesh found that VEOs were dissatisfied due to negative factors like meager incentives provided in their jobs.

Michels (2004) in his study of a causal model of behavior commitment revealed that majority (83.00%) of teachers belonged to medium level of annual income category, while 7.00 and 10.00 per cent of them high and low level of annual income category.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that more than 50 per cent of scientists (65.00 %) and its categories teachers 65.30 per cent, researchers (70.83%) and extension workers (42.87%) belonged to medium annual income category. 15 per cent of overall technical as well as 15.30 per cent of teachers 12.5 per cent of researchers and 21.42 per cent of extension workers belonged to low level of annual income category where as 20 per cent of overall scientists, 19.40 per cent of teachers, 16.67 per cent of researchers and 35.71 per cent of extension workers belonged to high annual income category.

**Job Involvement**

Agarwala (1980) in his work on a step of developing job involvement scale indicated that a very much involved person is regular, punctual, stick to work and a willing worker. He is technically sound, innovative and for him work is a very centre of his life. The characteristics of the least involved person are just opposite.
Ramakrishna Rao (1985) in his study on Assistant Agricultural Officers working under Agriculture Extension Project in Karnataka found that 52.23 per cent and 47.27 per cent of Assistant Agricultural Officers had low and high level of job involvement respectively.

Manjunath (2004) in his study in Tamilnadu University of Agricultural Sciences revealed that majority (66.67%) of extension workers belonged to medium level of job involvement, while 23.81 and 9.52 per cent of them experienced high and low level of job involvement, respectively.

Nagananda (2005) in his study of organizational climate perception of Assistant Directors of Agriculture & Agricultural Officer of KSDA, University of Agricultural Sciences, Dharwad found that high per cent of both Assistant Directors of Agriculture (70.00%) and Agriculture Officers (78.30%) belonged to medium job involvement category.

Sandic (2006) in his study in department of animal husbandry and veterinary sciences in Karnataka, revealed that majority (66.00%) of VOs belonged to medium level of job involvement category, while 16.00 and 18.00 per cent of them high and low level of job involvement.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that more than 50 per cent of scientists (65.00 %) and its categories teachers 65.30 per cent, researchers (70.83%) and extension workers (42.87%) belonged to medium annual income category. 15 per cent of overall technical as well as 15.30 per cent of teachers 12.5 per cent of researchers and 21.42 per cent of extension workers belonged to low level of annual income category where as 20 per cent of overall scientists, 19.40 per cent of teachers, 16.67 per cent of researchers and 35.71 per cent of extension workers belonged to high annual income category.

**Job Satisfaction**

Hegde (1984) reported that 42.5 per cent of the Agricultural Assistants working under Training and Visit system in Karnataka had medium level of job satisfaction, 25 per cent had low and 32.5 per cent had high level of job satisfaction, respectively.

Ramakrishna Rao (1985) reported that 45.45 per cent of Assistant Agricultural Officers working under Agriculture Extension Project in Karnataka belonged to the low job satisfaction category and 54.55 per cent belonged to high job satisfaction category. However, rank ordering of tasks by the two categories of respondents did not differ significantly.

Ravindra Sharma (1985) in his study on Village Extension Workers in Rajasthan found that 83.41 per cent of the Village Extension Workers observed that the post was according to their taste and choice. They were satisfied with the post they held. On the contrary 14.21 per cent were not fully satisfied with their job.

Dhakhore and Bhilegoankar (1987) in their study found that 68.33 per cent of Veterinary Extension Personnel in Maharashtra had moderate level of satisfaction, whereas 15 per cent expressed high satisfaction and 16.67 per cent were dissatisfied with their job.
Menasinhhal (1992) in his study on job satisfaction of Agricultural Assistants working under National Agriculture Extension Project in Karnataka state found that 45.33 per cent of Agricultural Assistants had medium level of satisfaction. About fifty five per cent of the Agricultural Assistants belonged to low satisfaction category while only 19.34 per cent had high level of job satisfaction.

Meti (1992) reported that 64 per cent of Agricultural Assistants working under National Agriculture Extension Project in Karnataka had medium level of job satisfaction. Seventeen per cent and nineteen per cent of Agricultural Assistants had high and low level of satisfaction respectively.

