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## **Extension Plus: A New Face Of Extension With Expanding Roles**

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Agricultural extension in India is in transition. After several years of neglect, public sector extension has been witnessing renewed interest and policy attention during the last few years. It is under pressure to reform its purpose as well as the way it is managed and is also being encouraged to work closely with extension providers from the private and voluntary sector. While the need for strengthening extension services and expanding its mandate is fairly recognized, the on-going reform process is yet to make a significant impact on improving extensions' contribution to agricultural development. Development of agriculture continues to remain critical for India's economic growth and poverty reduction. Indian agriculture faces several challenges and agricultural extension services can and should contribute to addressing these challenges. However, to do this effectively, extension needs to address some of the challenges it faces currently and should reinvent its role and mission.

India's economic security is heavily dependent on agriculture. About half of India's population is Agricultural extension services can and should play an important role in addressing many of these challenges. Perhaps, there is no agency at the ground level, other than agricultural extension services that can provide knowledge support to farmers and other intermediaries who are supporting farmers and at the same time support programme implementation. Considering the changing nature of agriculture and the evolving challenges, producers currently need a wider range of support, including organisational, marketing, technological, financial and entrepreneurial. To be successful, farmers require a wide range of knowledge from different sources and support to integrate these different bits of knowledge in their production context. Addressing many of these complex issues requires solutions which are beyond the decision making capacities of individual farmers. Collective decisions on resource use and marketing would necessitate forming new forms of collaboration and this is particularly important as this sector is dominated by small farms often with weak bargaining powers and limited political voice. While a production led strategy was the sole focus of extension earlier, this needs to be expanded to include a market led strategy to deal with the new challenges. But to play this role effectively, extension should expand its mandate beyond disseminating information on technologies so that it can better respond to the evolving demands for support and services of farmers. This includes, organizing user/producer groups, linking farmers to markets, engaging in research planning and technology selection, enable changes in policies and linking producers to a range of other support and service networks (Sulaiman and Hall, 2004, Rivera and Sulaiman, 2009). With this brief background present seminar has been conceptualized with following objectives.



### **Journey of Agricultural Extension in India**

<b>Time Period</b>	<b>Experiences</b>
1900's- 1950's	Experiments & Learning (Rural Development)
1960's-1970's	Golden Era (Green Revolution)
1980's-1990's	Decline & Disappointment (Decline in Productivity)
2000's- 2010's	Reinvention & Revisioning (ATMA)
2010 onwards	Agricultural Innovation System

### **Changing demands in Extension**

1. **Top down to bottom up approach:** There is need for paradigm shift from top-down blanket dissemination of technological packages, towards providing producers with the knowledge and understanding to solve their own location specific problems.
2. **Donor accountable to farmer accountable:** Farmers are to be provided with access to linkage mechanisms through which they would be provided all relevant information/data to help them articulate their problems and needs with reference to their production and marketing plans.
3. **Input intensive to knowledge intensive agriculture:** Extension is now facing challenges in the areas of relevance, accountability and sustainability. The changing economic scenario in our country and the need for appropriate agricultural technologies and agro-management practices to respond to food and nutritional security, poverty alleviation, diversifying market demands, export opportunities and environmental concerns are posing new challenges to the technology dissemination systems. Present thrust is more towards generation of knowledge intensive agriculture.
4. **Supply driven to demand driven technology development:** In the previous extension programmes, technology dissemination regime was more of supply driven. Now the focus is towards, demand driven extension system. Feedback system will play the key role in demand driven technology development approach.
5. **Focus from Research-Extension-Farmer to Research-Extension-Farmer-Market:** The direct interface and close interactions between scientist- research- farmer- markets need to be created. Farmers now recognize marketing rather than production as the major constraint in enhancing farm income.

Thus Extension Plus is highly essential and has special relevant regarding reforming of public extension organization in India, where extension is struggling to find a relevant role to deal with contemporary rural and agricultural development challenges. The need for this new and expanded view of extension is clearly emerging in the case of Indian agriculture, which is characterized by declining land and water availability, degradation of natural resources, an unfavorable price regime, low value addition, particularly in rural areas and increasing competition from import of agricultural commodities. It is found that cost of cultivation per hectare is higher on small and marginal farms than medium and large farms. Farmers thus find themselves in an ever more complex production and market environment, with an expanding need for information and services. Moreover, of the 121 crore Indians, 83.3 crore live in rural areas while 37.7 crore stay in urban areas, said the Census of India's 2011.



## Concept of Extension Plus

**Extension Plus:** Extension plus is a framework for investment in strengthening and reforming extension to be a strong partner and nodal agency with Agricultural Innovation System (AIS), providing technological and non technological services to farmers.

