

## **Chapter 14 - Managing human resources within extension**

One of the most significant developments in the field of organization in recent times is the increasing importance given to human resources. More and more attention is being paid to motivational aspects of human personality, particularly the need for self-esteem, group belonging, and self-actualization. This new awakening of humanism and humanization all over the world has in fact enlarged the scope of applying principles of human resource management in organizations. The development of people, their competencies, and the process development of the total organization are the main concerns of human resource management (Pareek & Rao, 1992).

Extension organizations in developing countries face the major problems of professional incompetence and lack of motivation among their employees. Further, many of the agricultural extension departments of these countries do not have a well-defined system of human resource management. Proper planning and management of human resources within extension organizations is essential to increase the capabilities, motivation, and overall effectiveness of extension personnel. Keeping this in view, this chapter discusses the various dimensions of human resource management as applicable to extension organizations: human resource planning for extension, job analysis, recruitment and training of extension personnel, performance appraisal, supervision, management of rewards and incentives, improvement of the quality of work life, and organizational development for extension.

### **Human resource planning for extension**

Human resource planning forecasts the future personnel needs of extension organizations. With the rapid changes in technology, needs of farmers, market situation, and competitive environment, planning for human resources has become an important, challenging task for extension. Human resource planning involves plans for future needs of personnel, their required skills, recruitment of employees, and development of personnel (Miller, Burack, & Albrecht, 1980). Human resource forecasting and human resource audit are the two most important components of this type of planning. Human resource forecasting refers to predicting an organization's future demand for number, type, and quality of various categories of employees. The assessment of future needs has to be based on analysis of present and future policies and growth trends. The techniques of forecasting include the formal expert survey, Delphi technique, statistical analysis, budget and planning analysis, and computer models. The human resource audit gives an account of the skills, abilities, and performance of all the employees of an organization (Werther & Davis, 1982).

### **Job analysis**

Job analysis traditionally was done for purposes connected with recruitment, pay, administration, and supervision. But the increasing complexity of work has made job analysis an important instrument for developing people in organizations. Job analysis requires a systematic collection, evaluation, and organization of information about the job. This information is collected through interviews, mailed questionnaires, observation, study of records, and similar methods. The collected information becomes a basis for preparing job descriptions and specifications. The job

description, or job profile, is a written statement which includes detailed specifications of duties to be performed, responsibilities, and working conditions and indicates what is expected of a job holder. A job specification is a profile of the human characteristics needed for the job, such as education, training, skills, experience, and physical and mental abilities (Werther & Davis, 1982).

Extension organizations in developing countries do not have clearly defined job descriptions or job specifications for extension personnel. The training and visit system of extension considerably improved the preparation of job charts, work plans, and time-bound work for different categories of extension personnel. However, the actual utility of job descriptions in extension organizations is complicated by factors such as work overload, seasonality of extension, the range of cropping systems, and distribution of extension service over a large area (Hayward, 1990). Studies analysing the role of extension agents reveal that they face work-related problems such as role ambiguity and lack of job authority, expertise, and accountability (Vijayaragavan & Singh, 1989). This shows that job analysis is needed to improve the performance and effectiveness of extension employees. Job analysis can more effectively contribute towards the development of extension personnel by adopting the following procedures which involve identifying key performance areas (KPA) and critical attributes.

### **Key Performance Areas for Various Categories of Extension Personnel**

A job description consists of many details, but does not specify key areas which need attention. Further, it gives the details of what is expected from the current jobholder. On the other hand, key performance areas are specific and show the critical functions relevant at present and for the future to achieve the objectives (Pareek & Rao, 1992). The identification of key performance areas helps in role clarity as well as in delegation of functions. This in turn aids in performance appraisal and training. Generally, four or five key areas for a job are identified. The core extension personnel of developing countries consists of village extension workers, subject-matter specialists, and supervisory staff or extension officers. Examples of key performance areas of core extension personnel are given below.

