

## **Strengthening the Role of Farmers' Organizations in Agricultural Innovation Systems: Case Studies from Benin, Rwanda and Tanzania**

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### **Abstract**

Farmer-oriented knowledge services are a prerequisite for innovation. However, innovation requires appropriate institutional settings. This paper analyses the roles played by farmer organizations (FOs) in agricultural innovation using the innovation systems concept, and has a closer look at their relations with agricultural service providers. Therefore case studies were conducted in Benin, Rwanda and Tanzania. They highlighted a number of best practices and lessons learned and allowed for identifying key issues for strengthening the role of FOs.

The case studies show that FOs operate in an increasingly decentralized, pluralist service provision sector, in which the private-sector is developing a market share. Both public and private-sector research and extension nowadays work with FOs. However, the ways in which FOs seize these opportunities are determined by the FO's origin and history. FOs access various knowledge sources and services, and use those that are most appropriate to them. Private goods and related knowledge services are increasingly considered by FOs as strict private-sector business. FO contributions to public-sector knowledge services vary according to the type of FO involved (e.g.: commodity-based, market-oriented or service-system-oriented FOs). The FO's resource base and related appropriate funding mechanisms for farmer-oriented services that enhance farmer participation in decision-making processes remain crucial.

In all case studies FOs contribute to the so-called support functions within the innovation system, e.g. credit and savings schemes, and marketing of products. Farmers consider these services to be crucial for (technological) innovation. Two major challenges emerged from the case studies with respect to empowering farmers. Agricultural innovation should be seen in a wider context and accepted as such by other actors. This allows FOs to identify key services, besides research and extension, which are necessary to achieve successful innovation. More important than identifying technological issues is the orientation of the innovation process itself: the final objective, the drivers and the innovation triggers, plus the key actors that need to be involved. This last challenge requires capacity development of FOs in areas such as: formulating comprehensive strategies for innovation; designing multi-actor institutions for interactive learning; and participatory policy-making.

### **Key words**

Social capital; agricultural services; research and extension; participation; capacity building.

# **Strengthening the Role of Farmers' Organizations in Agricultural Innovation Systems: Case Studies from Benin, Rwanda and Tanzania**

## **1. INTRODUCTION**

Different types of Farmers' Organizations (FOs) have different opportunities to relate with agricultural services. In this paper we investigate options these FOs explore to improve their innovative capacities through linkages with agricultural service providers (such as research and extension). Agricultural services contribute to improving farmers' innovation systems. Innovation, however, is often, if not always, defined by conditions other than simple access to and use of technologies; it also requires appropriate and conducive institutional and organizational settings. We therefore define innovation (after Smits 2000) as a successful combination of hardware (the technology), software (the mindset, the ideas) and *orgware* (the organizational and institutional settings). The agricultural innovation systems concept integrates these different dimensions and emphasizes links between actors, interactive learning processes, and the policy and institutional contexts (Hall and Yoganand 2002; Feinson 2003).

There are numerous types of FOs (Diagne and Pesche 1995): commodity-based or multi-purpose organizations that operate at national, regional and/or local level. FOs may also fulfill many functions such as: advocating and lobbying for political rights; representation on advisory bodies (such as district councils); providing technical or economical services (e.g. providing input or facilitating access to product marketing at local and national markets) to their members; and providing support for local development initiatives.

In this paper we analyze a number of case studies which were conducted together with different types of FOs in Benin, Rwanda and Tanzania (chapter 3). The cases highlight a number of best practices and lessons learned and allow for identifying key issues for strengthening the role of FOs in agricultural innovation (chapter 4). Before discussing the case studies we will first present the general context and background of FOs and agricultural innovation, notably the reforms undertaken in research and extension systems, in Sub-Saharan Africa (chapter 2).

