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ASSESSMENT STRATEGIC RESEARCH EXTENSION PLAN (SREP) METHODOLOGY FOR UPSCALING AND INSTITUTIONALISATION OF R-E-F LINKAGES

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ASSESSMENT STRATEGIC RESEARCH EXTENSION PLAN (SREP) METHODOLOGY FOR UPSCALING AND INSTITUTIONALISATION OF R-E-F LINKAGES

Background

The main goal of the Innovations in Technology Dissemination (ITD) component of the National Agricultural Technology Project (NATP) is to increase farmers input into programme planning and resource allocation especially at the block level and to increase accountability of stakeholders. Further, it is also to increase the programme coordination and integration so that program thrust such as Farming System Innovation, Farmers' Organization, Technical Gaps, and Natural Resource Management can be more effectively and efficiently implemented.

The existing research and extension system is largely top-down in nature. The scientists from research station decide agenda, which is often based upon their limited exposure to real problems faced by farmers. The involvement of extension persons and farmers in the above process is limited and passive. The present feedback system is very weak.

The existing research and extension systems operate largely on top down approach wherein research and extension agendas and priorities are decided by scientists and extension personnel with little input from farmers. Scientists, by and large, have limited exposure to field realities. The involvement of extension personnel and farmers in research is passive. The present feed back system is weak. Further, the technology recommendations are too general ignoring the multiple farming situations available within a district and even a farm. Therefore, refinement of technological packages for farming situations is needed for which the research and extension gaps need to be identified and prioritized for evolving appropriate research and developmental strategies.

Presently majority of farmers do adopt a part of the improved package. Hence, it may not be appropriate to conduct demonstrations or training programs in a routine manner on the package of technology. There is need to identify 'developmental gaps' so that it could be used as a basis for technical planning of development programmes.

Genesis of SREP

During the last two decades the scenario in rural areas has significantly changed and is having a major bearing on the existing farming systems. A number of new enterprises have been identified by scientists for each agro-climatic zone. These are being integrated by progressive and enterprising farmers leading to significant innovations in their overall farming system. Hence, there is need to analyze successful examples on this aspect so that these could be replicated in the concerned area at a faster rate.

Until recently much of the research was carried out under public sector. It is now well recognized that innovations emerge through multiple sources includes public, private, and even from informal research carried out by innovative farmers. Likewise extension of new technologies is carried out not only by public sector but also by private sector, Cooperatives, NGO, besides natural diffusion through farmers themselves. Hence, there is a need to integrate various sources of innovations and extension in such a manner that they provide a proper synergetic effect.

It is well known that farmers have not only technological but also other needs like inputs, credit, marketing, social facilitation for group action, conflict resolution, community organization etc. The public sector alone is not able to meet all these needs in an effective manner. Hence, there is need to identify appropriate organizations to meet specific needs based upon their comparative advantages.

The ultimate objective of both research and extension systems is to increase agricultural production. Formulating research and extension agenda

based on producer's requirement is likely to result in technologies that will be more acceptable to users. This also helps in allocation of resources to both research and extension activities to be taken up in the district. The basic concept of NATP highlights the need to develop a cost effective and sustainable extension system to facilitate the farming community towards achieving prosperity.

During the last decade, through a number of initiatives management tools have been developed to facilitate farmer's involvement in an effective manner in agricultural development in general and research and extension in particular. Based upon these tools a participatory methodology has been evolved for preparing a strategic research and extension plan (SREP) at the district level under the ITD component of NATP. The SREP for each district is the need of the hour to address the specific problems of the farming community, especially resource poor and other disadvantaged groups.

Concept of SREP

The concept of SREP has been operationalized based on the following thrust areas like focus on farms and the farming systems, integration of efforts and multiple service providers, ownership of the Agricultural Technology System (ATS) by key stakeholders, technological interventions in the form of intensification and diversification of the farming systems, value addition and marketing intervention, empowerment of farming community and multiple communication and information support.

To translate the above thrust areas into action an autonomous agency called Agricultural Technology Management Agency (ATMA) was created for each project district with NATP support. The responsibility of ATMA is to bring together researchers, extensionists, farmers and other stakeholders (including NGOs, and corporate and private sectors) to make, on the basis of joint diagnostic studies, district extension plan and recommendations for expanded

adaptive research to introduce innovations in technology dissemination to cater to local needs and situations. In other words, ATMA is mandated to develop a demand driven, situation specific, multi-actor oriented Strategic Research and Extension Plan (SREP) to accelerate agricultural development in the project district. The SREP thus serves as a basic document, which not only decides the development activities that need to be carried out, but also in which manner and by whom it has to be done.