*Village Extension Workers.* People in this category (1) make regular and systematic visits to villages and farms to develop rapport with the clientele and to understand their problems; (2) undertake educational activities in the form of meetings, campaigns, demonstrations, field days, training sessions, and exhibitions; and (3) provide advisory services to the farmers and solve their production problems.

*Subject-Matter Specialists.* Their role is to (1) keep abreast of current recommendations and findings related to farm production by maintaining continuous contact with agricultural research stations; (2) provide feedback to the research system about farmers' problems which need solutions; and (3) train and backstop village extension workers on the latest farm technology and help them in solving field problems.

*Supervisory Staff or Extension Officers.* People holding these positions (1) plan, organize, coordinate, and implement extension programmes and activities; (2) supervise and monitor the

work of field staff, providing guidance, motivation, and evaluation of performance; and (3) coordinate the programme with inter-and intradepartmental agencies.

### **Critical Attributes for Extension Personnel**

The key performance areas indicate the important roles and contributions of different categories of extension personnel. Once the roles are delineated, they can be analysed to indicate the attributes which can discriminate an effective from an ineffective role occupant. These critical attributes consist of qualities such as educational qualifications, skills, experience, physical characteristics, mental abilities, values, and attitudes needed for extension. The critical attributes needed for field-level and supervisory extension staff are necessary formal training in agriculture, practical skills and experience in farming, and knowledge of modern farm practices. Abilities in group dynamics, human relations, and communication are also important. Basic skills related to management and leadership are needed by extension supervisors. Values and attitudes such as faith in rural people, commitment to agricultural development, and concern for the whole community are important for all extension personnel (Gupta, 1963; Bhasin, 1976).

The importance of assessing personal and professional attributes for selecting productive extension personnel has been reported by several researchers (Gupta, 1963; Perumal, 1975). Assessment is essential because an unsatisfactory educational level of extension staff is one of the most serious problems of extension in countries like Bangladesh, Botswana, Kenya, Malaysia, Sudan, and Zambia (Blanckenburg, 1984). A worldwide analysis of the status of agricultural extension reveals the low level of formal education and training of field extension agents in developing countries (Swanson, Farner, & Bahal, 1990).

### **Recruitment and training of extension personnel**

Recruitment is important in selecting the right kind of extension personnel. Since the job of extension personnel calls for technical skills as well as commitment and willingness to educate rural people, an appropriate selection system is essential to ensure the right selection. The success of extension depends heavily upon selection of qualified and motivated personnel. Extension organizations in developing countries use two major sources of recruitment: from outside and from within. Entry-level positions such as village extension workers and agricultural extension officers are filled by outside recruitment, using the services of government placement agencies. Other channels of recruitment are advertisements, private placement agencies, professional search firms, and educational institutions. In some countries, farmers are recruited to help extension agents (Adams, 1982). In Israel, volunteers with practical experience in farming, usually a couple, were recruited as extension workers to help the immigrants. These agents were found to be enthusiastic; they lived with the farmers, set a personal example, and were effective instruments for making desired changes (Blum, 1987).

Most of the extension departments in developing countries have the policy of promoting or recruiting within for middle-level and top-level positions. For example, in India, positions like deputy director, joint director, and additional director of extension are filled through promotion (Vijayaragavan, 1994). The advantages of this policy are that it promotes loyalty and provides opportunities for existing extension staff to get high-level positions. However, its greatest

disadvantage is that it prevents the lateral entry of talented extension personnel and promotes complacency because seniority ensures promotion.

### **Methods and Techniques for Selecting Extension Staff**

The selection of extension staff starts with making the job opportunities known to all potential applicants through advertisement. The help of extension workers' training centres, agricultural colleges, rural institutions, and local government agencies may be sought to give wide publicity, as well as to inform candidates living in rural areas. This is followed by screening applicants to short-list suitable candidates and by evaluating potential candidates through various tests.

