Extension-Plus: New Roles for Extension and Advisory Services

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SYNOPSIS

Extension-plus" is a framework for investment in strengthening and reforming extension to be a strong partner and nodal agency within the AIS, providing technological and nontechnological services to farmers. 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. All current extension-plus arrangements have emerged from small pilot efforts that have expanded their scope and service provision based on experimentation, learning, and adaptation to local circumstances over time. Investments should focus on encouraging and enabling staff capacity to initiate small experimental projects in partnership with other organizations. Promoting the vision of extension-plus will prove challenging among public extension organizations unless reforms target the macro-institutional and policy context in which extension is practiced. Extension-plus can flourish only in organizational settings that have a culture of experimentation and learning. For cultural change in this direction to occur, it must be supported and legitimized unambiguously at the most senior levels of the extension service and allied organizations. Before designing the program and operational strategy for investment, it is advisable to undertake an institutional diagnosis to understand the range of organizations within the AIS, their expertise and activities, and their patterns of interaction. The scope of the specific extension investment and the priorities will vary in relation to the national, district, and local situations.

BACKGROUND AND CONTEXT FOR INVESTMENT

The limitations of a single model of extension and advisory services for all kinds of situations are now well recognized.

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 extension to partner with other organizations and individuals with varied skills and competencies to provide integrated support (technical, organizational, marketing) to producers is also apparent. A number of examples emerging in the public and the private sectors illustrate how the conventional technology transfer role of extension is being expanded to improve its relevance to contemporary agricultural and rural development (Sulaiman and Hall 2004a, 2004b). Many of these examples appear to demonstrate the value of an expanded mode of extension referred to as "extension-plus" and provide important guidelines on design and implementation of new investments.

Extension-plus is a framework for investment in strengthening and reforming extension to be a strong partner in the AIS. It is especially relevant in the context of reforming public extension organizations in developing countries, where extension is struggling to find a relevant role to deal with contemporary rural and agricultural development challenges. The key elements of extension-plus are:

- A broad scope of service provision (beyond technology transfer).
- The extensive use of partnerships to fulfill an expanded mandate.
- A learning-based approach.
- Negotiations with a wide range of stakeholders for developing workable and effective service arrangements.
- An institutional mechanism to represent clients' interests at the management level, so the program remains accountable to its clients.

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

Aspect of extension	Shifts from:	Shifts to:
Form/content of extension	Technology dissemination	Supporting rural livelihoods
	Improving farm productivity	Improving farm and nonfarm income
	Forming farmer groups	Building independent, farmer-operated organizations
	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	Through partnerships
Sources of innovation in extension	Centrally generated blueprints for wider implementation	Locally evolved (through ensuring right kind of support for local experimentation), with diverse approaches and multiple partners
Role of technical research	Technology development	Source of technical expertise and supporting adaptive research
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/blueprints	Facilitating evolution of locally relevant approaches
Introducing new working practices	Staff training	Changing organizational culture through action learning
Underpinning paradigm	Transfer of technology	Innovation systems

Source: Sulaiman and Hall 2004a.

time enhance the ability of other actors in the AIS to support producers in an integrated way. Table 3.5 describes key shifts needed to operationalize extension-plus.

INVESTMENT NEEDED

The most innovative investment element of this approach is the explicit acknowledgment that investment should be concerned with creating or enhancing the capacity of the current innovation system for interaction and coordinated action, so that the producers receive a wider range of support and services. Extension organizations traditionally have some capacity for interaction with research. In this case, however, extension has to widen its networks to connect producers with different sets of service providers. This means that extension should partner with a number of different agencies and develop specific arrangements in line with local circumstances. Investments should focus on encouraging and enabling staff capacity to initiate small experimental projects in partnership with other organizations. By facilitating small projects experimentally and assisting staff to reflect on their meaning and outcomes, these investments will build skills related to experimentation and learning. Table 3.6 summarizes the kinds of investments needed under extension-plus.

