SELF-DIRECTED WORK TEAMS FOR SUSTAINABLE LINKAGES: A NEW APPROACH FOR AGRICULTURAL DEVELOPMENT

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Agricultural extension in India has undergone several transformations since independence. The focus of extension reveals a steady progression towards technology transfer within the policy framework of food security. A significant development was the Training and Visit (T & V) extension management system in the mid-seventies. However, there has been a growing recognition that though T & V approach has made an important contribution to agricultural development it needed to be overhauled in meeting farmers' technology requirements during 21st century. It was recognized that extension needed to broad base its programmes by utilizing a Farming System Approach, allow for greater location specifity in programmes, secure greater farmer participation and strengthening linkage between research, extension, farmers and marketing.

In recent past, the information needs of farmers have also changed significantly with the availability of new technology and increasing specialization. Extension agents need higher skill levels due to the increased complexity of farming systems and management in today's economic environment. Therefore, continuous interface between extension and research is the key to meeting the future needs of information based society and that self-directed work teams have potential to make this possible.

Michigan State University Extension, USA in partnership with the Michigan Agricultural Experiment Station, has implemented self-directed area of expertise (AOE) teams as its major education development and delivery model (Leholm et al., 1998).

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Self-directed Work Teams:

The concept of self-directed work teams evolved out of a need to improve organizational performance in both the private and public sectors. Traditional, vertically and hierarchaly structured organizations have been considered too slow and cumbersome in responding to changing conditions and competition (Fisher, 1993).

Self-directed work teams have emerged in recent years as a solution to these deficiencies. The self-directed work team places decision-making and problem-solving authority in the hands of the persons closest to the product or services being created and provided (Orsburn et al., 1990). Experiences of private sector companies show that where self-directed work teams have been achieved, productivity has been considerably enhanced and customer satisfaction has resulted. In addition, other accrued benefits were enhanced quality, cost reduction, innovation, better use of employee's talents and organizational responsiveness to change.

At Michigan State University, an AOE team is highly trained group of Extension specialists and Research Scientists fully responsible for planning, implementing and evaluating educational programmes in a self-directed manner. Most teams have 10–20 members, with every member of team sharing responsibility for performance. Team members develop a specialty through a series of in-depth training and educational opportunities and integrate knowledge from several disciplines. Recognition and compensation are increasingly linked to team performance.

Among the Extension educators on AOE teams represent are of both university faculty members with statewide extension /research responsibility and extension agents who have a county or multi-county responsibility.

The goal of AOE is to create a core group of specialized extension agents focusing their responsibilities in one programme area i.e. field crops, horticulture and animal husbandry, etc., and raising their level of expertise by enhancing their training in the specific area. This will result in a more effective extension system that can meet the information and technical needs. These trained individuals will be prepared to educate, transfer technology

and management concepts, identify clientele concerns and research needs and identify and solve problems.

A paradigm shift is taking place in the organizational structure and their work force in developed countries. Teams are being employed to replace the traditional hierarchical management structure. With the development of AOE agents, teams of extension agents and specialists have been formed. These teams are self-directed and they have responsibility to establish their mission, goals and mode of operation.

Pilot testing of New Extension Model:

The National Agricultural Technology Project (NATP) has been initiated by the Ministry of Agriculture, Govt. of India, to expand ongoing reforms, consolidate earlier investments and address constraints and gaps not attempted so far. The basic premise of NATP is that research and extension programmes should be farmer centered and demand driven.

The purpose of NATP's Innovations in Technology Dissemination Component is to pilot test new organizational arrangements and operational procedures. One key concept is to decentralize decision-making to the district level through the creation of Agricultural Technology Management Agency (ATMA). A second goal is to increase farmer input into programme planning and resource allocation, especially at the block level, and to increase accountability to stakeholders. A third major goal is to increase programme coordination and integration, so that the programme thrusts such as farming system innovations, farmers organizations, technology gaps and natural resource management can be more effectively and efficiently implemented.

ATMA is a society of key stakeholders involved in agricultural activities for sustainable agricultural development in the district. It is a focal point for integrating research and extension activities and decentralizing day-to-day management of the public Agricultural Technology System (ATS). It is a registered society responsible for technology dissemination at the district level. As a society, it would be able to receive and expend project funds,

entering into contracts and agreements and maintaining revolving accounts that can be used to collect fees and thereby recovering operating cost.

The ATMA at district level would be increasingly responsible for all the technology dissemination activities at the district level. It would have linkage with all the line departments, research organizations, non-governmental organizations and agencies associated with agricultural development in the district. Research and Extension units within the project districts such as ZRS or substation, KVKs and the key line departments of agriculture, animal husbandry, horticulture and fisheries etc., would become constituent members of ATMA. Each research-extension (R-E) unit would retain its institutional identity and affiliation but programmes and procedures concerning district R-E activities would be determined by ATMA governing board to be implemented by its Management Committee (MC).