A typical selection process consists of the following steps: completed job application, initial screening, testing, indepth selection interview, physical examination, and job offer (French, 1982). In general, extension organizations in developing countries use a simple knowledge test and a brief interview to select extension personnel. By using the above method, it is impossible to discriminate an effective candidate from an ineffective candidate, because selecting extension personnel demands thorough, indepth testing of cognitive and noncognitive abilities.

Testing cognitive ability includes a knowledge test, a skill or ability test, and an aptitude test. A noncognitive test is a measure of behavioural dimensions which are important for field-level extension personnel, including concern for and commitment to rural people, empathy, problem-solving orientation, high motivation to influence and educate farmers, ability to work under unsupervised and difficult village conditions, patience and persistence, and team spirit. A good example of selecting village-level extension workers on the basis of behavioural characteristics is provided by the extension project of Allahabad Agricultural Institute (Bathgate, 1956). In response to an advertisement for 27 posts of village guides, 700 to 800 candidates had applied. The final selection procedure consisted of five days of testing skills and attitudes in actual village situations. The test included testing attitudes towards menial tasks like cleaning a cattle shed or digging a compost pit. The candidates' responses to emergency situations were also tested by dropping them into isolated villages.

The assessment centre approach, originally used during World War II, can be used to select extension staff. In this approach, an organization develops its internal resources for assessing new staff. The candidates to be recruited go through a number of simulation exercises, and an expert assesses their behaviour. The techniques used are a psychological test, role play, in-basket exercise, group discussion, projective test, knowledge test, and interviews.

### **Training and Development**

The training of extension personnel contributes directly to the development of human resources within extension organizations. "Training programmes are directed towards maintaining and improving current job performance, while development programmes seek to develop skills for future jobs" (Stoner & Freeman, 1992, p. 388). Training has to start with the identification of training needs through job analysis, performance appraisal, and organizational analysis. Once the training needs of extension personnel have been identified, the next step is to organize training programmes. Methods such as games, role playing, simulation exercises, and case study can be

used in extension organizations to create learning situations based on experience (Lynton & Pareek, 1990). Training based on actual field experience should be emphasized. Emerging new farm technologies such as integrated pest management and improved practices in horticulture call for actual field experience. Extension agents need training not only in the technological aspects but also in human relations, problem solving, sensitivity towards disadvantaged groups, and the basic concepts of management (Hayward, 1990).

### **Management Development Programmes**

Management development programmes are meant to improve the managerial skills of senior-level extension officers and to prepare them for future roles. There is a great need for management development programmes in extension organizations because they face complex situations due to changing agricultural scenarios. Further, extension managers have to be exposed to modern management techniques and methods. Management development programmes have to be suited to the needs of top-level extension managers and should be based on needs analysis. Methods such as coaching, job rotation, training sessions, classroom instruction, and educational institute-sponsored development programmes are used to train managers. In India, a separate institute called MANAGE has been established to train senior extension managers in managerial skills and human relations.

### **Performance appraisal**

In the previous sections, we discussed how extension personnel are recruited and trained and become part of a work group. These are all vital activities. However, the ultimate measure of effective human resources within an extension organization is the performance of extension personnel. Thus performance appraisal is important for effective human resource management. Performance appraisal is a process of evaluating employee performance in order to guide and develop the employee's potential. In many extension organizations which are government departments, the performance appraisal is nothing more than a confidential judgement of work done and a character report used to facilitate disciplinary action or promotion. The employees do not get feedback about their performance. Extension organizations need to have an open appraisal system to provide feedback and opportunities for open discussion with employees on their performance, because they have immense potential to grow and develop. This system can create a healthy working climate and employee motivation.

The performance appraisal which aims at facilitating employee development has the following major purposes: (1) to provide feedback and guidance, (2) to set performance goals, (3) to identify training needs, and (4) to provide inputs for management of pay administration, rewards, and promotion. The steps involved in effective performance appraisal are (1) identification of key performance areas and setting yearly objectives under each KPA, (2) identification of critical attributes for effective performance, (3) periodic review of performance, (4) discussion of performance with employees, and (5) identification of training and developmental needs (Pareek & Rao, 1992).

