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Towards Extension-plus: Opportunities and Challenges

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Introduction

Evidence from recent debates and empirical cases suggests the need for a more broadly conceived notion of extension – referred to here as extension-plus. However in order to operationalise this vision of extension-plus, it is not only necessary to understand the new scope of the extension task, but also to understand ways of stimulating a diversity of extension innovations that respond adaptively to local and evolving circumstances. This policy brief outlines both the scope of extension-plus and the value of learning-based approaches to developing extension innovations. It also discusses the challenges for extension reform of promoting a learning-based approach in public bodies where such processes of change clash with prevailing organisational cultures.

The emerging paradigm of extension-plus

Worldwide, it is now widely recognised 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 markets¹, to reducing the vulnerability and enhancing voice of the rural poor², development of micro-enterprises³, poverty reduction and environmental conservation⁴ and strengthening and support of farmer organisations⁵. 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 recognised and there is an increasing realisation that new extension approaches need to emerge locally, based on experimentation, learning and adaptation to prevailing circumstances^{5,6}.

The need for this new and expanded view of extension is clearly emerging in the case of Indian agriculture, which is characterised by declining land and water availability, degradation of natural resources, an unfavourable 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.

Extension-plus in action

Boxes 1 and 2 describe a range of experiences of extension initiatives from the public and private sectors that display the

Box 1: Extension-Plus-Examples from the field

Government initiative: Kerala Horticultural Development Programme (KHDP) was conceived in 1992 as a project to improve the overall situation of fruit and vegetable farmers in Kerala; by increasing and stabilising their income; reducing cost of production and improving the marketing system. KHDP used self-help groups (SHGs) as its key concept for promoting the development of farmers and experimented with different approaches to provide better access by farmers to technology markets and credit. Every SHG selects three master farmers; one each for production, marketing and credit related activities and each one of them are trained by KHDP. KHDP has so far constituted 2312 SHGs, involving 41913 registered farmers. KHDP has encouraged group marketing where farmers now form their own market and got traders to come and buy. In the year 2002-03, about 31 thousand tonnes of produce worth around Rs.29 crore was traded through 112 marketing centres. KHDP developed a unique credit package that could be availed by lease-land farmers and at the same time acceptable to the banks. Loans totalling Rs. 52 crore has been disbursed to farmers. To generate and access needed technologies for its farmers, KHDP contracted the state agricultural university for research and also undertook participatory technology development with farmers. With the end of funding support from European Union in 2001, the organisation was registered as a company and it currently provide support to growers in 11 districts. An impact study reported a significant increase in area under fruit and vegetables in 86% of the SHGs and an increase in income in 75% of the SHGs⁷. The same study also reported that the number of farmers availing credit increased from 21% in the pre-KHDP period to 41% by 1999 and an increase in the efficiency of loan disbursal and increase in size of loans.

Agri-business initiative: Mahindra ShubhLabh Services Limited (MSSL) was formed in 2001 as a subsidiary by Mahindra and Mahindra, one of the leading tractor manufacturing firm in India. The objective was to provide what the company describe as "integrated yield and profit solutions". The company has established through its franchises "Mahindra Krishi Vihar" (MKV), a one stop shop for farmers (who registers with them on a fee), that provide access to quality inputs and machinery, credit, access to advisory and field supervision services, buy back and better prices. MSSL initiated this service in paddy in Tamil Nadu and currently this service is being expanded to more crops and districts. In Tirunelveli, the Mahindra franchise, Bhuvi Care Private Ltd has successfully established this scheme in paddy and maize. In 2003-04 II season (October -February), 105 farmers have registered 305 acres of paddy at Rs.500/ per acre/season and 314 farmers have registered 1392 acres of maize at Rs.150/per acre/per season. In paddy, the participant farmers realised 12% increase in yield and 27% increases in net returns per acre and for maize, 10% and 40% respectively⁸.

Box 2: Extension-Plus: examples from the field

Financial institution initiative: BASIX is a group of financial services and technical assistance companies, established for the promotion of sustainable livelihoods. It is currently operating in five states, namely, Andhra Pradesh, Karnataka, Maharashtra, Orissa and Jharkhand. According to BASIX, credit is necessary, but not a sufficient condition for generating sustainable livelihoods. In Andhra Pradesh, BASIX has identified a few sub-sectors in its area of operation (districts) such as groundnut in Anantpur, cotton in Adilabad and milk in Mahabubnagar.In Tamil Nadu (Virudhanagar) and Jharkhand (Ranchi), BASIX has initiated activities in vegetables⁹. Besides intervening in areas, which leads to direct increase in productivity or output, BASIX has been involved in finding out alternate market channels (eg: directly linking of cotton growers to spinning mills and groundnut growers to oil millers or wholesale traders) or value addition possibilities in these subsectors (eg; contracting with decorticating unit to decorticate groundnut by farmers) with an objective of raising the income of the primary producers. BASIX in all these cases worked in collaboration with local NGOs, or producer groups.