The innovative approach of Strategic Research Extension Plan SREP was implemented on a pilot basis in selected 28 districts of seven states namely Andhra Pradesh, Bihar, Jarkhand, Himachal Pradesh, Maharashtra, Punjab and Orissa.

The SREP (Strategic Research Extension Plan) is an exercise for developing strategic research extension plan by considering district as a base unit. The important focus of this exercise is to strengthen Research-Extension-Farmer linkages for improving the farmers input (feedback) into programme planning by diagnosing the information obtained through participatory appraisals and a thorough analysis of the feedback so obtained. On the basis of this analyzed data, the strategies and activities are to be delineated based on the research and extension gaps identified for the districts. In order to do this, autonomous organizations called Agricultural Technology Management Agencies (ATMAs) were established in the 28 pilot districts of seven states. These ATMAs are responsible for proper planning and implementation of SREP.

SREP is conceptualized as a participatory methodology to prepare strategic research extension plan at the district level to increase agricultural production, to formulate research extension agenda based on producers' requirement to develop technology acceptable to users and to prioritize for resource allocation to research and extension at the district level.

An important purpose of SREP is forge strong organic linkages between research-extension-client systems to increase farmers input in programme

planning, resource allocation at block level and to increase accountability of stakeholders. It also seeks to improve the functional linkages across various stakeholders by increased programme coordination and integration.

Need for SREP Assessment for Up-scaling and Institutionalization with specific reference to Strengthening R-E-F Linkages

The SREPs were initiated during 1997-98 in the pilot states. ATMAs were also simultaneously established in all the 28 pilot districts. SREP documents are ready for all the 28 districts and are being implemented accordingly. Plans are already afoot to scale up the SREP approach as a refined and revitalized extension system to all the districts of the country. Hence, it essential and very much timely to reexamine the methodological issues of SREP related to process and outcome like the R-E-F linkages, identification and prioritization of researchable issues and influences on research programmes and outcomes with a focus on refining and improving it further. With this in the background, the present investigation was planned and undertaken with the following objectives:

Objectives

- To review the SREP methodology followed in the pilot districts with a focus on linkages and identification and prioritization of research, extension and development issues
- To analyze the mechanism followed in each state for implementation of SREP outputs in operationalizing strategies evolved
- To identify the gaps in SREP methodology and its implementation process and suggest appropriate measures to overcome the gaps, and
- To evolve future directions for up-scaling and institutionalization of SREP approach

Thus, the study was aimed at documenting the lessons learnt in the process of preparation and implementation of SREP with a critical analysis of

issues that need a re-look before the approach is institutionalized to ensure its compatibility with the existing systems, structures and functional dimensions.

Scope of the Study

This investigation was planned and carried out to take a quick stock of the methodological and operational issues like improving research-extension-farmer linkages and identification and prioritization research, extension and development issues pertaining to SREPs of the 28 pilot ATMA districts. Based on this, the investigation contemplated to offer a refined and improved version of SREP methodology for up scaling and institutionalizing it in another 250 districts of the country in the next phase. The study also examined the problems and possible consequences in terms of resource requirements and necessary structural and functional reforms in the existing systems to effectively take up the up scaling and institutionalization of SREP, besides addressing the training requirements and needs of the prospective actors to carry out the SREPs in the near future. Therefore, the findings of the proposed investigation would be of immediate relevance in providing a strong leverage for firmly anchoring this methodology on a much larger scale. The effort, however, in no way attempted a full-fledged review of SREP per se, as this is being carried out by other agency appointed for the purpose.

METHODOLOGY

The present study was carried out using ex-post facto research design during March – October 2004. As the study aimed at documenting SREP process and outcome assessments, it was decided to cover at least 50% of the pilot SREP districts. Accordingly, systematic sampling procedures were followed to select two representative SREP districts from each of the seven pilot SREP

states for detailed study. However, due to time limitations, study could cover only one district from Maharashtra. Thus, in all 13 SREP districts formed the sample of the study (Figure 1).

Desk study of SREP documents of selected districts was undertaken to gain a comprehensive insight in to the process of SREP documentation and also to look in to the various research and extension strategies and activities identified for action and implementation.

Keeping in view scope, aims and objectives of the study, it was decided to use personal interviews of and focused group discussions with the a cross section of the various stakeholders of SREP in the study districts to elicit the primary information. Structured interview schedule, covering the process and outcome related aspects of SREP, as well as semi structured check lists were used for interviews and focused group discussions, respectively. The data collection instruments namely interview schedule and checklist are enclosed as Appendix 1. Interviews and focused group discussions were held with core staff of ATMA (Chairpersons, Project Directors and Deputy Project Directors), Team of Farm Advisors (TOFAs), and members of ATMA Governing Body and Management Committee, Block Technology Team (BTT) members Farmers Advisory Committee (FAC) members and members of Farmer Interest Groups (FIGs) of every SREP district to collect primary information. The data thus collected was coded wherever necessary, tabulated and analyzed using

appropriate statistical analyses like frequency and percentage, and simple correlation.