Sundararswamy and Perumal (1992) in his work identified job satisfaction as one of the important variables which influence job performance of Assistant Agriculture Officers in extension in Karnataka.

Girija et al. (1994) in their study on Agricultural Graduates employed in different sectors reported that 46 per cent of them were satisfied with their job, while 25 per cent and 29 per cent were less satisfied and highly satisfied respectively.

According to Huli and Tyagi (1994) job satisfaction was predominantly low, where opportunity to use idea was low i.e., where employees were not involved in decision making.

Keregero and Mthupha (1997) established that extension workers perceived their job as non-satisfactory with respect to supervision and performance appraisal.

Halakatti and Sundaraswamy (1998) critical analysis on achievement motivation of agricultural assistants and associated factors in Karnataka indicated that job satisfaction significantly explained the variation in job performance. They also identified that job satisfaction had positive effect on job performance.

Shankara Rao and Sudharshana Rao (1998) in his study on Job Satisfaction of Village Extension Officers in Andhra Pradesh found that majority (82%) of Village Extension Officers in Andhra Pradesh had moderate to high level of job satisfaction.

Billikopt (1999) in his work on farmworkers positive about their jobs in Calcutta Agricultural University suggested complete job instruction could improve the working conditions of agricultural labourers.

Mohan (2000) in his study on job performance and job satisfaction of Assistant Agricultural Officer in Northern district of Karnataka reported that majority (67.07%) of the Assistant Agriculture Officers (AAOs) had medium job satisfaction, whereas 20.73 and 12.19 per cent of the AAOs were having low and high job satisfaction respectively.

Manjunath (2004) in Tamilnadu University of Agricultural Sciences reported that majority (95.24%) of extension workers belonged to medium job satisfaction, whereas, only 4.76 per cent of them belonged to high job satisfaction category. It was found that none of the extension workers belonged to low experience category.
Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that majority of the scientists (62.50%), and its categories namely teachers (63.27%), researchers (64.59%) and extension workers 50 per cent belonged to medium level of job satisfaction category. Where as 17.50 per cent of overall scientists, 19.39 per cent of teachers, 12.50 per cent of researchers and 21.42 per cent of extension workers belonged to low level of job satisfaction category. While 20.00 per cent of overall scientists, 17.34 per cent of teachers, 22.91 per cent of researchers and 28.58 per cent of extension workers belonged to high level of job satisfaction category.

**Attitude towards Job**

Prajapati and Patel (1984) revealed the overall attitude of extension worker in Jaipur district of Rajasthan that only 15 per cent of respondents had unfavourable attitude towards training and visit system, while the majority 62.5 per cent of the respondents were neutral

Brewer (2003) revealed that (54.00%) of the respondents were found to have medium level of attitude towards job, while 18.00 per cent and 28.00 per cent of them were in high and low level of attitude towards job category.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that favorable attitude towards job was observed among 60.00 per cent of scientists and its category teachers (59.19%), researchers (68.75%) and extension workers (42.86%). Less favorable attitude towards job was seen among 21.88 per cent of overall scientists, 21.42 per cent of teachers, 16.66 per cent of researchers and 21.42 per cent of extension workers. Where as most favorable attitude towards job was observed among 18.12 per cent of overall scientists, 19.39 per cent of teachers, 14.58 per cent of researchers and 35.72 per cent of extension workers.

**Job Performance**

Dhakhore and Bhilegoankar (1987) found that 69.17 per cent of the Veterinary Extension Personnel in Maharashtra had medium level of job performance, whereas 15.83 per cent and 15.00 per cent of the Veterinary Extension Personnel were found to have high and low level of performance respectively.

Hegde and Channegowda (1989) in their study concluded that a large number (68.7%) of Agricultural Assistants working under Agricultural Extension Project in Karnataka had medium level of job performance, while 15.00 per cent and 16.30 per cent had high and low performance respectively.

Narasimhagowda (1989) reported that 52.22 per cent of Assistant Horticultural Officers in Karnataka belonged to the high job performance category, while 48.78 per cent belonged to low performance category.

