



## Role of Extension Education in Rural Development

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Since the history of mankind, agriculture evolved round the basic food needs of man and developed principles and practices in crop production including field management. With changing situation, technological development have shifted the traditional agriculture from more crop production to mixed farming involving allied activities like animal husbandry, sericulture, pisciculture etc. Need for technological development in agriculture in our country arose due to the fact that -

### The structure of economy remained predominantly agriculture;

- The cultivable land being limited, productivity has to play an important role to meet the domestic and export requirements of farm produce, and
- The development plans also aimed at self-sufficiency in farm production, in particular, foodgrains to meet the growing demand of population.
- The technological development in agriculture, necessarily mean the use of modern inputs at micro level to improve productivity of land and accruing desired economic benefits therefrom.
- In this context, the most important inputs that play crucial role in agricultural development are

Present agriculture development is not product specific but operates within a specific socio-economic system and inter-sectoral dependency. It is, therefore, essential to create impact of the technology in agriculture on the entire farming community to achieve the desired goals of development. The review of agricultural development in the country indicates that 50 million tonnes of foodgrains production capacity just 30 years back has reached around 210 million tones in 2005-06. Indeed it is an impressive achievement, yet we have to reach more than the current. Our primary task is therefore to identify the various known inputs in agricultural and make them more popular amongst the farming community through selective measures such as multiple cropping, use of high-yielding seeds and such other inputs including irrigation. But some of the short comings responsible for slow progress in agricultural development are :

- Still traditional low yielding varieties are used in dry farming,
- Lack of proper agronomic practices in water conservation, sowing methods, seed rate, fertilizer use and absence of control of pests and diseases.

The benefits of development in agricultural sector have been derived mostly by the affluent community of rural sector, whereas little access to such technologies was available to the weaker sections of the farming community such as small and marginal farmers.

### Place of Extension in Rural Development

- In this background, it is of utmost importance to play an active role by various extension agencies operating in the rural sector for development of all sections of the population

through improved technology in agriculture and allied activities. The extension process is concerned with communicating the technology of scientific agriculture to the farmers in order to transform traditional level of agriculture to better for improving their economic conditions. Hence, extension in agriculture would mean stretching out the knowledge to farmers on adoption of the new technology and improved practices in various sub-sectors like crop production, livestock rearing fodder production, sericulture, bee-keeping, horticulture etc.

- Extension aims at changing the outlook and attitude of the farming community in general and it seeks means to improve the farm operations and farmer's family life in totality on their own initiative. As the farmers are mostly small and marginal, they lack direct access to developing agricultural technology. Educating such a group of farmers has to be, therefore, a sustained process to keep pace with rapidly changing agricultural technology.

### **Concept and Objective of Extension**

The modern concept of extension process is working with rural people through informal education for achieving total community development covering several activities, agriculture being the most important. Agricultural extension is considered to be a special branch of rural extension dealing with several economic and social aspects of farming community such as:

- Efficient farm production
- Efficient marketing, distribution and utilisation of farm produce
- Conservation, development and use of natural resources for farm sector development
- Efficient farm management
- Improving the standard of living of rural population
- Development of leadership for community improvement.

However, the objectives of the extension programmes depend upon socioeconomic conditions of the people in the area and need to transmit the latest developments in the field of agriculture to suit their requirements. Thus, the objectives have been set out in all such programmes primarily:

- To assist people to identify their problems and felt and unmet needs;
- to develop leadership among various sectors of the rural community;
- To transmit information based on agricultural research and applied experience with a view to bring about larger farm community under the modern technology;
- to keep research workers constantly informed about the problems at farm level to offer solutions based on further research in the specific area concerned.
- Extension is a continuous process of transmitting the knowledge on latest development in agricultural technology to a section of community for field application and feedback process to know the problems arising for further improvement of technology.

### **Philosophy of Extension**

- (1) development of the individual farmer and
- (2) interaction within the various sectors of rural community to avoid imbalanced development. In this process the individual farmer is supreme and the first training group that one can think of is the farm family. Secondly, extension services are rendered with a view to plan, execute and evaluate the technological changes adopted by farmers. Thirdly, extension aims at teaching the farming community and motivating them to bring the latest development into practice through a spontaneous response rather than forcing them to take it up. Naturally, certain techniques and tools are required to teach the people how to help themselves and to ensure that extension agency acts as a catalyst or change agent.

## Function of Extension

- Change in knowledge: The latest knowledge and information about the technological development to the farming community help in creating awareness of the facts and thereby likely change in attitudes.
- Change in attitude: The change in attitude is generally difficult in the farming As mentioned earlier, group reaction is the most important value in agricultural extension in changing the attitude of the farming community. Most farmers confirm to the attitude of the members of their respective groups, based on social or economic structure in rural society. Relatively few maintain an independent attitudes towards adoption process. The change in attitudes of groups is largely observed;
- Change in skills: Change in skills could be achieved by giving adequate knowledge about the new technology and its likely chances of adoption by various farming groups. Since the skills are either mental or manual, both of them accelerate adoption process in farming community for desired level.

## Motivation Process in Rural People

- Desire for affection or response: in terms of companionship, social mindedness, confidence, etc.
- Desire for new experience - in terms of adventure, new ways of doing the existing practices.