Strategic planning is assumed to be the key towards planning and implementation of development activities in agriculture. It encompasses various stages and steps such as understanding of resource base and resource inventory of the area, identifying the agro-ecological situations in the district, identification of organizations, identifying the farming systems being operated over a period of time, identification of successes and experiences of farmers, identification of problems and needs of farmers by using participatory methodologies, analysis of all the information collected, working at the strengths, weaknesses and opportunities available in the area, thus ultimately leading towards development of a comprehensive Strategic Research and Extension Plan (SREP) for the district.

Application of AOE Team Concept in Addressing SREP Issues:

After finalization and approval of District Strategic Research and Extension Plan (SREP) by Governing Board of ATMA, the research and extension priorities have to be identified by the ATMA Management Committee (AMC) based on the existing technical gaps in production and marketing of major enterprises in the district.

After prioritizing the areas of importance a group of scientists from Zonal Research Station / Krishi Vignan Kendra, extension functionaries from the field, innovative farmers (representing commodity interest groups) and other stakeholders such as marketing, credit and input agencies will be formed into a team / group to address the identified problems in a given period of time in a specific Agro-ecological situation of the district. The participation of these team members would be voluntary and they will be given with decision-making and problem solving authority. The roles and responsibilities of the team members would be decided by themselves. The budget required to carryout the identified task would be kept at the disposal of team by the Project Director, ATMA.

The suggested guidelines for AOE teams were:

- AOE teams have co-chair; one from the campus (ZRS/KVK, colleges, etc) and another from off-campus (field, etc). The on-campus co-chair has a joint research-extension faculty appointment or responsibility.
- AOE teams develop their own micro-vision, mission and operating procedures.
- AOE teams have an interdisciplinary, problem-solving, customer-oriented focus.
- AOE teams develop a plan for program delivery and curricula for staff development
- Involvement of stakeholders is expected including stakeholders information input for programme/project selection, direction and evaluation;
- Each AOE team member has an opportunity to select a mentor.
- AOE teams are expected to be entrepreneurial and generate resources for enhanced programming.

The salient features of this system:

i. Developing areas of expertise for extension agents

ii. Using a team approach between specialists and extension agents to accomplish education program delivery.

iii. Forming partnerships with producers and local representatives of industrial organizations and other stakeholders.

Advantages of New Model:

1. Formation of teams of AOEs will increase the relationship between specialists and field staff
2. AOE agents will be more focused so they will be able to build a significant knowledge base in specific areas
   - ➢ Training will be more effective because time allocated to training will be more concentrated on specific area of expertise and agents will have a greater opportunity to use their training in their job related activities.
3. With increased level of expertise, AOE agents will be able to work with producers at a higher level giving agents more credibility.
4. AOE agents will have an increased level of expertise to deal with clientele education, clientele and industry needs, and be able to evaluate new technology and become a source of new ideas.
5. Networks will enhance communications between extension agents, specialists and producers and industry resulting in:
   i. Improved identification of producers and industry problems, potential solutions and research needs.
   ii. Improved identification of educational programme needs
   iii. Transferring information to producers and industry organizations
   iv. Communicating what is happening in the research and within the field.

Chair of 'AOE' Team

- Will be expert in the subject and having research and extension experience. He/She may be working at ZRS/SAU level.

- The entire team will work under the guidance of the chair
- The team will decide vision, mission and objectives of AOE under the guidance of the chair.

