INNOVATIONS IN EXTENSION AND ADVISORY SERVICES INTERNATIONAL CONFERENCE

PROCEEDINGS

FARMER-MANAGED INNOVATION FUNDS DRIVE MULTI-STAKEHOLDER LEARNING PROCESSES

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ABSTRACT

Smallholder farmers in developing countries seldom have the chance to decide how public funds for agricultural innovation are used. The outputs of formal research and the messages extended by rural advisors often do not meet the needs and suit the conditions of these farmers. Under FAIR (Farmer Access to Innovation Resources) smallholders are now deciding on the use of local innovation support funds (LISFs) in eight countries in Africa and Asia: Cambodia, Ethiopia, Ghana, Kenya, Nepal, South Africa, Tanzania and Uganda. The LISF is a new institutional arrangement for joint learning and innovation by farmers and other key actors in agricultural development. It gives smallholder farmers – men and women – the means to design,

implement and evaluate their own processes of exploration and development. It supports decentralised farmer-led experiments and sharing of findings, from farmer-to-farmer and through formal extension channels. It stimulates farmers to identify how other actors - especially agricultural advisors and scientists - can support farmers' efforts to improve their farming systems. The management committees for LISFs – usually district-based - involve in some cases only farmers and in most cases involve other local actors as well. These local networks are linked through a national PROLINNOVA (Promoting Local Innovation) platform of actors from State and non-State organisations who seek to integrate farmerled participatory research and extension, based on local innovation, into mainstream research,

development and education. The work with LISFs is proving to be effective in achieving this institutionalisation from the bottom up. The paper highlights how the LISFs link with extension services and influence how these operate. The experiences provide broader lessons for using LISFs to link farmers, advisors, scientists and local entrepreneurs in joint learning driven by the interests of farmer groups and communities.

KEY WORDS: FARMER EXPERIMENTATION, INSTITUTIONALISATION, PARTICIPATORY APPROACHES

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INTRODUCTION AND OBJECTIVES

Research and advisory services in most developing countries still operate mainly in the transfer of technology mode, although there is a gradual increase in participatory approaches in recent years. Throughout history, farmers (including livestockkeepers, forest dwellers and fishers) have been the prime source of knowledge and the major agents of innovation in agriculture and natural resource management (NRM), but their contribution has often been ignored by formal agricultural research and development (ARD). Farmers have little say in how funds for ARD are used. The outputs of research and the messages extended by advisors often do not meet the farmers' needs and suit their conditions. Some efforts have been made to provide public funds to foster innovation, building on the contributions of diverse actors, e.g. through competitive grant schemes (World Bank, 2010). However, these funds tend to be allocated mainly to research, extension or large international nongovernmental organisations (NGOs). Such institutions retain an overwhelming influence on decisions about the topics and approaches and on how farmers may take part in this process. There is evidence, however, that small amounts of money made available directly to smallholders under their own control can help accelerate innovation and make the process locally sustainable (e.g. Ashby et al., 2000).

Since 2003, partners in PROLINNOVA (Box 1)

have promoted farmer-led approaches to ARD. We raised awareness in research and extension agencies about the innovativeness of smallholders. However, after identifying local innovations, extension agents tended to disseminate the innovations, rather than the approach of encouraging more farmers to experiment and adapt. Similarly, scientists tended to plan research to validate the local innovations, instead of supporting farmers in seeking answers to their own questions (Wettasinha et al., 2006). PROLINNOVA partners hypothesised that this power balance would change if farmers controlled the funds for local experimentation and learning. We developed the concept of Local Innovation Support Funds (LISFs) to allow farmers to 'call the tune' in ARD (Waters-Bayer et al., 2005; Veldhuizen et al., 2005).