## **Potential Appraisal**

The potential appraisal is a future-oriented appraisal by which the potential of an employee to occupy higher positions and to assume higher responsibilities is evaluated. The potential appraisal can help the extension staff to know their strengths and weaknesses and can motivate them to further develop their skills. Thus the potential appraisal helps in planning overall career development of employees. Some of the techniques used for the appraisal are self-appraisals, peer rating, the management by objectives (MBO) approach, psychological test and simulated work exercises, case analyses, and leadership exercises.

## **Performance Review and Counseling**

An important purpose of the performance appraisal is to counsel and guide employees towards greater job effectiveness. Thus a system of performance counselling is needed in extension organizations. Performance counselling is provided by the manager to the subordinates to help them in the analysis of job performance, identification of training needs, and finding solutions to the problems which hinder job effectiveness. Counselling is an art of communication involving two people - manager and employee. Counselling differs from training in that the former involves a dyadic relationship and establishes more mutuality and confidentiality. The success of performance counselling depends upon the employee's interest, a climate of openness and mutuality, and the counselling process. Extension managers can use directive, nondirective, and cooperative counselling (Werther & Davis, 1982).

## **Supervision**

Two major functions of supervision are task orientation and concern for employees. Therefore, direction and organization of activities, motivation of employees, and management of work groups are the important functions of extension supervisors.

## **Direction and Organization**

Extension supervisors have to plan the work and maintain a high standard of performance. The whole process of job analysis, identification of key performance areas, and performance appraisal will help in planning and organizing extension work. The training and visit system of extension has introduced mechanisms for defining goals, planning, and scheduling work at the field level with provisions for monitoring and evaluation. Some of the management techniques used by extension organizations in overall planning and management of programmes are the programme evaluation and review technique (PERT/critical path method (CPM) (Wiest & Levy, 1982), management by objectives (MBO) (McConkey, 1983), programme and performance budgeting system (PPBS), and time management techniques. These techniques have been practised by extension organizations in Asian and African countries with varying success. Personal computers offer good scope for extension managers to increase certain managerial skills.

A study of supervisory practices to improve field performance of agricultural extension in Kenya, Malawi, and the Philippines revealed the following effective supervisory practices

(Honadle, 1982): (1) use of collaborative, realistic, and result-oriented target setting and a daily activity plan; (2) a needs-based participatory evaluation system; (3) involvement of farmers in decision making and a reachable service target under local constraints; and (4) effective communication and use of simple proforma and report procedures.

Studies of agricultural extension in Asia and Africa show that extension supervisors must be considerate as well as task oriented, involving subordinates in decision making and treating the employees with more interpersonal competence (Leonard, 1977; Vijayaragavan & Singh, 1991). Up to 86 per cent of field agents in Southeast

Asia reported "friendship" as the most effective way for supervisors to ensure extension workers' reliable performance (Goodell, 1983). Thus if extension managers are to be effective, they have to give supportive evaluation by way of enhancing employee motivation and improving the functioning of work groups.

### **Motivating the Extension Personnel**

The work motivation and morale of extension staff, as reported earlier, are very poor in many countries. The reasons are many. The bureaucratic structure of extension administration, lack of rewards and incentives, poor facilities, poor promotional avenues, and the low esteem given to extension are the major causes of poor motivation and morale. Extension supervisors should have the ability to motivate and lead the field extension workers so that the field agents perform more than routine jobs, and supervisors should be involved in attaining excellence in extension work. This calls for extension managers having an understanding of various theories of motivation as applicable to frontline extension agents. Therefore, a knowledge of major theories of motivation such as Maslow's hierarchy of needs theory, Herzberg's two factor theory, McClelland's need theory, theory X and theory Y, and expectancy theory of motivation is essential (Stoner & Freeman, 1992). Special training for developing motivation among field-workers has to be undertaken by supervisors.

