

FARMERS' ORGANIZATIONS AND AGRICULTURAL INNOVATION

- CASE STUDIES FROM BENIN, RWANDA AND TANZANIA -

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EXECUTIVE SUMMARY

Context and background

Since the 1990s Sub-Saharan African countries have embarked on major agricultural sector reforms, which led to changing and innovative roles for the public and private sectors as well as civil society organizations. Farmers' organizations (FOs) now increasingly voice the needs of their members in various fora on policy-making and orienting service provision. They are solicited by the private sector to enhance chain development, including those for new markets, and they play a role in local development planning. FOs are now, more than ever, actively involved in agricultural development, which requires institutional, organizational and technological innovation in order to be successful. Providing user-oriented research, extension, and training services is therefore a prerequisite for technological innovation. Institutionalizing participatory methods, decentralizing services, creating multi-actor platforms and multi-stakeholder driven funding mechanisms all enhance demand-driven agricultural services. 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. However, the effective use of new technologies to become innovations is often defined by conditions other than simple access to knowledge and information; it often requires appropriate, innovative institutional and organizational settings. The agricultural innovation systems (AIS) concept therefore considers links between actors, interactive learning processes, and the policy and institutional contexts that govern the system 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.

Research and extension organizations have moved from working with individual farmers to collaboration with groups and, increasingly, with farmers' organizations. At the grass-roots level, farmers' associations, producers' groups and cooperatives, as well as specially created farmers' groups, 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. 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. 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 several roles, contribute to various functions that enhance successful innovation and increasingly provide services themselves.

Case studies

This bulletin analyzes the roles played by FOs in agricultural innovation using the innovation systems concept and investigates the constraints that hamper them from playing their role to the fullest extent. Case studies were therefore conducted, in partnership with farmers' organizations, as well as research, extension and training institutions in Benin, Rwanda and Tanzania. The case study approach also highlighted a number of best practices and lessons learned. Finally, research findings allowed the teams to identify the main issues for strengthening the role of FOs in agricultural innovation systems.

The first Benin case study focuses on FUPRO, the national federation of village farmers' groups and associations, district and provincial unions. These are key actors in the Benin cotton sector and were 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 that allocates resources to public-sector cotton research and agricultural extension through a central fund, which is derived from cotton levies. Both producers and ginners agree on the percentage of the market cotton price that is donated to this fund. At the provincial and district levels FUPRO member organizations have strong, historical relationships with public-sector services and are developing relationships with the private sector, but without any functional multi-actor platforms. 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, with an increasing role for the private sector. 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.

The second case study in Benin 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. Working relationships with the district extension service depend on the financial resources of the cotton producers' union. 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 Boukoubé union and the extension service are much 'poorer'; the latter hardly benefits from newly recruited extension agents 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 regional platforms for planning agricultural research, but representation and accountability are poorly organized and information rarely circulates at the district level. With respect to the cashew growers' union (ACooBéPA), research and extension services are managed by the project itself. 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 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.

The Rwandan case study covers the potato production and marketing chain in the northwest region of the country in investigating the role of IMBARAGA, a national farmers' syndicate, and ROPARWA, a national network of FOs and NGOs. In the post-conflict period FOs and NGOs took the lead for improving input supply, research and extension services for potato production, and 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 IMBARAGA combines the chain and community approach when organizing knowledge-for-innovation services: 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. However, funding remains the main challenge to sustain these initiatives. 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.

A DRT (Department of Research and Training) paper on the agricultural sector policies for empowering farmers and their organizations precedes the Tanzanian case studies. Building on recent experiences, the paper presents the main orientations for real farmer empowerment, and focuses on agricultural innovation. Farmer fora are being established at ward, district and national level and 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. Networking capacities allow these farmers' groups to be strengthened and thus become key partners for innovation. Although farmers are represented in local research and extension committees, farmers' representatives have little influence and often merely represent themselves. Farmers' representatives need to be replaced by representatives from FOs in order to enhance downward accountability. Appropriate information and funding mechanisms, for example, will strengthen FOs to better articulate their problems and needs. In line with the bottom-up approach for strengthening farmers' groups and networks, participatory planning, monitoring and evaluation will also be organized, initially from the village, then the ward and district levels.

The first Tanzanian case study concerns MVIWATA, which is the first farmer led network with a national coverage. MVIWATA links local farmers' groups in networks at different levels to enhance farmer representation and advocacy. Community-based farmers' groups, 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 farmers' groups also form the main element for managing knowledge and information for innovation: they are trained to network with community members and other farmers' groups 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 constraint. The lack of market opportunities for farmers remains another significant obstacle to agricultural innovation.