## **2. CONTEXT AND BACKGROUND**

Since the 1990s, Sub-Saharan African countries have embarked on major agricultural sector reforms, which led to changing roles for the public and private sectors as well as for civil society organizations. FOs increasingly voice the needs of their members in various fora on policy-making and service provision. They are also solicited by the private sector to enhance supply chain development, and they play a role in planning of local economic development. FOs are, more than ever, actively involved in agricultural development. It goes without saying that providing user-oriented research (rather than supply-driven), extension, and training services is an important condition for innovation. Institutionalizing participatory methods, decentralizing services, creating multi-actor platforms and multi-stakeholder driven funding mechanisms all enhance demand-driven agricultural services (Chema, Gilbert and Roseboom 2003; Heemskerk and Wennink 2005). The private-sector and/or public-private arrangements currently play an increasing role in research and extension. FOs are thus evolving in an environment where stakeholders' interests diverge and/or converge (Chirwa *et al.* 2005). Yet,

the effective use of new hardware (technologies) to become innovations is often defined by conditions other than simple access to knowledge and information; it requires appropriate and innovative institutional and organizational settings. The agricultural innovation systems concept therefore considers (i) links between actors, (ii) interactive learning processes, and (iii) the policy and institutional contexts that govern the system vital in order to better understand the generation, dissemination and application of knowledge. The agricultural innovation systems concept also emphasizes the need for all stakeholders to work together towards innovation for development (CTA/UNU-Intech/KIT 2005; Feinson 2003; Hall., A., and B. Yoganand 2002).

Research and extension organizations have moved from working with individual farmers to collaboration with groups and, increasingly, with FOs. At the grass-roots level, farmers' associations, producers' groups and cooperatives, as well as specially created FOs, are all involved in research and extension activities. At higher levels, unions, federations and syndicates are implicated in multi-stakeholder platforms for planning research and extension services (Collion and Rondot 1998; Hussein, 2001; Wuyts-Fivamo 1996). Nowadays FOs present a highly diverse picture: from the former, state-managed, cooperative societies and unions to the new, farmer-initiated federations and syndicates, as well as market-driven farmers' groups (Diagne and Pesche 1995; Bosc *et al.* 2002). As a consequence, links with public and private knowledge-for-innovation service providers are encountered at all levels, with various status, aims and function modalities. But the role of FOs in agricultural innovation goes much further than simply participating in, and contributing to, research and extension. Support functions, such as guiding innovation processes (e.g. information on norms, regulations and markets), sharing experiences for learning purposes, providing complementary services (e.g. credit facilities), are equally important. FOs can therefore fulfill multiple roles, contribute to various functions that enhance successful innovation, and increasingly provide services themselves.

### **3. CASE STUDIES**

Case studies were conducted in 2004, in collaboration with FOs, as well as research, extension and training institutions in Benin, Rwanda and Tanzania. Cases were analyzed following the innovation systems concept to identify the roles FOs played and the constraints that hamper them from playing their role to the fullest extent. The case study approach also highlighted a number of best practices and lessons learned. Finally, research findings allowed the research teams to identify the main issues for strengthening the role of FOs in agricultural innovation systems.

#### *3.1 Orienting research and development for cotton production in Benin*

The first case study conducted in Benin (Kouton *et al.* 2006) focuses on FUPRO, the national federation of village farmers' groups and associations, district and provincial unions. FUPRO is a key actor in the Benin cotton sector and was created with assistance from the public sector services, which previously managed this strategic sector. Cotton-sector reforms resulted in a more prominent role for FUPRO in orienting agricultural research and development (AR&D) services within the cotton sector. FUPRO participates in a national private-sector platform (*interprofession*) that allocates resources to public-sector cotton research (research proposals) and agricultural extension (recruitment of extension agents) through a central fund, which is derived from cotton levies. Both producers and ginner agree on the percentage of the market

cotton price that is donated to this fund. The cotton research institute has two eco-regional antennas while agricultural extension services are represented in all provinces and districts. The annual program for cotton research is being decided upon in the national platform. Debate among stakeholders mainly focuses on financial issues and less on relevance of research proposals.