All current extension-plus arrangements have emerged from small pilot efforts that have expanded their scope and service provision based on experimentation, learning, and adaptation to local circumstances over a period of time. Box 3.20 provides three examples-two from India and one from Bangladesh-of initiatives that served as nodes linking producers to technology and nontechnology services, including marketing. Each initiative supported the development of user groups that became the basic units for implementing programs. For example, in India's Kerala State, where smallholder and marginal farmers dominate agricultural production, almost 93 percent of land holdings are marginal (less than 1 hectare), and about 5 percent are small (1-2 hectares). Kerala imports around 80 percent of its fruit and vegetable requirements, primarily from neighboring states. In view of this dependency, the larger objective of the program described in box 3.20 was to develop a replicable model for horticultural development to diversify agriculture. The model, piloted in seven districts, was scaled up to cover all districts in the state after donor funding ended.

In the second example in box 3.20, BRAC (an international NGO) shifted from community development in Bangladesh toward a more targeted approach based on village organizations in 1977. Currently BRAC's operations reach about two-thirds of the population of Bangladesh. BRAC's outreach covers all 64 districts and 78 percent of villages in Bangladesh. Eighty percent of its funds are internally generated.

In the second example from India in box 3.20, a program to foster horticultural production in South Gujarat expanded from 44 families in 1982 to more than 23,000 families in 2010. Most activities are now managed by

Table 3.6 Investments	Needed under an Extension-Plus Scenario
Major investment areas	Purpose
Pre-project phase	 Analyze past and ongoing interventions by different agencies. Institutional diagnosis to understand the patterns of interaction among the different agencies and the institutional and policy environment. Understand demand for support. Develop a shared vision of objectives and potential approaches and identify potential partners.
Institutional and human capacity strengthening	 Place staff with diverse expertise (networking, technical knowledge, organizational development, market/ business development, credit and financial operations). Develop a new organizational culture that focuses on experimentation, openness to new ideas, reporting and learning from mistakes, regular staff reflection, incentives for good performance, and guidelines for staff assessment. Encourage appropriate institutional changes to enhance the organization's ability to act as a nodal agency, capable of brokering relations with other actors, by broadening its mandate and using partnership and learning as the key operational strategies.
Technical support	 Address the current weaknesses in technology use and find opportunities to bring in new technologies for production, postharvest handling, value addition, and export through contract research, recruitment or secondment of technical specialists in the program, or bringing experts on short consultancy assignments.
Credit and financial support	 Identify the current bottlenecks related to the availability of credit at reasonable rates and address them. This process might include bringing the credit issue to the right policy actors and negotiating with financial institutions.
Organizational development	 Organize producers to enhance their capacity to deal with different agencies, work collectively, and evolve new governance arrangements (see module 4, TN 5, on organizational change).
Market development	 Improve farmers' ability to negotiate and receive a fair price for their produce. This process would involve strengthening the existing value chains, developing more equitable institutions related to procurement and pricing, and, at times, creating new value chains by linking producers to new markets.

Source: Author.

Box 3.20 Extension-Plus: Examples from the Field

Kerala Horticultural Development Programme, India. Conceived in 1992, the Kerala Horticultural Development Programme (KHDP) aimed to improve the circumstances of Kerala's fruit and vegetable farmers by increasing and stabilizing their incomes, reducing production costs, and improving the marketing system. The KHDP worked with fruit and vegetable farmers to promote self-help groups. It trained three farmers from each group to become master farmers who could deal with production, credit, and marketing. It promoted the concept of credit to farmers who leased land, promoted group marketing, and established modern seed processing and fruit processing plants. To generate and access locally relevant technical knowledge, KHDP entered into contract research with the local agricultural university and strengthened the skills of farmers in participatory technology development. The total outlay for KHDP was €36.76 million, of which the European Commission contributed 78 percent and the state government contributed the remainder. Though it ended in December 2001, KHDP reinvented itself as the Vegetable and Fruit Promotion Council, Kerala (VFPCK, www.vfpck.org), a company in which 50 percent of the shares are held by producer groups. Since then, VFPCK has expanded its activities, coverage, and funding sources, obtaining some funds from government programs. All programs related to fruit and vegetable promotion are undertaken through VFPCK, whose approach was eventually extended to all districts in Kerala. The company directly reaches more than 132,000 vegetable and fruit farmers in Kerala.

