Partnership in Agricultural Extension: Needed Paradigm Shift

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In the post green revolution era of agriculture when liberalization and globalization are the buzzwords the demand for agricultural technology are changing and diversifying. To meet the food demands of the growing population and to compete in the international scenario, technologies are needed (i) to break the stagnation of yield growth in intensive irrigated agriculture; (ii) to harness the production potential in dry land farming which accounts for majority of India's cultivable land; (iii) to make optimum use of natural resources for sustainable production; and (iv) to make investment in agri-preneurship development.

Due to economic liberalization and signing up of the WTO agreement, the market place has become uncertain and volatile. There is desperation and confusion among the farming community as to what to grow and where to get the information to make best use of their limited resources. There are also lots of private players cropping up in the field of extension providing various kinds of services. We are also experiencing the unfolding of the information technology revolution. The advancement of the technology on the information and communication front is posing its own challenge. The rapid development in agriculture has resulted in increased importance of extension services during last few years. The role of extension in transferring technologies has been fairly acknowledged. The effective performance of extension system is now a real challenge for following reasons:

1. Information now has real, measurable value: Private-sector information providers such as crop advisors, business consultants, and private education and training providers are cropping up everywhere. The attraction is the revenue generated by refining information to meet specific audience needs.

- 2. Public extension services are no more solesource of information: Extension has spent
 decades as a sole-source provider in the
 information and outreach market. Technology has
 created the opportunity to provide and promote
 access that wasn't realistic before. Because of
 this, the traditional educational market is now more
 easily accessible for competitors agribusiness and
 commercial crop market advisors. Technology
 combined with open access to the rapidly expanding
 knowledge marketplace entices private information
 providers to step up the competition for clients
 (farmers) who previously were dependent on public
 sector extension as a sole-source education
 provider.
- 3. Essential shift from "provider mentality" to "user mentality": A "provider mentality" focuses on the process of distribution, meaning it is driven by what we want to distribute. A "user mentality" focuses on access and the customer, meaning we now need to anticipate customer needs and provide them access to our knowledge base. Therefore, there is need for traditional extension system to shift from distribution to access.
- 4. Required shift from broadcasting to narrow casting: The satellite T.V. makes available specialized channels for the access to all sorts of information including music and sports channels. Similarly, database is being created for almost every subject matter area be it be pesticides, chemicals or any thing else. People want to choose where they get specific information and not lock themselves into choices made by one provider.
- 5. *Instance Performance:* The market place demands customized, immediate response to problems and questions. Therefore, the challenge

- is to synthesize the data and make effective need based prompt decisions.
- 6. Demand driven and customized information: In this demanding scenario, the challenges to extension system are many and varied. The extension must satisfy the clients with locationspecific and need-based information.

Extension educator needs to:

- * Learn with clientele rather than being their teacher
- * Overcome information overload by getting information to the client when they need it
- * Adapt the information to local needs and values
- * Help both the economically productive sector that has access to technology and those without resources that want to acquire and use new technology
- * Make sure the extension educator is a knowledgeable and trusted consultant

In the present scenario, the role of extension is much wider and it needs to change its focus from safeguarding national food security to commercialization and export crop production; to equip themselves with traditional skills understand the clients and the local situation; train farmers in management skills and decision making skills; help the rural people develop leadership and organizational skills enabling them to organize better and participate fully in the development programmes; and develop their skills in marketing, selling, negotiating, delivering and using the knowledge of latest communication technology

Public and Private Extension: The demand for agricultural information by farmers is not uniform across the producers and the regions. After independence, the country initiated a number of programmes and created several institutions to provide extension and other services to the farmers. The information on agriculture is being provided by various public and private agencies. The public sector extension has the larger coverage, while private and other extension providers have limited coverage, rather supplementary role to a greater extent. Over the years number of organizations performing extension functions has been increasing. The performance of public sector extension is under scrutiny for quite some time. The questions are being raised on its capabilities to deliver goods in rapidly changing environment and this resulted into increasing number

private players in the extension field. From 1980s, the need for involving NGOs, private sector and farmers associations in sharing, augmenting and supplementing public sector extension is increasingly recognized.

The brief review of the extension performance and a sketch of the present changing scenario and its challenges in general and to extension in particular indicate a very gloomy picture and a serious gap towards competitiveness and quality performance. Usually extension has been used to meet expanding demands for food and to cope with declining availability of various resources. Its educational role in terms of problem diagnosis, effective transfer of technological messages though educational aids, feed back of farmers' response to technology and development of effective linkages with different agencies to solve problems of farmers; particularly in public extension is almost missing. The private extension systems are maintaining good contact with their clients and working in interpersonal and educational mode to some extent. This is mainly due to their targeted approach and limited area of jurisdiction. It is true that private extension cannot replace public extension. Public extension has to remain the main player in the field of extension. Many debates are going as how to make public extension system socially accountable and to what extent and in what area the private extension system is allowed to supplement the extension. What should be our strategy to cope with these challenges and how to bring about the needed changes in the extension system to make it more responsive and client oriented are crucial points need to be addressed appropriately. The argument in this connection is as under:

- 1. *Fund crunch:* In the era of disinvestments and privatization, the government machinery is not able to bear the burden of expenditure on public extension services. To overcome this fund crunch increasing privatization is the answer.
- 2. Efficiency and effectiveness: Reasons for efficiency and effectiveness may be many but there is a feeling that privately runs organizations are more efficient and effective resulting in cost reduction and increased profits and optimum use of the resources.
- 3. *Demand for specific information:* The private information provider works on the specific areas and can meet the demand for the specific

- information more efficiently than public extension system, which is nearly paralysed.
- 4. Paid services used more effectively: The past experience has confirmed that the paid services are more effectively used than the services provided free of cost. The clients always regard such services as reliable. There are areas where paid services are working well.
- 5. Increasing Transformation: The increasing commercialization of agriculture and innovative development in information technology have provided new sets of problems, opportunities and challenges, which require client friendly, market friendly and export/trade friendly interventions. A market is developing for skilled and specific agricultural advice. The private extension providers have comparative advantages to this situation and can play the desired role in this market.

Now the question is can we submit to such a radical view and privatize our extension completely. If not, what is the way out? The way out is the careful integration of public and private extension services according to various needs, so that the two can complement and supplement each other.

Thrust Areas of XI Five Year Plan: Agriculture and rural developments are two sides of a coin in sustainable development at gross root level. Accordingly, in the thrust areas and programmes of agricultural extension in the XI five-year plan, this aspect of integration of private sector extension services with present public system has been stressed on following ways:

- * Promotion of Agribusiness through development of Agribusiness Center: Under the new programme initiatives, there is proposal for promoting agribusiness through development of Agribusiness Centers. The objective cannot be achieved without the partnership with the private players.
- * Establishment of Agro-Clinics: The demand for the specific farm information is on the rise on one hand and on the other hand, a large number of agricultural graduates are in dire need of employment and they are seeking job opportunities outside. So, they can be trained to open these information shops. These shops can render advisory services on both crops and animal

- husbandry and act like single window for farm products, input information, inputs sale etc. at the block and district levels. Private agencies can play active role in successful implementation of this project.
- * Consolidation & strengthening of KVKs: At present, there are above 600 KVKs sanctioned, a reasonable numbers of them are run by NGOs. Now the question is how to bring about this integration? The process requires thorough understanding of the strengths and weaknesses of both the systems i.e. Government Organizations and Privately run institutes.
- * Contact farming: There are many MNCs coming up in big way for contract farming e.g. Pepsi in Punjab and ITC in Andhra Pradesh. The tomato cultivators of Punjab reported that the new technology introduced by the MNC and due to effective extension and market provision provided by MNCs contract farming led to cost cutting and higher yields consequently higher income both for the farmers as well as labourers.
- * Higher marketing efficiency: Experiences have shown that it is impossible to attain sustainable production isolated from marketing situation. There are number of such examples in which farmers become the victims of such extension approaches that emphasized to produce more without proper attempt to organize marketing.
 - Under such circumstances as the farmers incurred heavy losses, private agencies can help by providing:
- i. Information about market opportunities, price and marketing technology transfer.
- ii. Forward and backward linkages for increasing marketing access to farmers.
- iii. Post harvest technology to avoid distress sales including processing, grading, value addition, storage, packaging, transportation, distribution, product standardization, and reducing number of intermediaries.

The MNCs have the advantage of strong capital foundation and they provide enormous employment potential. Some of these MNCs are also having big R&D setup.

Implications: Our country's development stage has a bearing not only on the prevailing levels of technology

but also on the demand for agricultural produce and difficulty of providing extension. Most of the technologies for basic food crops will always remain a public good and hence should be provided by the public sector. The implication pointed here is that narrow goals of economic efficiency cannot be replaced by a broader aim of enhancing general welfare. While advocating institutional pluralism, a broad conceptual vision of extension is needed, so that any systematic link between two sides is not neglected because of increased complexity of bringing all sides together.

Government funding in India should continue to focus on public goods activities such as technology transfer, education and human resource development, while private extension should focus on specific needs of special client groups. Our government can take on a key role in developing strategies for the evolution of an extension system, which takes into account subsidiarity and complemearity among actors. It is important to devise a public extension policy because the extent to which other bodies will be willing to provide extension services is partially determined by government actions. Government should provide an enabling environment for non government provision of extension services in which the players come together share experiences and plan future and rural people's needs are more efficiently served on sustainable basis.

Opportunities for successful integration of the efforts of public sector, private sector and farmers groups are emerging in some areas. The need is to develop location based strategies and varied combinations of financing and providing extension services in different situations. At least block level and below, there should be close integration among public agencies, private agencies and farmers associations. There is a need to have adequate structural reforms to commercialize agriculture at this level for meeting the pressing needs of food demand, job requirement, open market for export/ trade avenues and skill development in human resources under one umbrella with minimum political interference and maximum social accountability. The private agencies should be given full opportunity to play its role at this level. This is essential for economic and social reasons.