NGO initiative: BAIF Development Foundation, an NGO has been implementing the *Wadi* programme in three states, Gujarat, Maharashtra and Karnataka covering more than 50,000 families. In South Gujarat, Dhruva, an NGO promoted by BAIF has facilitated establishment of fruit orchard (*wadi*) on the land belonging to *adivasis*. When the trees (mango and cashew) started yielding, the project realised the need to intervene in value addition and marketing if the tribal producers have to benefit from the intervention. At Vansda, BAIF facilitated the establishment of a producer co-operative "Vasundhara Vrix Vanwadi Jalsinchan Vikas Sahkari Mandal Samiti" with an objective to help the member producers to increase income through post harvest processing of fruits into marketable products and establish marketing linkages. By 2002-03, 13,000 *adivasis* have been assisted and an area of 11,897 acres of private land has been covered. Dhruva assisted the Vasunadhara Co-operative in designing appropriate systems (technical and organisational) to preserve fruits, process them (eg: cashew nuts, and as mango pickles, jams, and jellies) and access local and urban markets under the brand name "Vrindavan". This project funded by KfW, (a German donor) is implemented by Dhruva in partnership with "Village Ayojan Samities" and the National Bank for Agriculture and Rural Development (NABARD).

expanded agenda embodied in the concept of extension-plus. These cases are illustrative of a number of points concerning both content and process of extension innovations.

All these four cases illustrate the need for extension type organisations to act as a nodal point for linking farmers to both technology and non-technology services. For instance, for Kerala Horticultural Development Programme (KHDP), extension-plus meant development and strengthening farmer organisations; improving farmers' ability to find solutions to technical, credit related and marketing problems; assisting sourcing better technical knowledge available with other organisations; and strengthening the capability of farmer organisations to negotiate with the state, traders and banks for changes in terms, policy and practice. For Mahindra ShubhLabh Services Limited (MSSL), extension-plus includes the delivery of a wide range of services, namely, making available quality inputs at the right time, provision of field based advice on technology use, reduction of number of intermediaries, and getting better prices. The central innovation of MSSL is that it has evolved an integrated system that delivers all these services to farmers at one point, and delivering it as a viable business. Similarly for BASIX, extension-plus means, linking primary producers to processors, promoting value addition at the local level and linking producer groups to other agencies, in addition to providing technical support and credit. For BAIF Development Foundation (BAIF), setting up producer co-operatives, helping farmers acquire production, processing, managerial and marketing skills, and linking their produce to new and existing markets are all part of extension-plus.

All these cases reveal the importance of experimenting with new strategies and learning from them as a way of developing optimal arrangements. For instance, KHDP's farmer markets and new credit package for lease land farmers evolved though a series of failures (eg: reluctance of banks to provide credit to lease-land farmers, resistance from traders to procure goods from farmer markets, etc), but these failures provided KHDP with lessons on how to go forward and try better arrangements each time. Similarly for MSSL, the failures from its first Mahindra Krishi Vihar (MKV) established at Madurai and its subsequent

closure and the series of innovations made by its own franchisee "Bhuvi-care" to the MSSL approach helped it to evolve new location specific approaches while expanding MKVs to new locations. BASIX's interventions are based on system diagnosis in each location to identify critical interventions and potential partners. The key operational strategy is learning through small experimental interventions. Similarly BAIF's interventions were experimental. Learning from each of these experiments led to the development of subsequent interventions. All the above cases thus reveal the processes adopted, *viz*, experimentation, reflection and learning to evolve successful arrangements.

Moreover, these new institutional arrangements evolved through partnership with other organisations, networks and schemes already in place. For instance, KHDP partnered with research organisations, banks and traders to make the whole arrangement work. MSSL has evolved this new business venture in partnership with input companies, agro-processors and financial institutions. BAIF and Dhruva are working in partnership with people's organisations, producer co-operatives and a rural development bank. Similarly, BASIX has been building its interventions around existing organisations and is working in collaboration with NGOs, such as Association of Sarva Seva Farms in Virudhnagar, Gram Abhyudaya Mandal in Nizamabad, and Rural Development Trust in Anantapur and with producer co-operatives like Andhra Pradesh Diary Development Co-operative Federation in Mahabubnagar and vegetable producer groups in Virudhanagar.

From policy to practice-the key constraints

The National Agricultural Policy of India¹⁰ and the Policy Framework for Agricultural Extension¹¹ (PFAE) acknowledges the need for extension to engage with issues beyond technology dissemination. The PFAE affirms that the "policy environment will promote private and community driven extension to operate competitively, in roles that complement, supplement, work in partnerships and even substitute for public extension¹⁰. However, to fulfil this expanded role, extension organisations need to change considerably both in scope and mode of operation.

While the need to provide a wide range of services as envisaged in extension-plus is all too apparent, a clear roadmap on reforming extension is not evident. States face a number of dilemmas: how much of past arrangements should be retained and which innovations in extension provision are desirable, affordable (bearing in mind current financial difficulties) and politically possible given opposition from staff unions, and declining enthusiasm from donors and political patrons for a stand alone extension that deals with only technology dissemination. The learnings from the past do not seem to have made any difference to the way extension reform is approached. For instance, although the limitations of a single model of extension are well known (for example T&V), the merits are being considered of ATMA (Agricultural Technology Management Agency) as a model for extension that can be replicated across all states and districts.

