

Extension principles and practices as guide to Agricultural Production *

by

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Synopsis: This paper deals with the extension principles and practices as a guide to Agricultural Production.

Introduction: Agriculture constitutes the basic industry in India and provides the means of livelihood to majority of the population. It is a key industry which strengthens the national economy and creates wealth. The entire country is fully conscious of the gap that continues to exist between the production and self-sufficiency, not only in food output but also in producing raw-materials for the development of the industries. Agriculture being the primary source for the development of the industry, significance is being given by assigning priorities in all our national and state plans. The food production and raw-material production are not keeping pace with the population growth as well as industrial advancement. In addition to keep pace, the country has to create exportable surplus to earn foreign exchange.

If agriculture has to create national wealth, the basic need is to involve the multitudes of farmers, who are real participants, in programme building and execution. Their effective co-operation is essential to achieve our objective. It is the farming class that holds the key for successful agricultural production. The farmer and his family are to be oriented fully to feel their urge to increase their wealth by equipping themselves on the scientific methods of farming. They should acquire skills in farming, so that crop husbandry will receive able attention by them.

Invariably plans drafted and schemes sponsored are undoubtedly figure as people's plan; meaning thereby, plans are all drawn by the people, for the people and to the people. This particular aspect is to be borne in mind in building up and execution of programmes by the agency which shoulders the responsibility of the implementation. In essence "Destination of man" is the criterion. There is a Chinese proverb which narrates "If you are planning for one year; plant rice; if you are planning for 10 years plant fruit trees; and if you are planning for 100 years plant men".

The approach: Our approach is to encourage the villager and the village community to build effective programmes to decide and execute work and also to organise and build up institutions to serve the needs of the local area development. There should be a generation of feeling amongst the extension workers, that their role is to educate and train growers fully to develop themselves on their own

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capacity and utilise resources. That is to say to develop self-reliance and self-help in the individual and initiative in the community for running their affairs. This is possible only when the extension workers have explicit faith on extension principles like faith in the improvement of rural development, faith in the capacity of people, faith in the democracy and dignity of the man, faith in science and technology and finally faith in social justice. Extension workers who are working without the above faiths, working without rural outlook and background, working without evincing interest in rural population continue to exist. There are also workers, who do not have full faith in the capacity of the people and who always do the jobs by themselves underrating the capacity and experience of the people and leaders of the village in all plan executions. Needless to mention that the most important principle like social justice is to be taken into action in a scrupulous manner, when aids are to be passed to the beneficiaries mostly to under-privileged and ill-privileged classes of growers. The attention should not be towards a certain enlightened growers but should be to the down trodden who constitute the major percentage in any village population. Every extension worker should imbibe the correct spirit to identify himself with the farmers. According to Gandhiji's words "they should be one with them, be one of them and inspire confidence in them".

Target oriented or process oriented: Strangely all the personnel engaged in extension work are target oriented and not fully process oriented. No doubt targets are essential to achieve the objective set forth, but the fixation of the targets, on no account be done by the outside agency. It should be based on full consultation with the field agency and should be realistic with reference to needs of area and aspirations of the local people and also the resources they should mobilise progressively. Targets serve only as guide post, as a remainder and as an indicator presenting the work yet to be accomplished, qualitatively and quantitatively. But they are not final. Unless farmers are not associated at the time of fixation of targets and their impact felt in the formulation of plan and mobilisation of available resources, no tangible result can be achieved. Realising this concept of planning, sufficient orientation has taken place in the past and now and it is the talk of the day that plans are to be built up from the bottom. This is now being attempted by the extension agency and by preparing farm plans, village plans and consolidating them at block and district levels. Unfortunately we have not made much head-way for integrating village, block, district and state plans.

Fact finding survey on resources: In agricultural sector, fact finding survey on resources of the area is the primary requisite before farm plans and village plans are prepared at village level. There should be a critical and comprehensive survey under major aspects like, land productivity, irrigation and manure resources and methods of farming. The survey should give lucid picture of the conditions of the resources and before developments are contemplated. For instance they have to take particular care in recording the soil productivity nature. They should get the data about the area by studying the condition of the fields by

actual inspections and interpreting the conditions analytically and scientifically. Getting data from the records maintained at village level will not serve the purpose. In fact they should identify with the class of farmers at the time of survey who will be in a proper position to give their valuable say in the matter. Only with the association of the people even at the time of survey, accurate fact finding data is possible and the facts so gathered will be helpful to formulate plans. Similar comprehensive survey is necessary under assessment of manurial resources, under irrigations, and other farming practices that is practiced in villages. Under manures, information regarding local farmyard manure, green manure and compost preparations are to be evaluated properly. So also for irrigation, attempt should be made to assess properly the various kinds of irrigation resources and their conditions and the potential for sinking of wells in the village.