BRAC's Economic Development Programme. The Economic Development Programme of BRAC (an international NGO that originated as the Bangladesh Rural Advancement Committee) is the cornerstone for all of BRAC's development work in Bangladesh. The Development Programme covers microfinance, institution building, income-generating activities, and program support enterprises (such as seed production, disease diagnostic labs, and produce processing and

(Box continues on the following page)

Box 3.20 Extension-Plus: Examples from the Field (continued)

marketing). While BRAC believes that microfinance is necessary to break the cycle of poverty, it places equal importance on microenterprise development services to maximize the return obtained by the poor. Unlike standard business development programs, which offer some mix of generic training and marketing services, BRAC has developed an integrated, sector-specific approach to enterprise development for the poor. BRAC has identified six sectors in which large numbers of low-income women can be productively engaged at or near their homes: poultry, livestock, fisheries, sericulture, agriculture, and social forestry. For each of these sectors, BRAC has developed a set of services that comprises training in improved technologies, ongoing supply of technical assistance and inputs, monitoring and problem solving as needed, and marketing of finished goods. BRAC evolved this model through continuous iteration and experimental learning. This program has so far organized 8.45 million poor and landless people into 284,825 village organizations, which are the basic units of the program.

The Wadi Programme of Dharampur Uththan Vahini, India. Dharampur Uththan Vahini (DHRUVA, "Vanguard of Awakening in Dharampur"), an associate organization of the BAIF Development and Research

Foundation, works in 200 tribal villages in Valsad, Navsari, and Dangs Districts of South Gujarat. DHRUVA's Wadi Programme, which facilitated the establishment of fruit orchards (wadis) on land belonging to poor tribal families, started with 44 wadis in 1982. Village-level peoples' organizations have been pivotal in implementing the Wadi Programme's activities. The organization encouraged the formation of a cooperative for wadi farmers in the Vansda area to help them market their produce collectively. Produce from cashew and mango trees is sold to the cooperatives, which in turn sell them to the apex cooperative. DHRUVA helped the cooperative design appropriate systems to preserve and process horticultural produce (including cashews, mango pickles, jams, and jellies) and access local and urban markets under its Vrindavan brand name. Today, over 23,000 families from 400 villages have adapted the wadi model. Huge tracts of wasteland have been converted into orchards, which have contributed to improved livelihoods and the regeneration of natural resources. The project received funding from donors (including KfW) as well as government support for rural employment, tribal development, and funds from the National Bank for Agriculture and Rural Development.

Sources: Bhamoria 2004; VFPCK 2009; BRAC 2010; DHRUVA 2010.

producer cooperatives and village organizations, with only marginal support from the NGO that initiated the program. The initiative has been acclaimed worldwide as a sustainable and replicable model for alleviating poverty.

POTENTIAL BENEFITS

A potential benefit of investing in extension-plus is the development of a sustained capacity for innovation. For instance, the most important contribution of the investments in KHDP, BRAC, and DHRUVA has been the development of a capacity for continuous innovation even after the end of external funding. Many externally funded projects fail to deliver once funding ends because they fail to develop the capacity to keep innovating. Box 3.21 summarizes the impact of some good practices from KHDP/VFPCK. Table 3.7 lists some of the indicators that could be used to evaluate an extension-plus approach.