Rath (1992) reported that 78.00 per cent of the Subject Matter Specialists under Training and Visit system in Orissa were in medium job performance category, while 21.00 per cent in high job
performance and only one per cent of the Subject Matter Specialists were in low job performance category.

Ram Bhal et al. (1993) reported that female extension personnel are inadequate. The results of multiplicative effect indicated that in all the tests more than 12.00 per cent of female extension personnel increased cereal yield by 29.58 per cent, farmers income by 159.61 per cent, agricultural income and fertilizer consumption by 113.89 per cent. Less than 12.00 per cent of extension female personnel of total extension personnel may not be significant for agricultural development.

Rahad et al. (1995) found that none of the Village Extension Workers working under Training and Visit system in Maharashtra performed poorly, whereas 3.42 per cent, 10.83 per cent, 40.92 per cent and 34.73 per cent of Village Extension Workers were found to perform either below average, average, good and excellent, respectively.

Jaiswal et al. (1997) in their study indicated that 59 per cent of the Rural Extension Officers in Maharashtra belonged to medium category of job performance, followed by 22 per cent in low and 19 per cent in the high job performance category.

Sandhu and Raghbir (1997) reported that characteristics namely; rural background and field work orientation were strongly related to job performance. Agriculture Extension Officers posted at a distance of 60 km from their home were found to have the highest performance. There is need to make provisions for more opportunities in the job with regard to recognitions and rewards like certificates, appreciations etc. Need for time to time in-service training and reference courses for the AEO.

Subbarao (2001) referred job performance as the degree of accomplishment of the tasks that make up an individual’s job. It indicates how well an individual is fulfilling the job demands.

Sharma (2002) explained that performance is two things (i) it is the results that people get on the job and (ii) it is whatever they do that affects these results. Performance is the outcome of actions on the job and it is also the actions that produce that outcome.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that more than 50 per cent of scientists (55%) belonged to medium level of job performance category, similarly 65.30 percent of teachers, 35.41 per cent of researchers and 50.00 per cent of extension workers belonged to medium level of job performance category. While 18.75 per cent of overall scientists, 8.17 per cent of teachers, 37.5 per cent of researchers and 28.58 per cent of extension workers belonged to low level of job performance category, whereas 26.25 per cent of overall scientists 26.53 per cent of teachers, 27.09 per cent of researchers and 21.42 per cent of extension workers belonged high level of job performance category.

Motivation

Reddy (1983) classified 50 per cent, 35 per cent and 15 per cent of the Village Extension Officers working under Intensive Agriculture Extension Programme in Andhra Pradesh as having high, average and low achievement motivation in that order.
Sundaraswamy (1987) in his work on need achievement and job performance of Agricultural Officer in Karnataka, reported that 27.28 per cent of Assistant Agricultural Officers working under Training and Visit system belonged to the low level of achievement motivation category, whereas 51.24 per cent and 21.42 per cent of Assistant Agricultural Officers had medium and high level of achievement motivation.

Mohan (2000) in his study on job performance and job satisfaction of Assistant Agricultural Officer in Northern district of Karnataka reported that the AAOs having high, medium and low achievement motivation were 19.21, 69.51 and 12.19 per cent respectively.

Manjunath (2004) in Tamilnadu University of Agricultural Sciences reported that majority (66.67%) of extension workers belonged to medium Achievement motivation category, whereas, only 28.57 per cent of them belonged to high Achievement motivation category and 4.76 per cent belonged to low Achievement motivation category.

Kiran T.R. (2008) in his study in University of Agricultural Sciences, Dharwad revealed that Majority 80.63 per cent of overall scientists 84.70 per cent of teachers, 77.08 per cent of researchers and 64.29 per cent of extension workers belonged to medium level of achievement motivation category. 8.12 per cent of overall scientists, 7.14 per cent of teachers, 6.25 per cent of researchers and 21.42 per cent of extension workers belonged to low level of achievement motivation category where as 11.25 per cent of overall scientists, 8.16 per cent of teachers, 16.67 per cent of researchers and 14.29 per cent of extension workers belonged to high level of achievement motivation category.