### **Work-Group Management**

Every organization has formal and informal groups. Formal groups are established by the management, while informal groups are spontaneous and developed to satisfy mutual interest of the members. Because work groups have a considerable influence on the work situation, supervisors should be sensitive to the needs of the group and develop skills to guide and achieve the group's goal, which will benefit the organization and the members. Effective extension supervision can use work groups in problem solving because they can provide many creative solutions. One way to improve supervisory effectiveness in extension work is to develop a leadership style which represents the extension workers' group interest at the higher level of organization. This will increase the confidence and morale of the work group. An understanding of group dynamics and their implications for increasing work-group performance is essential for extension supervisors. For example, in the "Hawthorne Effect," increased performance due to special treatment of the group can be effectively used in extension organizations (Honadle, 1982). Studies have pointed out that well-developed group dynamics result in increased extension performance (Leonard, 1977).

## Management of rewards and incentives

An important aspect of human resource management which needs special attention in extension organizations is the development of a reward system which will attract, retain, and motivate extension personnel, as well as provide training and promotional opportunities. Extension organizations in Asian and African countries have a poor reward system (Vijayaragavan, 1994; Swanson, Farmer, & Bahal, 1990). The extension agents are not only poorly paid but are paid late and after reminders or visits to head-quarters (Wiggins, 1986). Most of the extension services are run by government agencies and operate under rules and regulations of public administration. These rules do not have provisions for rewarding superior performance or for a wage system based on merit. Promotion criteria are based on seniority and length of service. Thus the bureaucratic structure of extension services is a basic hindrance to designing a better reward system. Among many of the government departments, the agricultural department and extension service have a low public esteem and poor pay structure (Vijayaragavan & Singh, 1992).

The rewards and incentive system can be improved in several ways.

*Rewarding Superior Performance.* Extension organizations have to develop a reward system which encourages superior performance so that pay and wage administration will be an effective tool to promote performance, motivation, and satisfaction. A clear job description, performance standards, and performance appraisal will help in evaluating extension work and rewarding people for meritorious service. Ways and means have to be found within the existing framework of public administration for basing pay on performance. For example, extension workers on the basis of their performance can be sent for higher education. Nonmonetary rewards such as recognizing the good ideas of field workers or awarding honourable titles will also help in improving performance. Extension personnel may also be encouraged to form professional societies to develop and communicate high standards, as well as to recognize superior performance. A professional monthly journal or newsletter can help extension agents to communicate innovative ideas and reinforce superior performance.

*Improved Working Conditions at the Field Level.* The reward system must also be internally equitable. The relative importance of field-level extension functionaries has to be realized in terms of pay compensation and other amenities. Lower level extension workers often have to work under unpleasant and isolated conditions. A carefully planned system of field allowance will compensate this (Baxter, 1990). The living conditions of field extension workers must be improved by providing adequate facilities for housing, transport, and medical and educational allowances for children.

*Career Planning and Development for Extension Personnel.* A career refers to all of the jobs that people hold during their working lives. Career planning is the process by which employees plan their career goals and paths. Career development refers to all of the technical and managerial skills employees acquire to achieve their career plans. Career advancement, which gives a picture of future opportunities in terms of promotion, is a motivating factor for performance and development of skills. Unfortunately, no career structure exists for extension personnel in many organizations. In developing countries like India, there are many cases where one joins as a



village extension worker and retires in the same position after serving thirty to thirty-five years. As part of improving the rewards and incentives system, extension organizations have to develop suitable career paths and advancement for different categories of extension personnel on a systematic basis.

As part of career development, extension personnel should be provided with opportunities to develop their technical and managerial skills to enable them to occupy higher positions. Extension personnel should have a salary structure as well as promotion opportunities comparable to other professions like health or engineering. In Kenya, the pay and career opportunities of extension workers are comparable to other government employees (Onyango, 1987). Recommendations have already been made to equate the status of agricultural extension with that of agricultural research by offering an equal salary structure, professional advancement, and incentives and rewards (FAO, 1985).

