### **INNOVATIVE ACTIVITY PROFILE 4**

### **Providing Farmers with Direct Access to Innovation Funds**

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#### **SYNOPSIS**

pecific grant programs—referred to here as "Farmer Innovation Funds"—can be designed to provide direct, fairly simple competitive access to small grants or loans for individual farmers or farmer groups, businesses, or other stakeholders who wish to adapt, develop, or adopt innovations and business initiatives on topics and issues of their own choosing. Access to such funding allows a wide range of innovations to be tackled, and under proper conditions may expand enthusiasm and innovation capacity among smallholders, other rural stakeholders, and those who support them. Different funding schemes have been tested and adapted in several countries throughout Africa, Asia, and Eastern Europe, with specific objectives, types of farmers, setups, grant sizes, and screening and support mechanisms. The funding schemes are highly dynamic, evolving in response to changing circumstances and experience gained. Farmer Innovation Funds work better if and when decentralized settings are used and when support institutions have the necessary skills and experience to implement them. Funding mechanisms can be made more sustainable by linking them with savings and credit schemes and structures (should they exist) and/or by embedding them within existing agricultural R&D institutions and mechanisms for fostering innovation. Farmer Innovation Funds are most powerful when they are not implemented in isolation but as part of systemic, long-term efforts to promote and strengthen sustainable farming, participatory innovation development, and dynamic innovation systems and processes, in which the roles and skills of various stakeholders (particularly smallholders) are recognized and supported.

# CONTEXT: WHY PROVIDE INNOVATION FUNDS DIRECTLY TO FARMERS?

Although efforts have been made to provide public funding to foster innovation among a diverse group of stakeholders through competitive bidding (see, for example, World Bank 2010), such funds still tend to be allocated primarily to research and extension institutions or other formal actors in the agricultural sector (such as large NGOs), partly as a result of the high administrative and technical requirements for accessing the funds. Consequently, such institutions and actors retain an overwhelming influence and control over the main decisions related to who should benefit from such funding, how the innovation process is organized, what types of activities are implemented, and by whom. Conversely, farmers and other stakeholders involved rarely have direct access to (and hence have little to say about) funding to implement their own ideas about which innovations o explore. In most cases, farmers receive limited financial support to compensate them for the cost of their participation in specific activities being funded (such as working on experiments, linking with other actors, and so on) or to motivate them to try out new technologies developed by others.

### PROJECT OBJECTIVES AND DESCRIPTION

This profile examines how funding schemes to support farmer innovation ("Farmer Innovation Funds," FIF) can be designed and what lessons can be drawn, based on two sets of experiences:

■ Local Innovation Support Funds (LISFs) were initiated under the Prolinnova¹ network to test if and how

research and innovation funding could be channeled to, governed by, and accessed by small-scale farmers through small grants (typically a few hundred dollars or less) for developing innovations of their own choosing. LISFs specifically target poor and vulnerable households and focus more (but not exclusively) on local ideas and technologies (existing or new), depending on what farmers actually want to achieve. LISFs have been operating on a pilot basis in several low-income countries in Africa and Asia over the past five years.

■ Competitive Grant Programs (CGPs) focus on commercially oriented, small- to medium-size farmer groups and small rural businesses. Although CGPs work with poor farmers, they prioritize commercially oriented ones. The CGP focuses on business and market-oriented activities and emphasizes adapting and adopting existing technologies (but not exclusively). CGP grants are generally much larger than LISF grants (typically US\$10,000 or more). Grants include funding for investments to set up the innovative activity, for external technical assistance, and for technology transfer and demonstration to other farmers and stakeholders. A CGP initially operated in Albania, and similar schemes are being implemented in Armenia, Azerbaijan, and Kazakhstan.

Both funds have some generic features. They are both designed to provide a diverse spectrum of beneficiaries or clients (including farmers, land-users, and rural businesses, either as individuals or as members of groups) with easy access to relatively modest grants or loans allowing them to develop, invest in, and strengthen initiatives and innovations that they consider worth pursuing and which also have the potential to produce public goods such as economic growth and rural employment, social equity, and ecosystem services.