**Job Stress**

Srivastava (1982) found that the employee potentiality for better job performance influence their perception of workload, ambiguities and conflict relating to their job. The employees producing more by virtue of their high coping capacity and motivation perceive lesser role stress as compared to those maintaining low production level. Therefore, it may be established that only the perceived role stress influence employees’ job performance but their performance level also determine their perception of role stress to considerable extent.

Igodan (1987) reported that 80 per cent of the county agents in the Ohio state experienced moderate level of job stress and burnout and 20 per cent of the agents experienced high level of burnout.

Madhu et al. (1990) stated the role stress is a natural phenomenon in organization, linking position is usually of two types, such as role conflict and role ambiguity. Role conflict occurs when an incumbent is torn between conflicting expectation or when he feels he does things he does not want to do or when he thinks they are not a part of his role specification.

Role ambiguity exists when the incumbent had inadequate information about the role and its objective or a lack of feedback from others.
Mohan (2000) in his study on job performance and job satisfaction of Assistant Agricultural Officer in Northern district of Karnataka observed that 20.73, 64.63 and 14.63 per cent of AAOs were found to experience high, medium and low level of job stress.

Adesope and Agumagu (2003) reported from the study conducted in Nigeria that most of the respondents have considerable work experience on the job but income level is considerably low. Agricultural extension agents in the study area have medium job stress. Work experience was found to be the most significant factor related to job stress. Other factors such as age, education, income, gender marital status were not significantly related to job stress.

Manjunath (2004) in his study in Tamilnadu University of Agricultural Sciences revealed that majority (80.95%) of extension workers belonged to medium level of organizational stress, while 14.29 and 4.76 per cent of them experienced high and low level of organizational stress, respectively.

Sandic (2006) in his study in department of animal husbandry and veterinary sciences in Karnataka, revealed that majority (62.00%) of VOs belonged to medium level of job stress category, while 24.00 and 14.00 per cent of them high and low level of job stress category.

Problems encountered by scientists:-

Thippeswamaiah (1991) in his study on Subject Matter Specialists working under National Agriculture Extension Project reported that the important problems faced by them were non availability of vehicles for movement, inadequate working facilities and lack of direct control over field functionaries.

Manohari and Perumal (1996) reported that the Women Farm Graduates in Tamil Nadu faced the problems of inadequate conveyance facilities, lack of guidance from supervisors, target oriented work, need to work during odd hours and no faith shown on them by the farmers.

Kurbeti et al. (1997) in their study on barriers faced by Village Extension Workers in Training and Visit system in Maharashtra reported that three fifth (64%) of Village Extension Workers had medium barriers. An equal number that is 18 per cent had low and high extent of barriers in role performance. With regard to barriers in communication of messages, it was found that lack of farmers’ participation in various extension programmes (47.33%), language barriers (44.66%) non availability of literature on location specific technology (64%) and lack of skill in preparation and use of audio video aids (50.66%) were somewhat severe barriers.

Jaiswal et al. (1997) reported that the major problems faced by Rural Agricultural Extension Officers working under Training and Visit system in Madhya Pradesh were absence of contact farmers on the day of visit, tribal farmers are habitual in drinking country wine, lack of training inputs and audio visual aids, non settlement of present claims in time, lack of interdepartmental coordination and interference of local leaders.

Ashalatha et al. (1999) found that the major constrains faced by Agricultural Assistants working in KrishBhavans in Kerala were frequent transfers, too much workload, lack of promotional
opportunities lack of conveyance facilities, poor supply and services, low salary, area of operation too large, supply of spurious inputs like damaged seeds, adulterated fertilizers and pesticides etc.

Mohan (2000) in his study on job performance and job satisfaction of Assistant Agricultural Officer in Northern district of Karnataka reported that the important problems expressed by AAOs were non-availability of transport (28.12%), lack of co-operation and interest from farmers (28.12%), political interference (21.87%), interest of farmers in physical inputs rather than technology (21.87%), lack of interest in adoption of technology by the farmer (15.62%), lack of freedom for decision making (12.50%), Whereas 6.25 per cent of the AAOs expressed the problems as lack of support from seniors, urgency to get the work done and non-availability of inputs on time.