At the provincial and district levels FUPRO member organizations have strong, historical relationships with public-sector services and are now developing relationships with the private sector, but not through participation at a multi-actor platforms (because they do not exist). These relationships still focus on receiving knowledge-for-innovation services rather than orienting these services around members' needs. The knowledge services provided are mainly oriented towards inputs such as cottonseeds, fertilizers and pesticides. Cotton producers therefore consider innovation to be driven by the national cotton research institute and the private sector, both of which have up-to-date information on international trends and markets. The fact that cotton levies (to which producers indirectly contribute) are used to fund research and extension is insufficiently exploited by FUPRO and its member organizations to make their members' point of view weigh more heavily in decisions taken. More content-oriented, decentralized platforms are required in order to prepare the decision-making on funding by the national platform.

### *3.2 Cooperating with agricultural service providers in Benin*

The second case study in Benin (Dotia, Kouton and Wennink 2006) concerns two FUPRO member district unions (UCPs) - one in Kalalé district (in an important cotton-producing region of northern Benin), another in Boukoumbé district (in the northwest) - and a cashew growers' district union (ACooBéPA) in central Benin. The two cotton producers' unions receive management support from FUPRO, while the cashew growers' union is assisted by a national NGO, which is paid for the support services it provides by a donor-funded agricultural diversification project.

Cotton producers' unions have strong relationships with the district extension services, which provide management assistance, despite the official policy of transferring this assistance to FUPRO. Extension focuses on new cotton inputs (especially pesticides), which are provided by the private sector. The nature of the working relationships with the district extension service depends on the financial resources of the cotton producers' union (the volume of cotton produced and marketed). The Kalalé union contributes financially to the extension services but without actually orienting these services, even now that the majority of district extension agents are paid through centrally collected cotton levies. Both the union and the extension service in Boukoumbé are much 'poorer'; the latter hardly benefits from newly recruited extension agents through cotton funds since the region produces much less cotton. They therefore cooperate on a more 'closed purse' basis. In both the northern/north-western and central regions of Benin, the cotton producers' provincial unions (of which these district unions are members) participate in zonal (agro-ecological) platforms for planning agricultural (applied and adaptive) research, but representation and accountability are poorly organized and information rarely circulates at the grassroots level.

With respect to the cashew growers' union (ACooBéPA), research and extension services are managed by the project themselves. The project management unit has a research contract with the national agricultural research institute to develop technologies that are then disseminated by agents from the NGO. Research issues are identified during the project formulation phase

and are updated without strong institutionalized participation by the cashew growers' union. NGO extension agents provide training-of-trainers services to selected union members. Contrary to cotton producers, indigenous knowledge remains a source of innovation for cashew growers; it is only over the past few years that formal research (with financial support from the project) has received a new impulse for dealing with cashew-growing issues. Technological innovations have spread rapidly, with the help of trained cashew growers and their local networks.

In all three district unions, members feel that relationships with service providers should evolve and be based on a more client/user service-provider relationship, which also has implications for the mission and skills of the technical staff. However, both cotton and cashew producers emphasize that their unions were created to improve access to markets, which remains according to them a prerequisite for actual innovation.

### *3.3 Linking actors for potato production and marketing in Rwanda*

The case study conducted in Rwanda (Fané *et al.* 2006) covers the potato production and marketing chain in the northwestern part of the country and more specifically investigates the role of IMBARAGA, a national farmers' syndicate. In the post-conflict period, IMBARAGA (with assistance from a national FO and NGO network, ROPARWA) took the lead for improving input supply, research and extension services for potato production, and by organizing the marketing of potatoes. Farmers operate in cooperative structures, and storage facilities were built to organize multiplication of improved (registered) seed potatoes, to improve access to other inputs and to facilitate the marketing of potatoes. Building on the rich Rwandan tradition of farmers' associations, IMBARAGA assisted potato-producing associations to form federations that lobby for their interests and negotiate with the private sector.