POLICY ISSUES

Promoting the vision of extension-plus will prove challenging among public extension organizations unless the reforms target elements of the macro-institutional and policy context in which extension is practiced. Extensionplus can flourish only in organizational settings that have a culture of experimentation and learning. For cultural change in this direction to occur, it must be supported and legitimized wholeheartedly and unambiguously at the most senior levels of the extension service and allied organizations.

Institutional issues

As indicated, some of the underlying "institutions" (norms, values, routines, and attitudes) that govern or shape extension in its current form constrain the adoption of extension-plus. For instance, many countries continue to

Box 3.21 Good Practices and Their Impacts for Kerala's Fruit and Vegetable Farmers

The good practices followed by KHDP and its successor organization, VFPCK, produced a number of impacts:

- The program promoted the concept of organizing self-help groups of vegetable and fruit farmers and training certain farmers from each group in specific skills. VFPCK currently works with about 6,800 self-help groups, of which 405 are run by women, and reaches more than 132,000 farmers.
- By working closely with 11 commercial banks, the program could help farmers obtain credit for cultivation of leased land. More than US\$5.6 million in credit was distributed in 2008–09, and VFPCK also developed credit-linked insurance for farmers.
- Group marketing was promoted by establishing markets where farmers could bulk their produce for sale to traders and improve their bargaining position by obtaining information on market prices inside and outside Kerala. In 2008–09, more than 200 VFPCK Farmers' Markets operating across Kerala sold 87,000 tons of produce valued at

Sources: XLRI 1999; VFPCK 2009.

US\$20 million. The council supports these committees with infrastructure on a limited scale.

- Through its modern seed-processing plant, VFPCK produced more than 38 tons of seed for 19 vegetable varieties in 2008–09, thereby contributing 50 percent of Kerala's internal seed production. Through participatory technology development trials with farmers, the council is promoting the cultivation of vegetables in the cool season.
- The council established a modern fruit-processing factory with farmers as stakeholders. Products from this factory are traded in domestic and international markets.
- An external evaluation and impact study of KHDP by the Xavier Labour Research Institute reported a significant increase in area under fruit and vegetables in 86 percent of the self-help groups and increased incomes in 75 percent of the groups. The same study also reported that the number of farmers receiving credit increased from 21 percent in the pre-KHDP period to 41 percent by 1999, with an increase in the efficiency of loan disbursal and an increase in the size of the loans.

Table 3.7 Indicators That May Be Useful for Monitoring and Evaluating an Extension-Plus Approach			
Output indicators	Outcome indicators		
 Farmer groups or producer associations formed; groups' sustenance, maintenance of records Formation of new markets; marketing and price realization Training organized New inputs and technologies distributed and/or purchased and used Access to credit; credit use and repayment New value-added products developed Infrastructure developed; capacity utilization Partnerships, new working arrangements, or new areas of collaboration; quality of interactions Reforms promoted; changes in guidelines related to funding and collaboration 	 Increase in income, production, productivity; additional employment created Sustenance of the arrangement; continuance, expansion, and impact Enhanced capacity for collaboration and continuance of good practices; new partnerships formed; other institutional changes generated New funding generated Ability to respond to new demands Governance mechanisms: how different stakeholder views are expressed and quality of response 		

Source: Author.

plan, implement, and evaluate extension centrally, which can stifle any divergence from prescribed procedures and restrict innovation and learning, particularly by mid- and lower-level staff. In many instances, extension maintains a tradition of assessing performance in terms of technology adoption and upward accountability for resource utilization rather than by examining whether outputs were achieved and whether clients are satisfied. The reluctance to change

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is reinforced by an extension policy dialog that continues to be couched in terms of a narrow conceptualization of extension as an agency transferring technology and improved practices from research stations to farmers (Sulaiman and Hall 2005).