Since 2005, LISFs have been piloted in an action-research mode under the banner of FAIR (Farmer Access to Innovation Resources), initially in four and, from 2008 onwards, in eight countries in Africa and Asia (see Table 1). We wanted to see if and how funding can be channelled to, and accessed by, farmers through small grants for experimentation and learning, and if this approach could improve smallholder farming and increase their influence on mainstream research and extension. The farmers can use the funds to investigate ways to improve farming and NRM, focusing on topics and questions of their own choosing; they can identify and hire the support

BOX 1: PROLINNOVA

PROLINNOVA (Promoting Local Innovation in ecologically oriented agriculture and NRM) is an international network of State and non-State actors in 19 countries in Africa, Asia and Latin America. It was initiated by NGOs as a Global Partnership Programme under the auspices of the Global Forum on Agricultural Research. The partners are united in the convictions that:

- farmers are creative and generate relevant local innovations, i.e. new and better ways of doing things
- extension and research should support farmer-led innovation processes involving partnership between farmer groups, development agents in State and/or non-State organisations, scientists in research centres and universities, and the local private sector.
 Each Country Platform (CP) is composed of people from various institutions concerned with ARD. The CP designs country-specific ways to promote local innovation and to integrate farmerled joint innovation into formal institutions of research, development and education.

they need from external specialists; and they can decide what information they want to share with others and how.



Countries	Pilot areas	Co-ordinating NGO			
Cambodia	10 provinces in Central, Eastern and South-eastern Cambodia	Centre d'Études et de Développement Agricole Cambodgien (CEDAC)			
Ethiopia	Amaro, Southern region; Ambo, Oromia region; AgriService Ethiopia (ASE) Axum, Tigray region				
Ghana	4 zones, each comprising several districts, in Upper East and Northern regions	Association of Church Development Projects (ACDEP)			
Kenya	Busia and Nyando districts, Western region; World Neighbors (WN) Machakos and Mwingi districts, Eastern region				
Nepal	2008: 3 districts each in Eastern, Central, Western, Mid-Western and Far-Western regions; reduced in 2011 from total of 15 to 4 districts	Far-Western regions; reduced in Development (LI-BIRD)			
South Africa	8 communities in Amangwane and Amazizi tribal authorities, Uthukela district, KwaZulu-Natal province	Farmer Support Group (FSG)			
Tanzania	Central zone, Dodoma region; Southern highlands zone, Mbeya region	ern highlands Participatory Ecological Land Use Managemer (PELUM)-Tanzania			
Uganda	Kayunga, Luwero, Masaka, Mityana, Mubende, Mukono, Nakasongola, Rakai and Wakiso districts, Central region	Environmental Alert (EA)			

MATERIALS, METHODS AND DATA SOURCES

In each country, the PROLINNOVA partners conducted an exploratory feasibility study, on the basis of which they selected areas for piloting the LISFs, as shown in Table 1.

The co-ordinating NGOs facilitated multistakeholder learning platforms that guided and reflected on the piloting process. Decisions about use of the funds were usually made at district or zonal level by Fund Management Committees (FMCs). In some cases, e.g. Ethiopia, South Africa and Uganda, these involved only farmers, who received advice from district extension staff in government offices and local NGOs; in other cases, some of these extension staff were members of the FMCs. In Kenya and Ghana, researchers were also involved. The PROLINNOVA CP linked the FMCs and the local multi-stakeholder learning platforms to the learning platforms at national and/or provincial level, which included policy-makers in government agencies. This was already a strategy toward institutionalisation: through the interaction in LISF piloting, the stakeholders gained an understanding of the

approach and were challenged to think about changes needed within their institutions to allow it to be applied more widely.

Design of LISFs

In each country, a multi-stakeholder team was set up to co-ordinate the piloting. Based on lessons drawn by the PROLINNOVA International Support Team (IST) from an international review of experiences (Veldhuizen et al., 2005) and with subsequent guidance from the IST, the country teams developed guidelines for managing the grants. They set up the FMCs and facilitated these committees in agreeing on criteria for selecting grantees. They built the capacity of FMC members and staff of local supporting organisations to handle the LISF process. They were also involved in monitoring and evaluating the process and in facilitating sharing and learning between the FMCs and with ARD institutions and policy-makers, so as to create awareness and stimulate their support in continuing the LISFs.

The FMCs, usually with 5–10 members, were in charge of making the LISF known, organising calls for proposals, clarifying funding modalities (grant size, co-funding share etc.), screening applications, overseeing fund disbursement and M&E of the funded activities and results.