Perspective planning: The above picture is given to illustrate the effective role to be played by the extension staff before programme building and execution at village level. It is also true that perspective planning is needed to be attempted at village level.

Every plan should correspond and be based on the felt needs of the people. The farming class who are the participants in the village should have full say at various stages of programme namely planning, priority assignment and implementation. The programme should be acceptable and attainable, goals bringing satisfaction to the participants. There should also be a plan of action for guiding the day to day activities. It should also be broad enough to touch the interest of all the sections. It should not be rigid, capable of accommodating revision as programme progresses. Planning is a continuous process and not *ad hoc* process and it is a education process and also a co-ordinating process.

Thorough change is necessary by the planning authorities at village level to implement the above principles. It is through education and training of the leaders and farming class, proper involving of individual and the groups to think and decide and initiate action in accordance to improved technique is possible. To make growers plan conscious efforts are required on the part of the extension staff, to assist the growers in the preparation of instructive understandable and meaningful plans, simultaneously imparting the technique of planning and procedures to be adopted for fulfilment of the plan.

Our approach so far to build up the capacity of the people and generate self-help spirit in them have not borne good fruits. The entire approach is to be changed in view of the present trend in not yielding desired results.

Administrative set up: In an era of Intensive Agricultural District Programmes. Intensive Agricultural Area Programmes, significant changes are necessary in the administration to pilot the affairs at state and district and project levels. Everybody will agree in principle, to vest the administration of the technical jobs to the technically oriented and technically qualified personnel. We have just now changed over to have the head of the Agriculture department, as a technical officer. It is desirable either to make him as ex-officio secretary

of the Secretariat or to appoint a technical officer at Secretariate level to assist Agricultural Secretary in departmental affairs. At Collectorate level, the planning Personal Assistants should also be the experienced qualified departmental officers who will be in a better position to review the progress of work and also to suggest concrete measures for proper implementation of the schemes on agricultural sector. It is also necessary that the Block Development Officers are also from Agricultural Extension so that they can administer the primary agricultural affairs properly at block level. Apart from the appointment of technical personnel in the key posts, administrative co-ordination at various levels which is an essential requisite to push through programmes are to be built up in full measure.

There should be inter-departmental and intra-departmental co-ordination for efficient utilisation of resources and effective implementation of plans. All the departments connected with the development of agriculture, have to realise that the main objective of production goals in agricultural sector is to be realised by concurring fully, without taking contrary decisions and holding different opinions. To illustrate further, substantial progress in the utilisation of water under various irrigation project areas is possible when effective link is created between the agricultural and irrigation department. There is tremendous scope to cement co-operative and agricultural departments. Everyone is aware that in all package schemes supply line is to be effected fully and in time. This responsibility is now vested with the co-operatives.

Decentralisation of work: Extension wing will be able to deliver goods only when there is adequate delegation of powers to the authorities who are supervising the work at project level and at higher levels. The delegation of powers should be clear and unequivocal without "Ifs" and "buts". Delegation of authority and power will be effective only when resources are made available. This may warrant modifications in financial rules and also in administrative codes. It is worth altering the rules and codes to give concrete benefit to the public and also for enhancing the powers of the project officers who are engaged in the administration. The project officers also should be free to take bold and quick decisions to expedite matters when powers are delegated.

Training Programme for Extension Officers: In-service trainings are periodically given at district levels and at block levels to the extension staff to tone up their knowledge. There should be a continuous flow of knowledge from the subject matter specialists as well as from the research personnel to the extension wing, especially upon proven recommendations and on the methods to transmit them into field. The extension wing should also have full acquaintance with the job entrusted, the technique of planning, scientific evaluation and administrative intricacies to render jobs thoroughly. This aspect of guidance is necessary not only when they are undergoing collegiate course but also at frequent intervals when they come out to perform duties in the field. Extension work suffers for want of personnel in most of the projects initiated now in the state. When there is ambitious planning, there should be corresponding resources and trained personnel to manage the affairs successfully in the field.