The second Tanzanian case study focuses on MVIWAMO, a relatively young, member district network under MVIWATA that aims to assist farmers' groups in networking activities. Farmers' groups are community-based and their joint activities therefore have an out-scaling effect on the community. These

groups 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 farmers' groups involved and their network meeting on a regular basis to discuss their successes and failures. Although farmers' groups play an important role in agricultural innovation, the extension services provided to members, access to input supply and credit facilities, and marketable crops and livestock products are all conditions for successful innovation. Therefore MVIWAMO encourages networks to organize complementary services to their member farmer groups. Openness of (public and private sector) services for collaboration and functional district-planning and communication fora are therefore required.

Research findings

The case studies show that FOs operate in the changing context of 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 farmers' organizations) 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. However, the way in which FOs seize these newly created opportunities are 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 farmers' organizations can be distinguished:

- Commodity-based FOs (i.e. FUPRO Benin and its member unions, other FOs around the 'classical' cash crops (coffee, cacao, etc.) for export, but also out-growers associations) have been created through the initiative of (and with assistance from) parastatels or private enterprises. They have established contract-type relationships with private enterprises for input supply and marketing of produce. Innovation is mainly technological and oriented by the commodity market and the private sector.
- 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). Innovation remains technological if the project and NGO manage relationships (i.e. Benin case) but becomes institutional (i.e. Rwanda case) when both NGO and FO clearly aim to build sustainable institutions.
- 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 farmers' groups that are also part of larger networks. Through collective action (social capital) and participating 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.

The case studies demonstrate that FOs currently access various sources to gain knowledge and information from both the public and private sectors, and use those that are most appropriate to them. However, new links are not always formalized. In all cases, 'private goods' and related knowledge and information, such as agricultural inputs (seeds, fertilizers, pesticides, etc.), are increasingly seen as private-sector business. This compels public 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 agricultural innovation system, e.g. input supply, credit and savings schemes, and marketing of products. Farmers consider these services to be crucial for (technological) innovation. FO contributions to the so-called basic functions (research and extension) vary according to the type of organization involved. Commodity-based and market-oriented organizations studied consider research and extension as belonging to other institutes and organizations from both the public and private sectors. These are the main drivers behind innovation, despite the fact that the resource base, particularly of the commodity-based organizations, allows services to be oriented according to their membership's needs. However, service-system-oriented organizations play a much more active role in knowledge and information services, but in turn lack resources (and thus power) to set the agendas of these service providers.

The case studies allowed researchers to identify best practices and lesson learned in several areas, e.g.:

- farmer experience-based and evidence-based policy-making;
- sharing knowledge-for-innovation;
- guiding the innovation process by integrating production and marketing chain-oriented and community-based approaches; and
- coordinating complementary (support) services at the local level.

Experiences indicate that FOs can play an important role in sharing knowledge-for-innovation by initiating multi-actor platforms for interactive learning and by implementing joint activity programmes (including use of the media) with extension services on a cost-sharing basis. A major challenge facing FOs is to develop sustainable funding mechanisms for these (farmer-led) initiatives.

Strengthening the role of FOs

The following key elements need to be considered when attempting to strengthen the role of FOs in agricultural innovation, i.e. the:

- policy environment and institutional context (notably the integration level of farmers and their organizations into markets);
- assets and needs of the organization's membership base; and
- type of FOs involved.

Agricultural innovation is an interactive, multi-actor process that cannot be achieved by farmers alone. It requires not only links but also alliances between FOs and other institutions. Knowledge of these key elements therefore allows:

- defining the roles of public and private sector knowledge-for-innovation 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).

Several challenges emerged from the case studies with respect to empowering farmers and their organizations in general, and agricultural innovation in particular. AR&D issues, which are usually limited to technological constraints and priorities, should be seen in the wider context and accepted as such by other actors in the innovation system. This allows FOs to identify key services and service providers, besides research and extension, necessary to achieve successful innovation. FOs are increasingly being solicited to participate in planning (priority-setting and resource allocation) for service provision, but the mission statements formulated by many FOs and the specific skills of their representatives need to be developed further in order to increase effective participation. Furthermore, participation in services needs to go beyond planning and include monitoring and assessment of services provided, particularly since FOs themselves are starting to provide these services to their members and other farmers.

Appropriate funding mechanisms that enhance effective participation in decision-making processes remain crucial when designing service systems. This also evokes the challenge of enlarging the resource and power base of FOs to make them less dependant on external funding and more sustainable. More important than identifying AR&D 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 also calls for developing capacities and skills of FOs in areas such as:

- participatory and evidence-based policy-making;
- formulating comprehensive strategies for (technological) innovation; and
- designing multi-actor institutions for interactive learning.

Operational communication and knowledge/information management within FOs remain major challenges to enhancing organizational learning. Finally, equitable representation, social inclusion, upward participation and downward accountability within FOs are recurring issues for which strong community-based farmers' groups remain an essential prerequisite.