In cooperation with public-sector services and local NGOs, IMBARAGA facilitated farmer participation in research and extension. Researchers are encouraged to conduct on-farm research, while extension agents train farmers to conduct farmer-to-farmer extension. In its approach to AR&D. On a more extensive scale, the district agricultural extension service and IMBARAGA developed a farmer-to-farmer extension programme. Farmer extensionists are selected and trained to organize meetings of both community-based and potato-producing organizations. Producers were informed about market norms and standards with which technologies have to comply. IMBARAGA thus combines the chain and community approach: through their participation in platforms with other chain actors, federations are informed about market demands, and farmer extensionists embed knowledge transfer into a local community context.

An assessment of the farmer-to-farmer approach shows that lack of financial remuneration and weak linkages with research for knowledge input limits its impact. This is the start of a more pluralistic service provision system that needs strong but decentralized coordination in order to clearly articulate the needs of different production chains and local development stakeholders. Another challenge concerns lobbying for laws and regulations that allow producers to participate fully in multiplication of improved and registered seed potatoes, since the supply through public services remains a problem.

### *3.4 Networking for agricultural innovation in Tanzania*

In Tanzania farmer fora are being established at ward, district and national level and these fora are empowered to procure and contract services. Existing FOs play a role in innovation by linking community-based farmers' groups into larger networks (i.e. MVIWATA and MVIWAMO experiences) and by representing their members in decision-making platforms on agricultural service provision. Tanzania has a wide variety of farmers' groups at the community level, through both farmer-led initiatives and development projects. However, not all these groups are genuine, or registered, and are not sustainable without external assistance, while service providers increasingly seek collaboration with farmers' groups but do not have sufficient background information about them (Lema and Kapange 2006).

The first Tanzanian case study (Kaburire and Ruvuga 2006) concerns MVIWATA, which is the first farmer-led network with a national coverage. MVIWATA links local FOs in networks at different levels to enhance farmer representation and advocacy. Community-based FOs, whether organized via MVIWATA (or other) assistance, form the building blocks and focus on self-reliance and collective action. Through training on leadership and communication they are now capable of defending their members' interests and building partnerships with service providers supplying a wide range of services. MVIWATA is increasingly involved in representative bodies and, to some extent, in service provision. MVIWATA considers (technological) innovation to be successful only when farmers have access to services such as input supply, credit facilities and marketing.

The local FOs also form the main actor for managing knowledge and information for innovation: they are trained to network with community members and other FOs and to include indigenous knowledge when participating in (formal) research activities. Furthermore, in cooperation with other institutes, MVIWATA actively disseminates information on best practices in technological (agricultural practices), institutional (relations with service providers) and organizational (group dynamics) innovations by publishing information and broadcasting via radio programmes. Farmers' institutions are now being increasingly recognized as a "capital" for agricultural innovation. Despite MVIWATA's efforts in knowledge and information services to its members, the overall poor quality of the communication infrastructure remains a major concern. The lack of market opportunities for farmers remains another significant obstacle to agricultural innovation.

### *3.5 Linking farmers' organizations with service providers in Tanzania*

The second Tanzanian case study (Masandika and Mgangaluma 2006) focuses on MVIWAMO, a relatively young, member district network under MVIWATA that aims to assist FOs in networking activities. FOs are community-based and their joint activities therefore have an out-scaling effect on the community. These organizations are also trained in participatory assessment of problems and identifying solutions that lead to a wide range of services being provided to members. Promoting agricultural (technological) innovation is achieved by organizing thematic workshops, visiting community farmers who are successful innovators, and by organizing exchange visits both inside and outside Tanzania. The effectiveness of these visits for the community is monitored through a learning approach, with the FOs involved and their network meeting on a regular basis to discuss their successes and failures. Although FOs play an important role in agricultural innovation, other services provided to members, such as access to input supply and credit facilities, and marketing of crops and livestock products are all conditions for successful innovation. Therefore

MVIWAMO encourages networks to organize complementary services to their member FOs. Openness of (public and private sector) services for collaboration and functional district-planning and communication fora are therefore required.