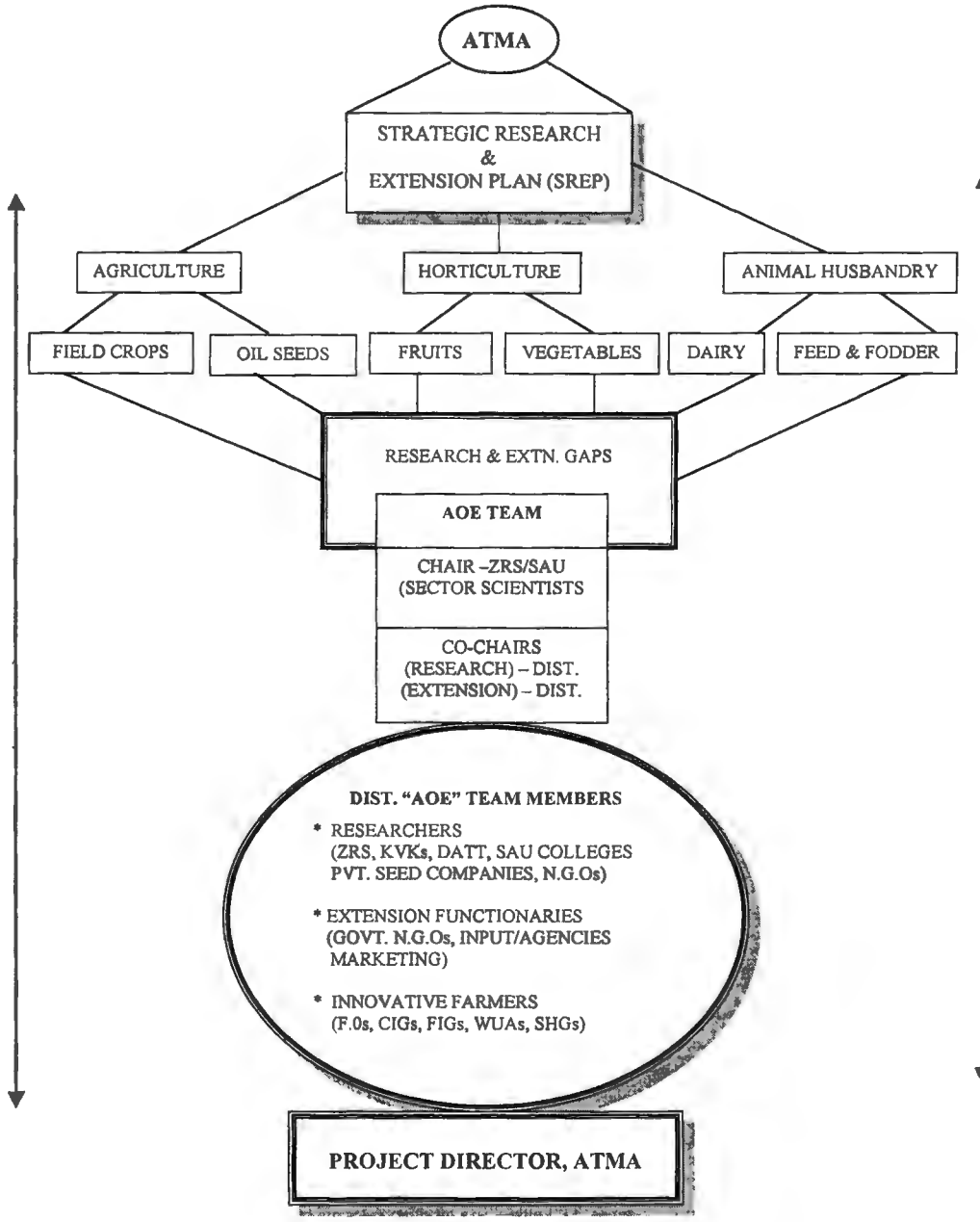
Co-Chairs

- The co-chairs of research and extension will be selected from the concerned district only by nomination. (Preferably from District Agriculture and Transfer of Technology Team of SAU for Research and Subject Matter Specialist / experienced extension officer of DDA /ADA cadre from the extension will be nominated)
- Budget will be made available at the co-chairs level.
- Co-chairs are accountable to chair and all the "AOE" team members
- Co-chairs will be working with the AOE team
- Co-chairs will be responsible in all the respects such and budget allotment, identifying training needs of team members corresponding with chair and P.D., ATMA, etc.

AOE Team Members:

- Members of the AOE team will be selected voluntarily
- Members will be representing from the selected Agro-ecological situation of the identified research / extension gaps
- Team will be regularly interacting among themselves and with co-chairs (by using available STD facility at block / mandal level)
- Team will identify their training needs
- Team will be responsible for preparation, implementation and Evaluation of Strategic Research and Extension Plan (SREP) in their respective field.
- Team will work through FOs/ FIGs / SHGs / WSAs / WUAs etc.,
- Team will work with close linkage between research - extension – farmers – marketing.

WORKING MODEL OF SELF-DIRECTED WORK TEAM (AOE TEAM)



- The performance of the team members will be evaluated by total team performance
- Team will be using participatory approaches while working with the farmers and among themselves.
- All the members of team are equal in their status.
- Any researcher / extension worker who has been interested in the identified area can opt to become member of team in the district
- There is no restriction in the number of team members (to start with 15-20 members).
- Decision - making and problem solving authority will be vested with the team
- Members of one team in the district can become the member of the other teams also

General Guidelines

- AOE teams can be identified voluntarily by sending circular to all the Researchers/Extension workers / FOs in the district in the identified areas.
- Budget requirement for each "AOE" team will be decided by the team themselves and forward to P.D. ATMA who is the Member secretary of the team
- P.D. ATMA will place the budget before G.B. ATMA for its approval
- After approval by G.B ATMA budget will be placed at the disposal of co-chairs.
- Co-chairs are responsible for settlement of the accounts with P.D, ATMA
- AOE teams will meet thrice during the crop season (before, during and after)
- The roles and responsibilities of the team members will be decided by themselves.

- The team functioning is highly flexible and based on the experience of working they can bring in new ideas for better functioning of the team members
- The AOE team is responsible for generation, dissemination and evaluation of technologies in their respective areas
- Team is responsible for bringing awareness among the farming community by using radio, T.V., Internet, supplying literature and organising Kisan Melas in the district.
- To start with atleast teams can be constituted representing Agriculture, Horticulture and Animal Husbandry in selected ATMA districts.

The concept of self-directed work teams is not only result oriented but also, strengthens linkages among all the stakeholders. It helps in recognizing and appreciating each other contribution, deriving job satisfaction, social affinity and furthering sustainable linkages.

References:

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