### **Improvement of the quality of work life**

The earlier approach to human resource development emphasized individual development through training and proper supervision. However, with the increasing complexity of organizations and society, it was soon realized that training individuals plays only a limited role in the development of organizations. The need for improving the quality of work life through making the job more satisfying and productive has been greatly felt. Factors such as the nature of the job or the role and involvement of employees in work decisions are important for improving the quality of work life. The methods used to do so are job enrichment, job design, and role interventions (Pareek, 1993). An understanding of these methods and their application in extension organizations are essential for extension managers to improve the performance of extension agents. Studies have shown that the work environment of extension organizations is poor and needs improvement (Jhamtani & Singh, 1989, 1992).

### **Job Enrichment and Job Design**

Job enrichment refers to detailed analysis of the work to know the factors which make it a satisfying experience. Job enrichment uses the job as the medium of developing employees and changing organizational practices. Some of the factors which increase job satisfaction are a sense of achievement in the job, recognition for the job, the nature of the work itself, and opportunities to learn new things and grow. The principles of job enrichment, according to Herzberg (1966), are removing controls while retaining accountability, introducing new tasks, giving a complete unit of work, granting job freedom, and helping employees to become expert in their tasks. These principles can be practised by extension managers to increase the quality of work and job satisfaction among extension personnel.

Job enrichment programmes were successful in improving the quality of work and job satisfaction. However, it was found that job enrichment had a limited view of the job, and the need for greater emphasis on human values was realized. This led to the concept of job design, which refers to structuring a job to satisfy the technical, organizational, social, and human requirements of the person performing the work (Davis & Taylor, 1979). Based on the humanization of work, job design aims at increasing the quality of work life through treating the

employees as human beings and emphasizing their development and involvement in work decisions. It emphasizes the use of extrinsic and intrinsic job factors, employee participation in management, autonomy, adaptability, and variety. The concept of job design can be used by extension managers to increase participation of extension personnel in the planning and management of extension programmes, which will improve the quality of their work life.

### **Role Interventions**

The study of roles, which are the positions employees hold in an organization, as defined by the expectations of significant persons and the individuals occupying the positions, is a comparatively neglected aspect of organizations. Roles are an important dimension in increasing organizational effectiveness. Through their roles, people are linked with the organization. This linkage increases organizational effectiveness by integrating the individuals with the organization. Such integration increases mental well-being and personal effectiveness (Pareek, 1993). The purpose of role-based intervention is to increase the mutuality of roles in organizations. Role-based interventions are done through learning situations such as process laboratory, group discussion, and use of questionnaires and schedules. Role-based interventions in extension organizations will result in increased work commitment, motivation, creativity, and team spirit.

### **Organizational development**

An efficient extension organization needs to develop the capability of responding to changes in relation to its environment. Extension organizations have to cope with changes within and outside the organization, such as changes in farm technology, communication methods, needs of farmers, rural situations, export and import of farm produce, and market economy. Organizational development allows for planned changes in the organization's tasks, techniques, structure, and people. Attitudes, values, and practices of the organization are changed so that it can cope with changing situations. The employees also gain greater skills to deal with new problems.

Also focussing on team building and conflict management (Chattopadhyay & Pareek, 1982), organizational development is a planned effort and is done with the help of an external expert in the behavioural sciences. The process consists of diagnosis of the problem, data collection, feedback of data to the organization, introduction of specific interventions, evaluation, and follow-up. Techniques such as sensitivity training, transactional analysis, and team-building exercises are used to develop interpersonal relationships. Organizational development is an effective approach that can be used by extension organizations to bring about planned changes and to increase the interpersonal relationships among the employees.

### **Conclusion**

The key factor in the success of extension organizations is improving their human resources. This chapter has discussed various dimensions of human resource management which will help extension managers improve their human resource system. The proper planning and implementation of the human resource system will result in overall development of extension personnel. This

will also enable extension organizations to adapt to the rapid changes occurring in the extension environment of developing countries.