**Agricultural Innovation System:** A network of organizations, enterprises and individuals focused on bringing new products, new processes and new reforms of organization into economic use together with the institutions and policies that affect the way different agents interact, share, access, exchange and use knowledge.

The larger goal of investments in extension-plus is to strengthen the capacity of extension and advisory services to play a much wider role (a bridging role) and at the same time enhance the ability of other actors in the AIS to support producers in an integrated way. Worldwide, it is now widely recognized that agricultural extension needs to reform in ways that allow it fulfil a diverse set of objectives. This ranges from better linking of farmers to input and output markets, to reducing the vulnerability and enhancing voice of the rural poor, development of micro-enterprises, poverty reduction and environmental conservation and strengthening and support of farmer organizations. So while technology transfer is important, what is also required is the strengthening of locally relevant innovation processes and knowledge systems. Extension is being forced to embrace a broadened mandate that, while in reality has always existed, has rarely been addressed. The limitations of a single model of extension for all kinds of situations are now well recognized and there is an increasing realization that new extension approaches need to emerge locally, based on experimentation, learning and adaptation to prevailing circumstances. The need for this new and expanded view of extension is clearly emerging in the case of Indian agriculture, which is characterized by declining land and water availability, degradation of natural resources, an unfavorable price regime, low value addition, particularly in rural areas and increasing competition from import of agricultural commodities. Farmers thus find themselves in an ever more complex production and market environment, with an expanding need for information and services.

## Key elements of Extension Plus

### **i. A broad scope for service provision (Beyond technology transfer):**

Going beyond the current linear technology transfer mode of extension requires a pragmatic and programmatic approach to the delivery of extension services. For example, development of the value chains(whole range of goods and services necessary for an agricultural product to move from the farm to the final customer or consumer.) will require technical expertise that goes beyond the capacity of the current extension functionaries. While they need to be trained for such innovations, hiring experts at the district and block levels to provide such services will help in the involvement of the private and NGO sectors in extension advice and delivery to support the farmers. A strategic approach to effective involvement of private and NGO sectors expertise is needed.

### **ii. The extensive use of partnerships to fulfill an expanded mandate.**

Involving different stakeholders through better partnerships. The public-private partnerships need further nurturing in agricultural extension services. The role of private dealers of inputs and the operators of agri clinics in advising farmers could be made more effective by improving their capacity at the district levels. Specific courses before beginning of each crop season may be needed to equip them to meet the farmers' needs. The SREPs and SWEPs should reflect these needs and the DAPs and BAPs should budget for such training activities. Different stake holders involved in agricultural extension includes (i) Private sector (Input firms, Agri-business Consultants), (ii) NGOs



(National and International) (iii) Producer organizations (iv) ICT Based Services (v) Farmer (Key communicators and Progressive farmers).

### **iii. A learning based approach.**

It is made possible through Farmers Field School (FFS). FFS is a non-formal learner centered educational process. It seeks to empower people to solve their field problems by Participation, interaction, joint decision making, self confidence and self determination. A farmer field school consists of 25-30 farmers who meet every regular interval for an entire crop growing season. The focus of the FFS is on crop ecology & ICM practices. Farmers work in small groups to ensure that each one's ideas are shared to focus on the above. In FFS, there is acceptance of the uniqueness of each participant. The FFS trainers play a crucial role in ensuring that the environment and all resources contribute to the farmers' learning experiences. Characteristics of the Farmer Field School include farmers as experts, field is the primary learning material, extension workers as facilitators not teachers, curriculum is integrated, trainings follows the seasonal cycle, regular group meetings, learning materials are learner generated and group dynamics/team building.

### **iv. Negotiations with a wide range of stakeholders for developing workable and effective service arrangements**

Creating a more realistic, cyclical and dynamic model of information exchange and knowledge dissemination whereby farmers, researchers, educators and extensionist are all engaged in the generation of new knowledge, and in its transfer and in its use. Allowing projects to develop a learning mode, engaging all major stakeholders.