#### **4. STRENGTHENING THE ROLE OF FARMERS' ORGANIZATIONS IN AGRICULTURAL INNOVATION**

##### *4.1 Overall key issues*

The case studies show that FOs operate in an increasingly pluralist service provision sector, in which the public-sector research and extension institutions are being deconcentrated and the private-sector service providers (e.g. enterprises, NGOs, and FOs) are developing a market share. FOs are also increasingly valued for representing social capital that is crucial for the necessary transformation of the African agricultural sector. The way in which FOs seize these newly created opportunities are strongly determined by their origin and history.

According to the nature of the investments used to build the organizations and the types of links that are being pursued by the FOs, three types of FOs can be distinguished (adapted from Bingen and Rouse 2002; Bingen, Serrano and Howard 2003):

- (i) “Old” commodity-based FOs (i.e. FUPRO Benin and its member unions, but also the more recent out-growers associations) have been created through the initiative of (and with assistance from) parastatels or private enterprises. They have contract-type relationships with private enterprises for adequate handling of input supply, processing and marketing of products and relations with RPOs are purely contractual. Less attention goes to facilitating knowledge and information flows and interaction between stakeholders. Innovation is mainly technological, oriented by the commodity market and driven by the private sector.
- (ii) “New” market-oriented FOs with collaborative relationships (i.e. ACooBéPA Benin and IMBARAGA-affiliated potato producers’ federations) seek to develop collaboration with chain actors, using assistance from externally funded projects and/or NGOs (which often initiated the creation of the FO). The focus on innovation remains technological if the project and NGO manage relationships (i.e. Benin case) but also involves institutional dimensions (i.e. Rwanda case) when both NGO and FO clearly aim to build sustainable institutions. This makes innovation a co-managed process during which modalities for collaboration between chain actors change according to the challenges that are being faced.
- (iii) Service-system-oriented and network FOs (i.e. MVIWATA and MVIWAMO in Tanzania, but also IMBARAGA in Rwanda) emphasize self-reliance by promoting community-based FOs that are also part of larger networks. Through collective action (social capital) and participation in local fora, they establish partnerships with other actors for service provision in various areas (information and training on technologies, credit and savings schemes, etc.). Innovation has a rather organizational and institutional character as a prerequisite for technological innovation. It is often embedded in participatory approaches for resolving problems. Agricultural innovation is driven by farmers’ needs and concerns general issues that are common to most farm households. Clearly defined strategies for capacity building and valuing investments that have been made for innovating are critical for ensuring positive impact on rural livelihoods (see also Friis-Hansen, Aben and Kidoid 2004 for cases in Uganda).

The on-going reforms in the agricultural sector require a redistribution of the roles of different stakeholders in the innovation system and the establishment of new links. Such new links are not always formalized and sustained (through appropriate funding mechanisms; see also Collion and Rondot, 1998). In all cases presented above, private goods, such as agricultural inputs, and related knowledge services, are increasingly seen as private-sector business. This compels public-sector organizations to redefine their role in relation to the private sector; the latter often only serves part of the farming community. All FOs contribute to the so-called support functions within the innovation system, e.g. credit and savings schemes, and marketing of products. Farmers consider these services to be crucial for (technological) innovation. FOs' contributions to knowledge services vary according to the type of FO involved. Commodity-based and market-oriented organizations studied consider research and extension as belonging to other institutes from both the public and private sectors. These institutes are important drivers behind innovation, even though adequate financial resources of these FOs could have allowed them to better orient services towards the needs of their members. Service-system-oriented and network FOs play a much more active role in agricultural services, but in turn lack resources to set the services' agendas.