IARI initiative 'Village-based integrated models for market-led agriculture': The extension initiative of IARI is to develop 'Village based integrated models for

market-led agriculture' in different parts of the country by involving institutions. The programme aims at creating location-specific models to utilize properly prime land and rural resources for agriculture; realize the untapped production potential by bridging yield gaps; ensure household food, income and employment security; develop system approach with all attention to the links in production to food value chain; develop local capacity for participation, leadership, group action and entrepreneurship; sensitize, upgrade and strengthen the extension support and linkages; strengthen input-output chain from farm to market and sustain retail boom and promote quick spread of technologies through farmer-to-farmer extension in wider areas.

The IARI has established project field sites in north, south, east and west parts of the country by involving institutions to carry out TOT interventions in participatory mode in the fields of diversified/ commercial farming. The attempt is to understand the problems faced by the farmers related to their livelihoods and adoption and diffusion of farm enterprises, and address them to strengthen the technologies/enterprises movements through farmer-to-farmer extension. The local partners being involved include development departments, SAUs/ ICAR institutes, NGOs or corporate sector. Some selected nearby sites are being connected with IARI for information communication and knowledge sharing. The project is being carried out in phased manner in concentric mode in collaboration with selected SAUs/ ICAR institutes across the country.

- Peri-urban agriculture (up to 75 Kms. from IARI)-Three (3) sites in NCR of Delhi + Gurgaon (Haryana)
- Integrated agriculture (above 75 to 500 Kms. from IARI)- Eight (8) sites (Sonepat in Haryana, Western districts & Mathura in UP, Patiala in Punjab, Churu, Jhunjhunu & Bharatpur in Rajasthan)
- 3. Integrated farming systems (beyond 500 Kms. from IARI) Nine (9) sites (Gulbarga & Bangalore in Karnataka, Parthian & Rahuri in Maharashtra, Varanasi & Mirzapur in UP, Ranchi in Jharkhand, Udaipur in Rajasthan, Navsari in Gujarat)

A cluster of 2-4 villages/a village Panchayat has been selected at each project site. The innovative farmers in different project locations are also being linked and utilized for technology transfer. A mutual agreement for collaborative efforts between the IARI and SAUs/ ICAR Institutes has been made. The SAUs/ICAR institutes involved are MPUAT, Udaipur (Rajasthan), MPKVV Rahuri (Maharashtra), MAU Parbhani (Maharashtra), UAS Dharwad & UAS Bangalore (Karnataka), BAU, Ranchi (Jharkhand) and BHU (UP), IIVR, Varanasi & CIRG, Mathura (UP), NAU, Navasari (Gujarat) and NRC Rapeseed-Mustard, Bharatpur (Rajasthan) from Kharif 2007. The programme encompasses village-based natural resources management and lays emphasis on quality seeds production, protected horticulture, diversification with high value crops/vegetables/flowers, processing, value addition and marketing, capacity building for entrepreneurship development by integrating indigenous knowledge and practices. The exchange of technologies among partners for trial and adoption in suitable locations and avoiding duplication of research efforts are also the concern of IARI initiative. It involves a farming systems approach with following emphases:

- The concept of Seed Bank by producing enough good quality seeds and planting materials of important crop/vegetable varieties and hybrids through appropriate training and education to meet requirements of village cluster and nearby areas.
- The concept of Water Bank by harvesting rain water and judiciously using it by adopting efficient water management techniques and choosing the crops and varieties according to available water quantity.
- Development of Fodder Bank by introducing quality fodders and their conservation techniques using Feed Block Making Machine through farmers' association/SHG// Panchayat for successful

- rearing of animals for dairy, meat, wool, draught purposes.
- 4. Development of Energy Grid/ Energy Bank by harnessing renewable energy from different sources such as solar, wind, water, biomass, biodiesel etc. to meet major demand of energy.
- 5. Development of Manure Bank by utilizing cattle dung and other bio-mass for improving soil health and physical properties, providing renewable energy and reducing pollution.
- 6. The concept of Knowledge Bank by developing knowledge society through information support in production, processing, value addition and marketing.
- Development of Villagers Cooperative Bank completely owned and managed by the rural people with appropriate directions and risk mitigation fund for helping the resource poor under unforeseen adverse situations.

The IARI extension is to create 'Village-based Models of Market-led Agriculture' in various locations so as to improve livelihood security and facilitate adoption and diffusion of technologies through farmer-to-farmer extension. The model envisages building up knowledge base of bio-diversity experiments of agroenterprises; promoting rural knowledge systems; empowering people and their institutions for sustainable management of rural natural resources; developing local capacity for effective implementation of agroenterprises through field demonstrations/ research and information networking and establishing partnerships among various institutions involved in agro-enterprises development.