Farmers – individuals or groups – could access small grants to further explore ideas that they regarded as worthwhile and that the FMC

regarded as potentially beneficial for the community, particularly for resource-poor households. The LISFs were designed to be easily accessible to smallholders through simple application procedures and rapid fund disbursement modalities.

Grants could be used for various purposes and different types of innovation, including technical (e.g. improved production or processing of farm produce), organisational (e.g. creating better access to input, service and produce markets) and institutional (e.g. adjusting local rules for NRM). Grants could be used for small-scale experimentation on one's own farm, joint experimentation by farmers and other actors (extension agents, researchers etc.), sharing experiences and results, and other learning events. Besides generating locally relevant innovations, the LISF process was meant to strengthen farmers' individual and collective capacity to innovate and to influence formal research and extension.

Operation of the LISFs

The FMC circulated open calls for proposals, sometimes in written form but mainly by word-of-mouth. FMC members and staff of the local supporting organisations helped farmers to understand the eligibility criteria and to write proposals of 1–2 pages with a simple budget, sometimes even writing down oral applications on behalf of illiterate farmers. The FMC screened the

proposals according to the agreed criteria, selected the grantees and arranged or oversaw the distribution of resources in cash or kind to the farmers. The main criteria for screening the proposals were fairly similar across all pilots and were that:

- the idea was driven by the farmer applicants (not by extension agents or scientists);
- the innovation to be explored appeared sound in economic, environmental and social terms;
- the innovation could be used by poor farmers (needed only locally available, low-cost inputs);
- the support through the LISF could add value to (improve or validate) the innovation;
- the applicants were willing to share their results;
- the proposal was for local experimentation and learning, not for farm investment.

The farmers who were awarded grants conducted their own experiments or led joint experimentation with other farmers and advisors, sometimes also scientists, or co-organised training or study visits. The FMCs ensured that the activities were done according to the (usually written) agreements with the grantees. The FMCs and development agents organised field days or innovation fairs and used rural radio and – in the case of Cambodia – a farmer magazine to share the farmers' findings and to motivate more farmers to apply for the next round of funding. The experimenting farmers also shared their results during informal farmer-to-farmer visits. The national PROLINNOVA team

used the examples of functioning LISFs to try to convince policy-makers in extension and research that this approach was a feasible and effective way to stimulate innovation processes relevant for smallholders.

Monitoring and evaluation (M&E)

As this was a pilot activity, much attention was paid to M&E of the LISF arrangements and outcomes in order to learn and adjust the approach and to assess the potential for scaling it up. The PROLINNOVA IST developed a detailed monitoring tool ('register') to record comparable data from all of the countries involved. Assisted by a scientist from CIRAD, the PROLINNOVA CPs doing the LISF piloting developed guidelines for participatory assessment of impact at community and higher institutional level (Triomphe *et al.*, 2012). During the pilot phase, four main levels of co-learning were supported by M&E:

- Community level: through learning-by-doing, joint reflection and local M&E, farmer groups learned how to assess the relevance of proposed research for community needs, how to manage innovation funds and how to take the lead in joint innovation activities involving also non-farmers, and they learned from the results of the local experimentation and investigation.
- District and/or zonal level: through training, mentoring, supporting the pilots and coorganising innovation fairs, staff of extension



services, local administration and NGOs learned about farmer innovativeness and priorities, how to facilitate and support farmer-led innovation processes, and the roles of different actors in innovation systems. In some cases, people from a nearby research centre and/or agricultural college were directly involved in the M&E and learning from the local pilot.

- Provincial and/or national level: through workshops to reflect on M&E and impactassessment findings, the multi-stakeholder platforms learned about the feasibility and effectiveness of farmer-managed innovation funds, how farmer-led innovation processes can be enhanced and how an LISF approach can be mainstreamed as a complement to conventional research and as an alternative approach to extension.
- International level: through annual international workshops and bi-annual e-conferences to compare and analyse structures, procedures and outcomes of piloting LISFs, PROLINNOVA partners in both piloting and non-piloting countries learned about promising ways to enhance rural innovation and to influence ARD policy and practice; this mutual learning helped the CPs and the PROLINNOVA IST to draw lessons for policy influence and to strategise for scaling-up participatory approaches.