#### 4.2 *Best practices and lessons learned*

The case studies allowed for identifying best practices and lesson learned for farmer-led innovation systems, in several areas, such as: farmer experience-based policy-making; sharing knowledge-for-innovation; guiding the innovation process; and coordinating complementary (support) services. These lessons learned are summarized in Table 1. Experiences indicate that FOs play and can play an important role in sharing knowledge by initiating multi-actor platforms for interactive learning and by implementing joint activity programmes with services on a cost-sharing basis. A major challenge facing FOs is to develop sustainable funding mechanisms for these (farmer-led) initiatives (see also Heemskerk and Wennink 2005).

Table 1: Best practices and lessons learned from the case studies

<b>AIS functions</b>	<b>Best practices</b>	<b>Lessons learned</b>
Policy-making and implementation	FOs contribute to policy-making by providing FO experiences (evidence-based) <sup>d)</sup>	Reinforce the FOs' capacity for evidence-based policy-making ("learning-by-doing")
	Empowering FOs with grass-roots links (social capital) for agricultural innovation and transformation <sup>c) d)</sup>	Prepare an (district) overview of FOs/FGs, their characteristics and functions to identify their (potential) roles
	Training local FO leaders to voice their demands <sup>d)</sup>	Document FO experiences of voicing demands for innovation
Exchange and share knowledge, identify knowledge needs and supply information	Local learning initiatives (FRGs, FEGs, FFS, etc.) for sharing and exchanging experience and information <sup>a) d) e)</sup>	Establish partnerships with the public and private (market-oriented) sector to advance and guide experiential learning
	Use printed material (newsletters) and media (radio programmes) for sharing information <sup>a) c) d)</sup>	Document FO-initiated best practices to gain credibility with technical and financial partners

<b>AIS functions</b>	<b>Best practices</b>	<b>Lessons learned</b>
	Joint activity programmes between FOs and public-sector agricultural extension for providing front-line services <sup>b) c) d)</sup>	Design sustainable funding mechanisms and coordinate services provided by the public sector and private enterprises
Guide innovation processes, identify knowledge needs and supply information	Synergy between production and marketing chain-oriented and community-based information and training approaches <sup>c)</sup>	Establish interactions between commodity-based and general issue FOs for putting cross-cutting issues on the AR&D agenda
	FO initiated (provincial) technical committees (themes, crops or products) to orient innovation activities <sup>b) c)</sup>	Link with formal multi-stakeholder platforms that have a decision-making mandate on AR&D programmes
Provide complementary and supporting services	Linking development investments with FO managed contracts for client control over services <sup>d)</sup>	Design service provision and delivery systems at local governance entity level

Case studies referred to a) FUPRO-Benin; b) District producers' unions-Benin; c) ROPARWA/IMBARAGA affiliated POs-Rwanda; and d) MVIWATA/MVIWAMO network FOs-Tanzania.

Another issue is that chain-oriented and network-based approaches for knowledge services combine two core strengths: chain orientation links producers and markets for orienting the innovation process (standards and norms) and keeps the producers 'sharp', while using local networks allow for socially embedded organization of knowledge diffusion and exchange. Chain development can also generate financial resources for funding service provision. Initiatives such as thematic groups, technical committees, etc. organized by FOs themselves allow to link chain-development from a producers' perspective with decision-making fora on AR&D services at district, provincial and national level.

### 4.3 Strengthening the role of FOs

Agricultural innovation is an interactive, multi-actor process that cannot be achieved by farmers alone. It requires not only links but also strategic alliances between FOs and other institutions. Knowledge of these key elements therefore allows: defining the roles of public and private sector service providers; designing appropriate funding mechanisms to underpin these links and enhance the farmer-led and demand-driven services; and determining the innovation perspective (technological, institutional and/or organizational).