Therefore, it is worthwhile to analyse the felt and unfelt needs of the farming community in rural sector which accelerate motivation process through satisfaction of such needs. While introducing a new concepts or a new technology to the farmers, the most important consideration is how to ensure satisfaction of the felt needs of the larger section of farming community for putting it into action.

However, individual farmer is motivated through satisfaction of a specific need within the need hierarchy which is in the order of :

- Basic need: psychological, food shelter clothing
- Security need: economic or social
- Love and belonging need: companionship
- Esteem need: status in the society and within groups etc.
- Self actualisation need: Self confidence, self-satisfaction with some spiritual element.

Another way of motivating different farmers' groups could be through proper planning of adoption process within the entire community. Some of the essential steps of planning adoption process are :

**Attention:** Farmers should get direct attention to new and better farming techniques through use of various extension tools.

**Interest:** To sustain interest in the farming community. One idea at a time should be introduced to avoid lack of interest.

**Desire:** The farming community adopts new farm technology only when there is significant urge for satisfying the specific need.

**Conviction:** The farming community should acquire confidence in the new technology by doing themselves and creating ability within to do things.

**Action:** The conviction of the farming community is generally converted ultimately into action process in adoption of new technology.



**Satisfaction:** The final product of the earlier steps is satisfaction that results in adopting the new technology.

### **Rural Sociology**

Rural Sociology has direct impact on designing the agricultural extension system. As extension aims at developing not only individuals but also society as a whole, the analysis of various groups in rural community is most important sociological aspects which bring the desired change in the attitude of the rural community for accepting the new technological change in agriculture. Structure and development of rural society is the most crucial for rural extension. Rural society comprises of different groups like (1) Primary (2) Secondary and (3) Formal or Environmental. While dealing with the group, the leadership, which induces technology transfer is an important factor. Every group has a informal leader who creates interest within members of his own group for acceptance of specific activity in the rural society. Even within the group, different farmers may like to get advice from different leaders depending upon the specific need like agricultural, social and religious aspects, etc. hence not only the individuals, but also the social groups play an important role in changing attitude in favour of rural extension.

1. **'Training' and 'Visit' system - A new approach to extension:** Considering the philosophy of extension and influence of rural sociology in changing the attitude and acceptance of new ideas by various social and economic groups in the society, an approach has been designed for rural extension popularly known as 'training' and 'visit' system. The system is basically confined to reorganisation of the existing structure and setting up of appropriate extension agency to motivate the farmers to adopt latest technological developments in the farm sector. This system is very simple and requiring just re-orientation of organisation and methods down the extension hierarchy with a single line of command, from the state level to villages level in which definite sequencing of farm activities and also proper sequencing of time for different operations during a specific agriculture season are planned much in advance.

A single chain of command for both training and extension activities operates from the Director of Agriculture to the District Agriculture Officer and Agriculture Extension Officer down to the village level worker. The village level worker (VL W) is supposed to extend the technical package in agricultural activities to about 800 to 1200 farm families. These families are divided to form homogeneous as far as possible, groups on the basis of socio-economic structure of rural society with a view to transmit the technical package effectively by the VL W. The planning is done for each agricultural season which is divided into 15 days' segments. In this process, the most important element is training the village level worker, the most vital link in the extension who is given a day's training at the commencement of each fortnightly segment on the critical farm operations. The farmers are educated by VL W during the particular agricultural season with reference to principal crops in the area and the segment. On execution of the specific segment of 15 days, the VL W is again required to go for a day's training at the block level with the Agricultural Extension Officer to review the problems of implementation and the difficulties envisaged by the farmers and seek solutions thereto. The agricultural plans and the segments are backed up by practical and group discussions and even learning by handling disease specimen, pest control, equipment etc. that the village level worker needs know thoroughly. Thus the VL W gets continuous training.

Besides evaluation of implementation of the seasonal plan by farming community their levels of technology is ensured through the system. The higher level officials like Agricultural Extension Officer at the block level, District Agricultural Officer at the District

level and the subject matter specialists, Agronomist, Entomologists, Pathologists, etc. are fully equipped with the programme and problems that could be encountered in the technical package. At the highest level, the Director of Agriculture in the State, review of various programmes supported by their extension system is evaluated at the end of the year and fresh plans are prepared for subsequent year based on the experience gained during the previous year. Therefore, the training aspects of the system is critically examined with a view to have a thorough knowledge of various aspects of farm technical package during a particular season.

While executing the segmental plans in a particular agricultural season, the village level worker has to identify roughly 8-10 homogeneous groups based on social or economic structure consisting of about 100 to 150 families each. Each group must be visited once every fortnight on a specific day. Since VL W cannot contact entire group in large number he plans his visit in the morning to about 10 contact farmers in the group who are generally progressive in adoption of the new technology. After meeting the selected progressive farmers the meeting of the entire group is arranged either in the afternoon or in the evening to transmit the programme to all the members of the group. Thus, the individual groups get encouragement to take up the timely and proper farm operations.

As mentioned earlier, the Agricultural Extension Officer is trained once a month by the District Agricultural Officer and subject matter specialists including University Research worker in both theoretical and practical aspects of various farm operations at the demonstration centres.

In 'Training' and 'Visit' system of extension an important aspects is transfer of the VL W from the jurisdiction of Community Development Department to the Department of Agriculture so that he can give more attention to the agriculture extension activities at the village level without diverting attention for other activities.

In this system the village level worker has been transformed into a confident respected and much sought for change agent.