For the Farmers: It is the man behind the plough who is to perform the duties efficiently under crop husbandry. He has to be enthused, motivated to acquire the skill of farm management. This transmission of skill is possible only when large scale programmes for training institutional leaders, progressive leaders and persons attached to voluntary associations is embarked. The government have to assign importance to the training programme by providing adequate funds and drafting services of the competent scientists to impart training. Though this is prodegeous task, it is very essential to organise training institutions and also conduct training classes at suitable intervals on permanent basis. In as much as the major class of growers are yet to acquire technical skill, we have to review the training programme once done in the past at village level. Starting of study circles or village action groups are essential to discover and develop village leadership and to train farmers prepare them to take active part in joining the group and participating in the group activities.

Field demonstrations: The effective tool in educating the growers is the proper conduct of demonstrations in the field. Since cultivator has to use new methods, materials and techniques, all the vital elements regarding planning and supervision in the conduct of demonstrations, are to be observed. Any failure will create a set back in the entire education programme. The extension staff is now burdened with greater number of demonstrations that could be managed by them within the time schedule. Since the demonstrations serve as effective media for introducing the proven recommendations, to yield benefits to the farmers, they are to be laid at suitable centres. The conduct of field days in those centres to educate the farmer for the adoption of package practices that are demonstrated in the composite demonstrations is essential.

There is all round emphasis in utilising the services of the technical personnel largely for the purposes of education. Unfortunately this is not witnessed. When they are relieved from the supply line there will be ample time for the extension staff to bestow attention adequately on the educational aspects and concentrate in developing the capacity and skills of the farmers. To keep the educational process on sustained level, the extension authorities have to examine the following aspects by putting questions such as who initiated the project, who actually implemented the project and what were the relations among the people as planned and worked together, what local arrangements have been made for maintenance of the project and whether the villagers shared knowledge and learnt from this experience and how the community has changed through this experience. If the extension authorities satisfy with the results of projects initiated on right lines, success can be ensured in the education of considerable number of farmers. The composite and result demonstrations will provide media for testing on the lines envisaged. If there is progressive appreciation to the proven recommendations adopted in a particular project, considerable impact will be felt and enlistment of the co-operation of the farmers will be easier to adopt package of practices.

Follow up and Evaluation: In the implementation of programmes, mere learning of the intricacies of the procedure and the acquiring of the technical skill on the part of the extension staff is not enough. Much more important element is to pass on the skills in time and along with essential requisite materials needed by the growers. Success of farming, largely depends upon the timing of the operations in the field, besides application of techniques. This could be achieved only when the service personnel attached to extension wing takes measures for proper advance action for securing the materials and reinforcing the same to the needed areas in time. This is possible only when production of products either in public sector or in private sector keep pace with demand. There will be tremendous set back in the progress of work when the supply line fails.

Indeed, there is an insistence by the project officers to prepare calendar of operations for each month and in accordance to his direction, the proper preparation of schedule of activities is kept ready. But fruits will be realised only when there is effective follow up of schedule. Unless the supervising personnel exercises checks for effective follow up of action, progress in the execution of projects will remain poor.

Evaluation is an important requisite to judge the trend of progress under schemes, and it permits to break certain rigidities, revise rules and change in policies consistent to situations to reach the goals. Evaluation work will have to be done departmentally as well as by an independent impartial body to record correct and final achievements against the set goals. This is being done at all levels in the departments and by the Governments. What is required is that the project officers, inspecting and evaluating authorities should attach more significance for assessment under building up of extension process, at all levels rather than realisation of products. They have to examine whether educational process for motivating growers is taking strides or not, whether facilities are afforded to advance the educational process from the present level to an effective level and whether the projects that support the educational process are implemented properly. Here one has to examine the projects such as conduct of composite and result demonstrations, field days and other campaigns launched for educational purposes. The above type of evaluation will throw much light on the proper approaches made by the extension staff and passing on the knowledge and skills to the farmers. Evaluation report should never take the form of fault finding nature, but to be always in the form of guidance.

Finally there would be a generation of feeling amongst extension staff as well as in the minds of actual participants namely the farming class, that they should endeavour jointly to step up production in agricultural sector. All those engaged to help the farmers and institutions in their ventures should realise that progress can be attained only by involving people at large, and by encouraging collective thinking and group action at village level.