The funds can be used for various purposes and types of innovations, including technical ones (natural resource management, for example, or improved production, processing, or transformation of produce), organizational ones (such as better access to input, service, and produce markets), and institutional ones (such as creating new institutions and rules or transforming existing ones). To fulfill this purpose, funds may be used for implementing diverse types of activities: experimenting on a smallholder's own farm, engaging in joint experimentation and other activities by farmers and other stakeholders (researchers, extension agents, and so on), transferring existing technology, or sharing and disseminating successful experiences. In doing so, the aim is also to strengthen the individual and collective

capacity of the fund recipients to innovate and to increase their overall contribution to and participation in the innovation process.

Funds are administered by small multistakeholder committees or secretariats (usually with 5–10 members but no more than 2 or 3 in the case of the CGPs) in charge of organizing the calls for proposals and creating sufficient awareness about the fund, clarifying the funding modalities (grant size and cofunding share, interest rate if a loan is involved, and so on), screening applications in a formalized and transparent way, and overseeing the effective disbursement of funds (adapted to the financial services and circuits available to the applicants).

In most cases, field days or innovation fairs and/or commercial radio or TV programs (in the case of CGPs) are organized to share the results obtained by farmers through their fund-supported activities. The intention is to increase awareness about the funds and motivate more farmers to apply for the next cycle of funding.

Other key activities typically include capacity building for those who handle the fund at the local level as well as representatives of organizations supporting farmers' innovation. A typical fund program also seeks to establish an enabling environment for implementing grants, allowing careful M&E, and ensuring effective learning and sharing with members of the FIF committees and with relevant agricultural R&D institutions and policy makers. These efforts are aimed at creating awareness and support for the fund program's longer-term sustainability.

#### **INNOVATIVE ELEMENT**

Farmer innovation funds present a handful of innovative elements:

- They are designed to be easily accessible to small-scale farmers and other stakeholders through simple application forms and procedures, simple fund disbursement modalities, support provided to farmers to fill in application forms and meet eligibility criteria, and the possibility of applying as individuals or groups.
- They are meant to solve problems and to test innovations defined and chosen freely by the applicants themselves.
- Some FIFs (such as LISFs) strive to give farmers a prominent role in fund governance, including setting up criteria for selecting applicants, screening proposals, and M&E.
- FIFs have a relatively light administrative structure, so that over time the corresponding costs are reduced and

bureaucracy is minimized, allowing timely response to applicants and disbursement of grants.

#### **BENEFITS AND IMPACTS**

The funds have reached several thousand farmers to date. Table 5.12 summarizes information on numbers and amounts of grants made in several countries in 2005–10.

*Impact assessments* of the LISF program are being carried out. Initial evidence in Ghana and Ethiopia indicate that

many "new" innovations are emerging as a result of LISFs. Not only the farmer innovators but also other farmers who benefitted from sharing results are reporting higher crop and livestock productivity and increased savings and incomes. In both Ethiopia and Ghana, different stakeholders state that more use is being made of participatory approaches to extension work in the zones where the LISFs operate. For examples of innovations explored through FIFs, see box 5.35.

CGPs have proven effective in supporting farmer groups and emerging rural businesses to introduce, test, and

Table 5.12 Key Characteristics of Farmer Innovation Fund Grants Made in Several Countries, 2005–10						
Country	Period covered	Applications received	Percent approved	Loan or grant?	Award size (US\$)	Who are the applicants?
LISF scheme						
Cambodia	2005-09	193	69	Loan	10-100	Individuals filtered by group
Ethiopia	2005-09	109	43	Grant	<100-300+	Both individuals and groups of 4-5 persons
Ghana	2008-09	80	43	Grant	30-300	Mostly individuals
Kenya	2008-09	103	22	Grant	50-250	Mixed/unisex groups and individuals
Nepal	2004-09	63	38	Grant	50-750	Mostly individuals
South Africa	2005-09	65	23	Grant	700-2300+	Mixed/unisex groups and individuals
Tanzania	2008-09	25	64	Grant	500-1000	Group applications only
Uganda	2005-08	98	68	Mostly loan	25-120	Initially groups, later also individuals
CGP scheme						
Albania	2002-08	656	22	Grant	3,000-15,000	Groups and associations
Armenia	2006-09	276	20	Grant	Up to 20,000	Groups, associations, small businesses
Azerbaijan	2007-10	279	22	Grant	10,000–30,000	Groups, associations, small businesses

Source: Authors.