### **v. An institutional mechanism to represent clients' interests at the management level, so the program remains accountable to its clients**

This is ensured by implementation of Agricultural Technology Management Agency (ATMA). ATMA is a district level autonomous agency entrusted with the role of agricultural technology management in the district. The district collector/deputy commissioner heads ATMA Governing Body, with members drawn from the line department, KVKs, farmers and NGOs. The central idea of the ATMA model was that it would act as a mechanism to bring together the different agencies involved in extension in a district. In consultation with farmers it identifies local research and extension priorities and develops local level problem-solving plans. Funds are specifically allocated for ATMA to implement its activities. The ATMA was introduced as a pilot in 28 districts in seven states of India from 1998-2003 as part of the World Bank funded Innovations in Technology Dissemination (ITD) component of the National Agriculture Technology Project (NATP). Under ATMA, grass root level extension is mainly channelised through the involvement of BTTs (Block level 7 Technology Teams) and FACs (farmer advisory committees), farmer groups/ farmer interest groups and self help groups. Based on the "success" of this pilot in the 7 states, in 2004 the Government of India decided to expand this model with its own funds — across all districts in the country. However, the same technical support and funding available during the pilot stage was not made available at the expansion phase. Lack of dedicated manpower, functional autonomy and attitudinal barriers at all levels further constrained ATMA from achieving its goals (Sulaiman and Hall, 2008). Although ATMA has been highlighted as an innovative example of agricultural extension (Singh and Swanson 2006; Swanson et al. 2008), other than bringing few additional resources and flexibility to use these funds on activities identified in consultation with farmers, it failed to make any significant improvement in the way extension was funded and implemented (Sulaiman and Hall, 2008; AFC, 2010). ATMA however provided a platform for interaction between line departments and farmers and brought some new concepts such as bottom up planning and commodity interest groups into field extension practice.



### Key Shift required from Extension to Extension-Plus.

Aspect of Extension	From	To
1. Form/content	Technology dissemination	Supporting rural livelihoods
	Improving farm productivity	Improving farm and non-farm income
	Forming farmer groups	Building networks
	Providing services	Enabling farmers to access services from other agencies
	Market information	Market development
2. Monitoring & Evaluation	Input & output targets	Learning
3. Planning & Implementation	Doing it alone	Through Partnerships
4. Sources of innovation in extension	Centrally generated	Locally evolved (through experimentation)
5. Approaches	Fixed/uniform	Evolving/diverse
6. Staff capacity development	Training	Learning by doing, facilitated experimentation
7. Capacity dev. of extension system	Personnel and infrastructure	Development of linkages and networks
8. Policy approach	Prescriptive/blue prints	Facilitating evolution of locally relevant approaches
9. Introducing new working practices	Staff training	Changing organizational culture through action learning
10. Underpinning paradigm	Technology transfer	Innovation system

### Activities to ensure successful operation of Extension –Plus Approach

Any policy, programme must have following six phase/aspect of operation:

#### 1. Pre-Project Phase.

- (i) Conduct individual consultations, workshops, sample surveys.
- (ii) Identify key partners.
- (iii) Develop a shared vision for the program.

#### 2. Institutional and Human Development.

- (i) Recruit experts that can bring specific skills
- (ii) Conduct training, exposure visits, case analysis.
- (iii) Conduct an organizational and management review



### 3. Technical Support.

- (i) Identify best technologies and refine or adapt them to local conditions
- (ii) Direct recruitment
- (iii) Make available on time the best and most efficient inputs, either by producing them directly or brokering arrangements with other suppliers
- (iv) Recruit qualified technical staff and train them so that they remain up to date.
- (v) If necessary, fund adaptive research.

### 4. Credit and Financial Support.

- (i) Understand the financial/credit landscape
- (ii) Linking with financing agencies
- (iii) Guarantee transactions, set up funds
- (iv) Organize producers for group lending.

### 5. Organizational Development.

- (i) Form producer organization ( Self-help groups, commodity interest groups, federation of self-help groups, producer, companies, and similar groups)
- (ii) Enhance skills through appropriate training programs (Skills in group dynamics or office management , including financial management).

### 6. Market Development.

- (i) Analyze and strengthen market chain.
- (ii) Negotiate with different actors in the value chain.
- (iii) Create new markets if needed.
- (iv) Develop new products.

### Indicators for evaluating and monitoring Extension Plus Approach

- a. Farmers groups or producer associations formed
- b. Formation of new markets
- c. Distribution and use of new inputs and technologies
- d. Credit use and repayment
- e. New value added products
- f. Partnership and quality of interactions
- g. Reforms promoted; changes in funding and collaboration
- h. Increased income and additional employment created

### Conclusion

A healthy, vibrant and responsive extension system with an aim of faster, sustainable and more inclusive agricultural growth is the need of the hour. Operationalising extension-plus requires a new organizational culture where extension reinvents as a nodal agency that will provide technological and non-technological services to farmers. Extension needs to play a facilitating role enabling access to services by acting as a bridge connecting farmers, the poor and vulnerable groups with different service providers. There is high need for bringing on Extension Revolution.



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