Public and private sector roles

A first step in operationalizing extension-plus is to reach broad agreement that extension must be reinvented as a nodal agency that provides technological and nontechnological services to farmers. In other words, extension will need to partner with a large number of other public, private, and NGO agencies that provide many of the additional services that will be in demand. In most settings, partnership among these agencies has been the exception rather than the rule, given the great level of mistrust among them. Extension can play its wider role only after undergoing large-scale restructuring and institutional changes, which extension bureaucracies often have been reluctant to undertake. Some of these changes include a broadened mandate, partnership and learning as key operational strategies, and freedom and support for staff at district and block levels to experiment with alternative strategies.

Human resource issues

To implement this approach, extension organization would require new expertise. One way of obtaining this expertise is to create a core group of specialists with skills such as market development, organizational development, enterprise development, and agribusiness management. The extension curricula of universities and the content offered in extension training centers will also need to be reviewed to ensure that perspectives such as extension-plus are adequately covered.

Sustainability issues

To sustain the institutional changes and capacity developed through this approach, a clear exit strategy must be agreed upon by the donor and the stakeholders. Building community-based organizations (user groups, cooperatives, village organizations, self-help groups), shifting the operation and management of the program to these organizations, and enhancing the capacity of these organizations to perform their responsibilities and raise fresh resources are all important steps toward sustaining the approach, even after donor support ends.

LESSONS LEARNED

Implementing the extension-plus approach can involve a number of challenges:

- The fact that the final program details cannot be visualized in the beginning can make donors and national governments slightly uncomfortable. As the approach can be implemented only as a series of experiments, resource allocation in the initial stages can only be tentative.
- The approach requires high-quality human resources at different levels, representing more diverse kinds of expertise. Human resource costs as a percentage of the total investment can be quite high.
- Partnering with organizations with diverse types of expertise is critical. Partnering is not an easy task for organizations that have a long history of isolated or independent functioning. In such cases, implementation could be slow.
- Only when the organization has sufficient flexibility to deal with administrative and financial issues will this approach flourish. The program should have opportunities for reflection and learning and sufficient flexibility to respond to the demands and opportunities emerging from the field as the program evolves.

These operational issues are not insurmountable. The program should be fully aware of them and find ways of engaging the government and the donors to resolve some of these concerns. Box 3.22 describes how the KHDP/VFPCK program met these challenges.

Some of the lessons learned from implementing extensionplus in varied settings are:

- The goals of the investment should be broad enough to provide integrated support to producers, improve competitiveness of the sector, or upgrade the production system to improve livelihoods, and so on. Broad goals are necessary to challenge extension to broaden its agenda.
- The investment should provide for hiring a mix of global and local expertise to support program implementation. It would be useful to get human resources on a long-term basis, starting with the design and inception of the program, to provide continuity and a shared vision of the objectives and approaches for implementation.
- Partnership with other organizations having varied skills should be the basic philosophy guiding the interventions.
- Continuous experimentation, reflection, and learning should be the basic approach for identifying relevant

Box 3.22 Experience with Innovative Activity in Kerala Horticulture

The most attractive feature of the program developed for fruit and vegetable producers by KHDP and its successor organization, VFPCK, was the concept of integrating three main components of agricultural development: production (including support for research and development), credit, and markets.

To implement this concept, KHDP created a new organizational structure and management strategy. It hired the services of international and national consultants to support key areas of its operation: credit, implementing an agroprocessing program, technology, and training. The expatriate experts, who were on a long-term consulting assignment, brought new knowledge and fresh perspectives to the program as it translated its vision into action.

Another interesting feature of the program was the flexibility to change the type and nature of interventions as and when problems arose. This flexibility allowed the program to evolve over the years. In its early years, KHDP quickly found that it needed to organize farmers into groups to promote new technology, help access credit, and strengthen negotiating power through collective marketing. It entered into a contract research arrangement with the state agricultural university for technical backstopping, and when it found this arrangement was unsuccessful, it realized the importance of involving farmers directly in technology development and testing. Since

Source: Author.

then, the program has promoted participatory technology development and testing. Initial serious setbacks in group marketing also caused the program to reflect and learn to overcome the problems. An additional problem was that traders perceived farmers' markets to be a threat, and considerable persuasion became necessary to convince them of the benefits they would receive from cooperating with the farmers' markets.