Box 5.35 Innovation Themes Explored in the Local Innovation Support Funds and Competitive Grant Programs

Crop and animal husbandry. Examples include devising inexpensive animal rations by replacing externally bought feed with locally available feed, treating animal disease with local plants, selecting germplasm adapted to local conditions, controlling bacterial wilt in enset (false banana), devising effective water-harvesting methods, improving apple and peach production technologies, and using plastic mulches in vineyards.

**Processing and storage.** Examples include vegetable preservation, improved sheep cheese production and brand marketing, and improved onion storage.

*Improved quality and marketing.* Examples include collection and standardization of olive oil, improved

*Source*: Compiled from several LISF and CGP reports.

lean-meat pig production and marketing, improved packaging of aromatic and medicinal herbs, and improved packaging and marketing of honey.

**Development of niche markets.** Examples include production of honeybee feed, production of saplings for forest and ornamental trees, and production of aromatic and medicinal plants.

Sustainable natural resource management. Examples include increasing biodiversity and combating deforestation through regeneration of an endangered native tree species of economic value.

**Social innovation.** Examples include organization of groups for developing innovations and improving savings and credit schemes.

demonstrate innovative technologies to a broader audience of potential rural entrepreneurs and beneficiaries. About 85 percent of the direct grantees (for example, 700 farmers in Albania) experienced an increase in yearly income and were likely to continue their activities after completion. Over 20,000 farmers were directly exposed to new technologies through the technology transfer activities, with an estimated 3–5 emulators per grant at completion and an additional number likely to adopt and possibly adapt the technologies in subsequent years (boxes 5.36 and 5.37 provide examples of a CGP and an LISF case).

### LESSONS LEARNED AND ISSUES FOR WIDER APPLICATION

A number of lessons from the Prolinnova experience with FIFs may be useful in designing similar interventions. They are summarized in the sections that follow.

# Ensure that funds are used for their intended purpose

Farmer funds are meant to support innovation or promote the adoption of new, relevant technologies (rather than

# Box 5.36 An Example of a Competitive Grant Program Grant: Improved Onion Storage and Marketing in Albania

A local farmer association asked for a competitive grant to build a small onion storage facility to lengthen the marketing period and obtain higher prices during the off-season. During the grant period, the association increased from 7 to 32 members, each with about 0.15 hectares of onions and total production of around 350 tons per year, and signed a contract with a trader in Tirana to purchase the onions. Around 37 tons could be stored at a time, with further investments planned to increase storage capacity and to purchase a vehicle for

distributing the produce. Other activities included purchase of a sprayer and irrigation pump for use by members and drying onion seed for planting. During the grant period, dissemination included two workshops, five training days, three publications, and a local TV broadcast focusing on various aspects of onion production and marketing. This grant eventually resulted in linking production with markets and contributed substantially to the development of a viable farmer association in a remote corner of Albania.

Source: World Bank 2011.

### Box 5.37 An Example of a Local Innovation Support Fund Grant: Propagating Podocarpus in Ethiopia

In the highlands near Ambo in Ethiopia, communities rear livestock, produce crops, and plant trees for food and income. One tree genus of socioeconomic importance is *Podocarpus*, a conifer that produces good timber. These trees are becoming extinct because of high demand and the long dormancy of the seed, which takes up to a year to germinate. A farmer, Jifara Workineh, applied for and obtained an LISF grant to test various germination methods with the aim of shortening the dormancy period and regenerating the tree population in his community. The LISF grant provided him with the required material inputs. Jifara eventually developed a successful method of reducing

the dormancy period by placing seed mixed with soil in a polybag, burying it in a hole, and providing sufficient regular water. The method resulted in a high germination rate (85 percent) and reduced the dormancy period from over a year to three weeks. Based on these results, Jifara received an award from the government, which raised his self-esteem; his income increased from selling seedlings; and the community's stocks of *Podocarpus* have increased. In addition, researchers' and especially extension workers' attitudes towards farmers changed, as they now recognized the contributions of local farmers to local solutions using mostly local resources.

Source: Prolinnova-Ethiopia, personal communication.

purchasing inputs alone). They generally achieve the intended objective if good overall management of the program is ensured, local community-based organizations and farmer organizations are strongly involved, proposals are selected according to clear criteria and procedures, and grants are formalized through signed contracts.