Linking with key actors for innovation is not limited to those that provide straightforward knowledge services; importantly it also extends to parties that contribute to services such as credit and savings schemes, infrastructure development, and input supply and marketing channels (see also Sanginga *et al.* 2004). From the farmers' point of view, these services are of vital importance to successful innovation, and AR&D issues therefore need to be contextualized and accepted as such by other actors and stakeholders.

The knowledge services provided need to be responsive to farmers' needs if they are to have a positive impact on their livelihoods. This demands an effective participation by farmers and their organizations in planning and monitoring & evaluation of the services provided. FOs

themselves can strengthen institutionalized participation by developing the skills of their technical staff to assist FO representatives in preparing planning sessions. A challenge is to develop mechanisms for farmer-led M&E that allow clients'/users' evaluation and/or beneficiary assessments, and thereby make service providers accountable, more responsive and more efficient. Experience shows that the underpinning funding mechanisms largely determine the degree of farmer ownership and consequently the responsiveness of the services provided.

Identifying strategic sectors, crops, products or topics, plus innovation drivers and triggers, and consequently the key stakeholders, is all vital to successful planning of and resource allocation for knowledge services. Participatory planning procedures therefore need to broaden priority setting for technology development and dissemination. The fact that all FOs focus heavily on services other than research and extension once again emphasizes the importance of factors and issues other than knowledge and technology in achieving effective innovation. FOs need to develop capacity at various levels in relation to innovation development such as formulating comprehensive strategies for technological innovation (within a chain development context) and creating interactive learning platforms.

Sharing and exchanging knowledge and information is crucial and requires appropriate fora where stakeholders meet on a regular basis. Other (public-sector research and extension) institutions often initiate these local-level multi-stakeholder platforms (Farmer Research Groups, Farmer Extension Groups, Farmer Field Schools, farmer fora, etc.). However, FOs need to take the lead in developing platforms at the provincial and national levels in order to provide indigenous knowledge and to make service provision more farmer-centred and farmer-accountable. Developing learning capacities is first of all a joint process taken together with other innovation stakeholders.

Innovation also includes organizational innovation. FOs need to adapt themselves to a changing context through collective processes that allow for learning from knowledge and the experience gained by members, staff and similar organizations, in order to continuously improve procedures and practices. Effective operational communication systems and well-maintained and accessible institutional archives are two important pillars of a learning farmer organization.

Knowledge services and technologies provided to farmers are often standardized, and they seem to be less adapted to the different social groups and types of farming households that comprise their memberships. However, FOs have sufficient information to grasp the socioeconomic diversity of the membership base (e.g. as part of their membership registration and administration) and can define acceptable criteria for all to characterize member groups and specify demands for services.

Weak representation of minority groups (e.g. very poor farmers and women) in decision-making processes due to cultural and institutional barriers remains an important recurrent issue. Internal institutional barriers can be identified and removed (i.e. to go beyond window dressing), though external facilitation is often needed to achieve this. Service providers also need to develop inclusive mechanisms and make participation, inclusion and downward accountability a joint responsibility within the service system. However, case study results indicate that strong community-rooted farmers' groups form building blocks for larger organizations and, in combination with training for communication and leadership skills, can

enhance opportunities for all social groups to have their voices heard, and thus facilitate upward participation and downward accountability.

Social, human and financial capital together provide a solid basis for sustainable FOs, which can then fully participate in platforms, fora, etc. on policy-making and implementation. However, many FOs rely on external funds for organizational functioning and institutional development. Empowerment therefore requires reinforcing both the financial resources (e.g. levies on marketed products, mobilizing resources through grass-roots financial institutions) and the power base (i.e. integrating existing farmer networks and federations). Once the role of FOs strengthens, political interference is also likely to increase, as already sometimes happens at the district level. FOs therefore need to urgently develop their local networks – not only to achieve an even stronger base, but also to further strengthen downward accountability and upward representation.

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