In the beginning, KHDP envisaged providing credit to farmers through cooperative credit societies. After encountering difficulty in mobilizing funds on its own, the program decided to arrange for commercial banks to supply the credit. Although the banks were reluctant to provide credit to landless farmers, KHDP's willingness to deposit its own funds with those banks encouraged them to take the risk.

The program paid explicit attention to learning along the way. It established a monthly review meeting of project managers that provided a forum for sharing knowledge and experience from implementation on the ground and served as the program's learning laboratory. Without this forum, the program probably would never have learned from its initial experiments, some of which failed. The donor (the European Commission) supported management's changes to the initial design, which to a large extent allowed the program to achieve its goals.

strategies for implementation. The program should have sufficient flexibility to shift approaches based on this learning.

- Accountability to clients is important. Clients should be part of the governance structure.
- A well-thought-out exit strategy should be in place before funding ends. Activities in the final year of implementation should focus on how to sustain the investment's positive outcomes.

Recommendations for practitioners

Extension can and should expand its role, given its significance for the larger AIS. The principles of extension-plus provide an opportunity for expanding the role of extension by raising questions on the nature of extension's tasks, recognizing the need for new expertise, facilitating a review of extension's current interactions, and highlighting the importance of institutional changes. These tasks are important for developing and sustaining a capacity for innovation, which should be the main focus of investing in this kind of approach.

Before designing the program and operational strategy for investment, it would be better to undertake an institutional diagnosis to understand the range of organizations within the AIS, their expertise and activities, and their patterns of interaction. The scope of the specific extension investment and the priorities will vary in relation to the national, district, and local situations. For instance, forming groups of farmers could be the starting point in one

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	Table 3.8 Activities to Ensure Successful Operation of an Extension-Plus Approach		
Phase or aspect of operation	Activity		
Pre-project phase	 Conduct individual consultations, workshops, sample surveys Identify key partners Develop a shared vision for the program 		
Institutional and human development	 Recruit experts that can bring specific skills Negotiate to get the right kind of staff on deputation Identify and contract consultants (short and long term) Conduct training, exposure visits, case analysis Conduct an organizational and management review 		
Technical support	 Identify best technologies and refine or adapt them to local conditions Direct recruitment Make available on time the best and most efficient inputs, either by producing them directly or brokering arrangements with other suppliers Recruit qualified technical staff and train them so that they remain up to date If necessary, fund adaptive research 		
Credit and financial support	 Understand the financial/credit landscape Negotiate with financing agencies Guarantee transactions, set up revolving funds Organize producers for group lending Influence policies to help mainstream credit operations 		
Organizational development	 Form producer organizations (self-help groups, commodity interest groups, federation of self-help groups, producer companies, and similar groups) Enhance skills through appropriate training programs (for example, skills in group dynamics or office management, including financial management) 		
Market development	 Analyze and strengthen market chain Negotiate with different actors in the value chain Create new markets if needed Develop new products 		

Source: Author.

location, whereas linking farmers to new or emerging markets could be the priority in another. It would be ideal to source expertise and other inputs by forging links with other actors rather than trying to do everything through one program. If reliable sources of expertise and inputs do not exist, however, the program will have to start its own initiatives.

Specific activities that can ensure success at different stages and for different aspects of an extension-plus approach are listed in table 3.8.

Investment should focus on potential ways for strengthening and sustaining the capacity for innovation during the project period and after its end. Developing a new office (administration/financing) manual; making arrangements for monitoring, learning, and impact assessment; creating opportunities for communication and engagement with policy; and ensuring adequate funds for addressing evolving challenges are also critical for implementing this approach.