With respect to LISF schemes, greater clarity about fund use emerged gradually, after some initial confusion about whether LISF grants could cover input costs. With respect to CGPs, three elements are taken into consideration in the grant: investment, technical assistance, and technology transfer. Operating costs and purchase of inputs are normally part of the beneficiary's contribution, unless they are clearly related to the demonstration function of the grant.

#### Target the funds carefully

The best results are observed when funds are set up to target preexisting community-based organizations, farmer groups, and institutions that have prior experience with participatory approaches, and when good support institutions or service providers are selected.

Support institutions often face significant challenges in terms of their ability to provide sufficient initial mentoring to farmers and other grantees and then to step back and allow fuller appropriation of the scheme by local actors. Support institutions also need to develop the capacity to attract and involve major "conventional" agricultural R&D actors, a recurrent challenge for NGOs engaged in FIF schemes. In particular, it is critical to bring local and national extension and research partners on board to facilitate the scaling-up of the process and the results of such schemes.

# Value added of farmer innovation compared to joint innovation by farmers and agricultural R&D

Localized innovation with minimal support from outside generally yields results that can be readily understood and available to neighbors of farmers benefitting directly from FIF grants. It is also a good way of empowering farmers and strengthening their capacity to engage with the formal agricultural R&D environment.

For its part, joint (multistakeholder) innovation deriving from structured and systematic interactions between farmers, researchers, and other actors in agricultural R&D is geared more toward generating results that can be scaled up with greater certainty. It is more costly and riskier than local (farmer) innovation, as it invariably takes time to assemble the right mix of partners and skills and to ensure it is

adequately resourced. It may result in delayed implementation of activities and "hijacking" of the process by researchers or extension agents, which may lower the motivation of the farmers. But provided things are done properly, that the diverse stakeholders perceive the value of working together, and that trust develops among the parties, several advantages emerge as the potential synergies between these actors come into play. Farmers, scientists, extension agents, and private business owners learn and improvise together—which is the full expression of an effective innovation system. Joint innovation also usually implies improved research design, more rigor in implementation, and better documentation of results, all of which increase the prospects of wider application and dissemination of innovation.

# Costs associated with implementing an effective FIF program

One key objective in establishing a fund program is to keep administrative, support, and supervision costs as low as possible, compared to the amount invested in experimentation by grantees. Given the fairly experimental nature of the LISF and CGP programs profiled here (implying that new mechanisms and setups had to be designed), and the fact that some expenses are fixed (such as those for M&E or for establishing and operating committees), the relative amounts devoted to such costs versus the amount of the grants themselves may be quite high, especially in the initial stages.

Experience with LISFs over the past five years indicates that, in the start-up phase, about two-thirds of the program costs are associated with capacity building for farmers and support institutions, operational costs (making calls, screening proposals, reviewing progress, and so on), creating awareness about the fund, technical external backstopping by service providers and research, sharing and disseminating process and results, and M&E and impact assessment. About one-third of program costs are for the grants themselves. Over time, the costs associated with running an FIF gradually decrease relative to the cost share of the grants, to about two-thirds grants and one-third running costs. Overall, the absolute costs for the grant component in the FIFs vary greatly according to size of awards, scale of the program, and level of cofunding by grantees.

#### Effectiveness and dynamics of fund setups

The appropriate setup (local versus institutional, decentralized versus centralized) for governing and managing the fund depends on the specific context, experiences, opportunities,

and the scale at which implementing a FIF program makes the most sense. FIF programs have generally been moving towards more farmer-led governance mechanisms and structures. This shift requires support organizations to move away from managing funds directly and to become more involved in building the capacity of farmer groups to manage funds autonomously. Support institutions also play an increasingly important role in ensuring the quality of proposals and integrity of fund use. The case from Cambodia (box 5.38) illustrates the evolving nature of the setup.

Ideally, both local and central approaches could be implemented at the same time. This strategy would speed the learning process and the way the entire agricultural R&D system operates and responds to farmers' needs and desires.

# Sustainability and scaling up of FIF programs: Advances and challenges

At the *community level*, considerable progress has been achieved in giving farmers access to innovation resources

and in building their capacity to collaboratively manage funding schemes at their level through specific training and mentoring by support organizations. In financial terms, sustainability and a sense of responsibility can be enhanced by putting payback arrangements into place within community organizations, as done in the case of the LISF Cambodia and Uganda. Not all stakeholders are keen on a loantype mechanism for funding research and innovation, however, as this approach is easily confused with a classic microcredit or loan scheme.