Moreover, the planning and implementation of extension programmes still rests only on extending technologies to farmers. Public sector extension is yet to make any experimentation with perfecting new marketing arrangements that reduce the number of intermediaries, eliminate exploitative weighing and payment methods, and help farmers to get better prices. Current efforts that provide information on prices and market arrivals in major markets alone have limited operational merit. But policy can't seem to get beyond this impasse of prescription without subsequent analysis and refinement.

The cases described above suggest a number of broad principles: the need to build on existing structures and strengths in different locations; the need to establish new programmes in ways that explicitly recognise the experimental nature of the reform and change process; and the need to recognise the value of diversity of approaches and arrangements. Those involved in the reform process will need to build skills that allow them to reflect on progress (both successes and failures) and change course accordingly. It will require approaches that are less target-driven and more concerned with learning and the development of new capacities to deal with local circumstances. Table 1 illustrates the key shifts required for operationalising extension-plus.

However, the current organisational culture in general restrict the ability of public sector extension to realise the vision of extension-plus precisely because the principles outlined above are counter to deeply held norms in the public sector.

The following features typify this culture and need to be the focus of measures to reform the existing extension arrangements.

- Rigid professional hierarchies and patterns of control, with highly centralised modes of planning. This tends to stifle deviation from prescribed procedures, restricting innovation, particularly by middle and lower level staff.
- A tradition of assessing performance in terms of technology adoption and hence a focus on improved technology transfer mechanisms at the expense of other activities that may have a perfectly legitimate role in supporting farmers.
- A history of only rewarding successes and thus a reluctance to report and analyse the reasons of failure of a technology or a new approach.
- A tradition of working independently and a mistrust of other agencies. This is particularly so with regard to external agencies, NGO's and private sector, but also with other public agencies including research organisations.
- A tradition of up-ward accountability for resource utilisation rather than output achievement and client satisfaction.

Rules and conventions related to recruitment, qualifications, transfer, contractual appointments and performance assessment further prevent accessing a wider range of expertise. The combined effect of these professional and administrative traditions is a prevailing culture in public sector extension that views its operational mandate — technology transfer — in very narrow terms, but also a culture in which the incentives and capabilities to learn and innovate are highly restricted. It is perhaps this weakness in the current culture of extension agencies and associated planning bodies that need to be addressed as one of the key issues by the reform process.

Ways forward

The underlying principles of extension-plus include a broad scope of service provision; the extensive use of partnerships to fulfil an expanded mandate; a learning-based approach that includes negotiations with a wide range of stakeholders in order

Table 1	. Operationalising	Extension-	Plus: Key shifts
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Items	From	То
Form/Content	Technology dissemination	Supporting rural livelihoods
	Improving farm productivity	Improving farm and non-farm income
	Forming farmer groups	Building independent farmer operated organisations
	Providing services	Enabling farmers to access services from other agencies
	Market information	Market development
Monitoring and Evaluation	Input and output targets	Learning
Planning and Implementation Strategy	Doing it alone	Partnerships
Sources of innovation in extension	Centrally generated	Locally evolved (through local experimentation)
Approaches	Fixed/uniform	Evolving/diverse
Capacity Development of staff	Training	Learning by doing, facilitated experimentation
Capacity development of extension system	Personnel and infrastructure	Development of linkages and networks
Policy Approach	Prescriptive/blue prints	Facilitating evolution of locally relevant approaches
Introducing new working practices	Staff training	Changing organisational culture through action learning
Underpinning paradigm	Transfer of Technology	Innovation system

to develop workable and effective arrangements in line with specific local circumstances and objectives; and a larger degree of accountability to client groups. To operationalise extension-plus, there is a need for a broad agreement on the need to reinvent extension as a nodal agency that provides 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. Operationalising extension-plus requires a new organisational culture. Next steps to developing this new culture might include:

- **a.** Capacity Development. Shifting from training to a "learning by doing" approach whereby staff are encouraged and enabled to initiate small experimental projects that address broad livelihood needs and use partnership as a central approach. By treating small projects experimentally and facilitating staff to reflect on their meaning and outcomes, this would build skills related to experimentation, learning and evaluating innovative extension approaches.
- **b. New skills.** Constituting a core group of specialists at the district level with non-traditional extension skills such as: market

development; institutional development; post-harvest; enterprise development and agribusiness management.

- **c. O&M review.** An organisational and management review of existing extension system, primarily to explore possibilities of recruiting limited number of better qualified field staff, creating new incentive structures and to provide more administrative and financial freedom at the lower levels.
- **d. Better informed policy process**. As part of the reform and planning process, resources should be used for systematic institutional analysis of promising extension innovations so that generalisable principles can be drawn and new strategies suitably informed.

Only if extension takes learning-based approach to changing its role and improving its performance, will reforms succeed. But if this cultural change is to flourish, it needs to be supported and legitimised wholeheartedly and unambiguously at the most senior levels of the extension services and in other allied organisations. Challenging as this may be, without a new organisational culture, the far-reaching reforms needed to operationalise extension-plus will not succeed.

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March, 2004

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