Nagananda (2005) in his study on organizational climate perception of Assistant Directors of Agriculture and Agriculture Officers of KSDA, revealed that inadequate conveyance facilities, lack of promotional opportunities and political interference in implementing programmes, lack of recognition for good workers, discrimination between different cadres of officers as important problems expressed by both officers in the departments. Further, three fourth of Agriculture Officers had expressed the problem of inadequate field functionaries to carry out extension work.

Sandic (2006) in department of animal husbandry and veterinary sciences in Karnataka, reported that major constraints expressed by the VOs were inadequate training (85.71%), inadequate facilities such as chemicals, medicines and other facilities (85.71%). Further, VOs had indicated that lack of reward, recognition and appreciation for special achievements (71.42%), relatively low salary increment and salary (62.85%) and lack of appropriate promotion scheme (57.14%) as other major constraints.

**Research design:**

1. **Sample unit**: Scientist including teachers, researchers and extension personnel working in colleges, departments, research stations, KVKs etc. of State Agricultural Universities of Gujarat.
2. **Sample size**: 400 Sample Units (100 from each university)
3. **Sample Frame**: List will be collect from the Registrar Office of each State Agricultural University of Gujarat.
4. **Sampling method**: Probability sampling
5. **Sampling technique**: Stratified sampling
6. **Research approach**: Questionnaire (Personal Interview)
7. **Area of Survey**: Four Gujarat State Agricultural Universities
8. **Research instrument**: Closed ended questionnaire
9. **Analysis**: Data analysis is done through tabulation, cross tabulation, graphs and statistical techniques.
Limitations of the study:-

The limitation of the study is inadequate time and other resources available at the disposal of a single investigator. The area of the study was restricted to Gujarat State Agricultural University. As such generalization of the study could be extended to the area only where similar conditions exist. As the study was based more on individual perception and expressed opinion of respondents under study, personal bias and prejudice of respondents might have crept in several points though all possible precautions were taken to avoid them.

Proposed Chapters plan:-

1. Introduction to the topic.
2. Review of Literature.
3. Research Methodology.
4. Result and Discussion.
5. Conclusion- Suggestion

Result and Discussion:-

This is the part where understanding of the subject by the researchers pays crucial role. Data collected and represented in raw form does not make any sense to the researcher and to the reader. The data needs to be analyzed and presented in a meaningful manner to come to conclusion. Data analysis is the most part of any research work. Analysis of the data collected from various primary and secondary sources are very important as it leads to the final conclusion and helps in bringing about changes in the existing systems. It also helps in future decision making, and gives direction for future work. Analysis of data collected through the structured questionnaire is done here. The analysis is done separately for each of the variables or dimensions taken in questionnaire. Here, dependents are variables like organizational climate and organizational commitments, independents variables are age, education level, experience, income level, job satisfaction, job performance, motivation, job involvement, attitude towards job and job stress. As the need of study, various statistical tools are used like frequencies, percentage, mean, standard deviation, t-test, correlation coefficient etc. The analysis is represented using tables and charts. As tables are one of the best ways to represent the data in comprehensive and meaningful manner where as charts make the interpretation of the analyzed data easier for finding out the meaning of it. Based on that represented result are discussion and compared with other already researched same variables.
Conclusion and Suggestion:-

There has been dearth of research studies dealing with organizational aspect and problems of scientists in Agricultural Universities in India particularly in Gujarat state. Therefore, the present study would be one of the pioneering attempts for providing basic information and findings on the above lines in Gujarat state. The outcome of the study might act as guidelines for scientists to perform their job duties more effectively and help officials of the Universities in understanding the psychology of scientists. This study would enable the programme planners and policy makers to gear up their activities towards improving perceived organizational climate of the scientists. The different activities in which scientists are participating more activity and also the activities for which they are not contributing much will be known so as to facilitate policy makers and programme planners act suitably.

In addition, this study will facilitate in knowing the organization related characteristics which will serve as guideline for policy makers and programme planners in choosing the scientists for various posts in Gujarat state Agricultural University and to formulate effective programmes to implementation in future.

Besides, the study will also contribute in evolving a criterion for classification of scientists and a methodology for ranking, classifying and comparing the group of their scientific productivity. In future, the findings would have a wider application to other Agricultural Universities, since the nature of the job of scientists is more or less similar in all Agricultural Universities.

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