At a higher level, efforts to institutionalize the FIF concept within the country's agricultural R&D systems are incipient. In Tanzania, a local government has agreed to help replenish the LISF in one district. In other countries, some government agencies participate actively in implementing LISF pilots. In Cambodia, the government and donors are interested in supporting the recently established central institution running the LISF over the long term (box 5.38). In Albania, the Ministry of Agriculture, Food and Consumer Protection built on the initial CGP approach by creating an investment grant model in the

### Box 5.38 Dynamics of the Local Innovation Support Fund Setup in Cambodia, 2006–10

An initial structure for the Local Innovation Support Fund (LISF) in Cambodia was designed based on a feasibility study carried out in 2005–06. From the start, it was decided to operate the LISF as a revolving fund. Farmers could apply to the LISF for a loan, on which interest was charged. This setup was seen as the best way to make farmers feel more responsible for carrying out LISF activities and to replenish and expand the initial fund, linking it to existing community-based savings and credit schemes. From 2005 to 2008, LISF pilots were established in three provinces, each with a different organization playing the leading role, overseen by an LISF National Steering Committee coordinated by the Cambodian Center for Study and Development in Agriculture (CEDAC), which also coordinates Prolinnova-Cambodia. Although LISF operations were highly decentralized in operational terms, the three provinces followed a common procedure. Fund requests by individual farmers were first sent to a farmer association, which compiled and forwarded

them to the lead LISF partner in the province. After a preliminary review of the proposals, this partner forwarded them to the LISF National Steering Committee for a final decision.

In 2008, the LISF scheme was expanded to 11 provinces involving a total of 20 NGO members of Prolinnova–Cambodia, but it proved too difficult to ensure the necessary capacity building and the quality of the proposals and ensuing experimentation. It was also challenging to handle the varying degree of ownership by farmers and local support institutions as well as to monitor the results. Moreover, it was difficult to attract funding from the national government and from international donors.

In response, starting in 2011, a new structure was designed to implement the LISF through a farmer-governed, centralized national fund under an existing farmer organization at the national level, Farmer and Nature Net (FNN). CEDAC and other Prolinnova—Cambodia partners play solely an advisory role to the

Sources: Vitou 2008; FAIR workshop reports 2009, 2010. Note: CEDAC = Centre d'Etude et de Développement Agricole Cambodgien. official government agricultural support program. In Central Asia, CGP-like schemes have been set up to emulate the success obtained in Albania.

When integrating innovation funds into a wider framework, is it highly desirable to implement parallel activities contributing to farmer empowerment and capacity strengthening. When such integration has been achieved, the scope and opportunities for an effective and sustainable funding scheme are greatly expanded, at least in contexts where poverty and serious social and economic problems prevail.

With respect to choosing the appropriate grant size, small grants are extremely relevant for very poor, risk-averse farmers working with little outside help and little need for investment in equipment or infrastructure, and on innovations that have a strong location-specific character or an inherently small niche. They may also be a good way to start and experiment with the FIF concept and process, before institutionalization takes place.

Larger grants are relevant for better-off farmers, for group applications, when costs of external research and advisory services are factored in, and for supporting increased commercialization in rural areas. If and when actors from formal agricultural R&D are ready to integrate FIFs into their activities, they will usually be more willing to go with bigger grants than with small grants.

#### **CONCLUSIONS**

FIFs are a valuable, vital component of a wider approach to strengthening innovation capacities and systems. By making innovation funds more readily available to farmers and other relevant stakeholders, FIFs, as illustrated by the LISF and CGP experiences, are performing an essential role in strengthening innovation and promoting a greater role and voice for farmers and other rural stakeholders in governance of agricultural R&D.

FIFs are most powerful when they are not implemented in isolation but form part of systemic, long-term efforts to promote and strengthen sustainable farming, participatory innovation development, and dynamic innovation systems and processes, in which the roles and skills of various stakeholders (particularly smallholders) are recognized and supported. An FIF program should be complemented with investments in a number of related areas that create an enabling environment for agriculture: improving research and extension (to make them more responsive to demand), nurturing the emergence and consolidation of a vibrant private sector capable of providing services and inputs and processing the produce, establishing effective coordination mechanisms among these stakeholders, designing and funding policies that will favor rather than restrain innovation, improving education and training, and favoring market linkages, among others.