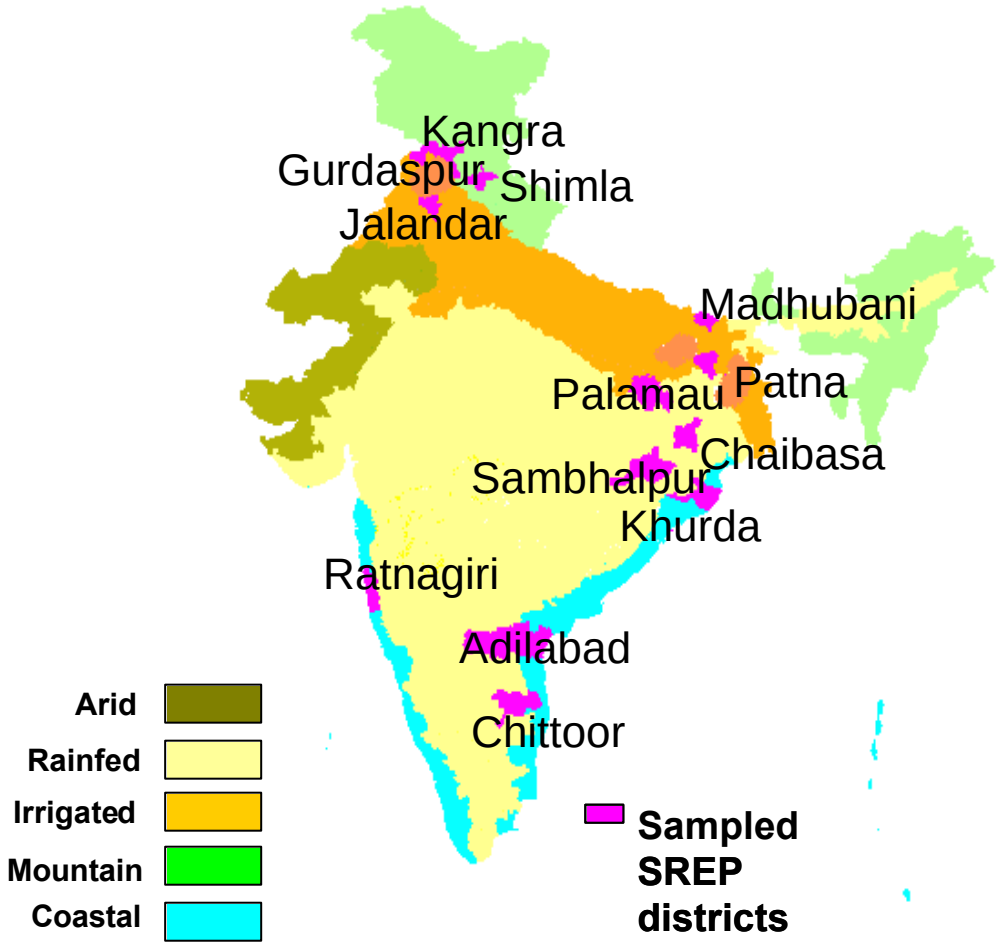

Figure 1. Map of India showing the sampled SREP districts

SUMMARY OF FINDINGS

The Innovations in Technology Dissemination (ITD) component of the National Agricultural Technology Project (NATP) is to increase farmers input into programme planning and resource allocation especially at the block level and to increase accountability of stakeholders. There is a need to integrate various sources of innovations and extension in such a manner that they provide a proper synergetic effect. A participatory methodology has been evolved for

addressing this issue in preparing a strategic research and extension plan (SREP) at the district level under the ITD component of NATP.

The innovative approach of was implemented on a pilot basis in selected 28 districts of seven states namely Andhra Pradesh, Bihar, Jarkhand, Himachal Pradesh, Maharashtra, Punjab and Orissa.

Ex -post facto research design was used. Even though it was targeted to cover at least 50% of the pilot districts, 13 SREP districts could be covered within the available time. personal interview and focused group discussions with a cross section of the various stakeholders of SREP were used as data collection methods Structured interview schedule, semi structured check lists were used as data collection instruments. The data collected was coded , tabulated and analyzed using appropriate statistical analyses like frequency and percentage, and simple correlation.

SUMMARY OF FINDINGS

1. The managerial positions like Project Directors (PD) and Deputy Project Directors (DPD) are manned by technocrats either from the State Agricultural University of the concerned state or from State Development Departments like Department of Agriculture and Department of Horticulture
2. Wherever PDs are from University, the Research-Extension-Farmer linkages were better.
3. There is no clear-cut role for the DPD, which needs to be critically looked into while up-scaling and institutionalization of SREP.

4. The number of Agro Eco Situations (AESs) and representative blocks has been logically carved out to characterize the micro situations and needs of farmers
5. SREP implementation is not uniform and many of the districts have been revisited exactly after a period of 3 years.
6. Involvement of important stakeholder agencies like SAMETI, ICAR institutes and Department of Forestry was very much limited as these were observed to be involved in SREP preparation in one district each.
7. Orientation exercises was organized to develop among the district level stakeholder agencies a comprehensive understanding of the concepts and principles of NATP and SREP
8. The content of the orientation exercise by and large conformed to what is envisaged in the SREP guidelines
9. Priority was given to the concepts of NATP followed by ATMA and PRA during orientation exercise
10. The group dynamics & group approach is not adequately addressed during orientation training
11. The guidelines with reference to parameters for identification of AES were followed in majority of the surveyed districts
12. PDs expressed their agreement that AES based planning takes care of the major agricultural features of the district and is essentially a 'bottom up planning' exercise relevant for micro-level planning of research and extension interventions
13. Type of soil was the major criteria considered in identification of AES followed by rainfall and irrigation facilities.
14. In majority of the sample districts the there were as many number of TOFAs as that of the AES, in case of three districts the number was more than the AESs

15. In all the 13 sampled districts agreed that there was adequate representation of all the stakeholders like researchers, line departments, NGOs, women, input agencies, financial institutions, etc., and there was compatibility between the expertise available in the TOFA and the major farming situations of the AES they represented
16. Experience , belief in participatory approach, technical competence, knowledge of local conditions ,strategic thinking ability, open to suggestions and ability to travel extensively were followed in majority (8 to 10 out of 13) of the districts for TOFA member selection. Communication ability and age were considered in six and three districts, respectively while the criteria of leadership quality and working in the same block were considered in one district each.
17. Necessary logistic arrangements like residential facilities, vehicles, communication support and training material were in place for TOFA training
18. SAMETIs played major role under the overall facilitation of MANAGE and support from ATMAs, neighboring SAU and ICAR institutions for the training
19. 10 out of the 13 PDs rated TOFA training as highly useful while the rest three rated it as very much useful
20. sources used for collecting secondary information in the 13 study districts revealed that a this information and data was sourced from a large variety of sources, major one being District Statistical Department (8 out of 13) followed by line departments (7 out of 13

IMPLICATIONS and RECOMMENDATIONS

1. There should be a clear-cut role for the DPD, this needs to be done while up-scaling and institutionalization of SREP.

2. To improve Research-Extension-Farmer linkages PDs from University are recommended
3. While up-scaling, there should be an inbuilt provision for revisiting the SREP at an interval of 2-3 years to accommodate emerging and changing research and extension issues and needs of the peasantry of the district
4. While upscaling important stakeholder agencies like SAMETI, ICAR institutes and Department of Forestry needs to be involved to a larger extent in SREP preparation
5. Promoting groups or association of farming communities and also encouraging them to actively participate in SREP preparation and implementation needs to be looked into before upscaling SREP
6. Thorough analysis of the various stakeholder groups using stakeholder analysis (SA) technique must precede initiation of SREP to ensure stake holder participation and co-operation
7. The group dynamics & group approach should be adequately addressed during district level officers and TOFA orientation training
8. In the up-scaled SREP methodology an indicative list of the important parameters or criteria with flexibility and provision to accommodate local considerations in identification of AES may be given.
9. Suitable planning mechanism for the hilly regions needs to be recommended while up-scaling SREP due to unique features of the hilly tract which makes AES characterization difficult.
10. Flexibility and provision to accommodate local considerations in identification of AES must be oriented to .
11. Situations where AESs are too widely spread and diverse in terms of features necessitates more than one TOFA to collect and analyze information required for planning the intervention strategies and activities.

12. Effective preparation and implementation of SREP calls for representation of all the necessary expertise from various departments in line with the problems and opportunities of the AES
13. Clear-cut guidance must be institutionalized for selecting TOFA members while up scaling
14. Team of master trainers at the state level may be prepared to serve as resource persons in these training programmes. While MANAGE can take lead in identifying these master trainers, the responsibility of training these master trainers can be shared by MANAGE and NAARM.