RESULTS AND DISCUSSION

Table 2 summarises information on the numbers and amounts of grants made in the eight countries in the past six years, based on data available to date.

Gender issues

In most countries, more grants were made to male than to female farmers. This was because illiteracy rates were higher among women than men and the percentage of women in the FMCs was higher (which reflected – with respect to the development staff involved – the percentage of women at that level). In South Africa, where eight out of 12 FMC members were women, over half the grants were made to individual women and to mixed groups dominated by women. In Uganda, where 55% of the FMC members were female, the grants were made to three women-only community-based organisations (CBOs) and nine mixed-gender CBOs. Women made up about one-third of the FMC members in Kenya, where the CP insisted on having at least two women in each FMC. Here, grants were made on an almost equal basis to men and women as individuals and in unisex and mixed groups. In Cambodia, 25% of the FMC members were women; in Nepal and Ethiopia, less than 5% were women. Comparing genderdisaggregated data between countries at review meetings revealed the weakness of some CPs in this regard. For example, the other CPs criticised the Nepal team because grants were made only to

men; the team then gave more attention to women. Likewise, in Ethiopia, the supporting NGOs started to help women prepare their applications, to increase their chances of being accepted for grants. Overall, the number of women receiving grants has increased in the last three years.

Use of funds

Over half of the resources made available to farmers through the LISFs have been spent on farmer or farmer-led own/joint experimentation, covering the costs of, e.g., measuring equipment, protective clothing (when dealing with potentially toxic substances such as biological pesticides), notebooks and other writing materials. The other major activities funded were: learning events such as training by farmer innovators and farmer-to-farmer or farmer-to-researcher visits to find out about local innovations and ways of improving them.

In six of the eight countries, the funds were made available to farmers as grants. In Cambodia and Uganda, the FMCs gave the funds out as loans, to be paid back by the experimenting farmers if their experiments were successful and brought them financial gains. In Tanzania, the experimenting farmers have already made partial repayments in kind.

The topics of innovation and experimentation were diverse and included issues on:

• Crop and animal husbandry: devising inexpensive animal rations using locally available



Country	Period covered	Appli- cations received	Percentage approved	Percen- tage female grantees	Grant size (US\$)	Applicants	Level and type of FMC
Cambodia	2005–09	193	69	39	10–100	Individuals filtered by farmer group	Provincial FMCs, final approval by PROLINNOVA CP
Ethiopia	2005–10	118	43	14	<100- 300+	Individuals or groups of 4–5	District FMCs, fully farmer- managed
Ghana	2008–11	265	64	27	30–300	Mostly individuals	Multi-stakeholder zonal FMCs with farmer representative, final approval by PROLINNOVA CP
Kenya	2008–09	103	22	>50	50–250	Mixed/uni-sex groups and individuals	District FMCs with 70% farmers, also as office bearers
Nepal	2004–09	63	38	30%	50–750	Mostly individuals	District FMCs overseen by national LISF team
South Africa	2005–11	72	35	54	700– 2300+	Mixed/uni-sex groups and individuals	District FMC within Trust made up of community members
Tanzania	2008–11	49	78	n.a. (mixed- gender groups)	500–1000	Group application only	Zonal FMC with farmers, NGO staff and researchers
Uganda	2005–08	98	68	n.a. (mixed- gender groups)	25–120	Initially groups, later also individuals	District FMCs, fully farmer- managed

feed, treating animal disease with local plants, selecting germplasm adapted to local conditions, controlling bacterial wilt, developing biological pesticides, devising effective water-harvesting methods.

 Marketing: developing niche markets for honeybee feed and hives and for medicinal plants, ways of raising and selling tree saplings for on-farm trees.

- Natural resource management: increasing biodiversity and combating deforestation through regeneration of endangered native tree species of economic value.
- Social innovation: forming local groups to develop and demonstrate innovations, improving savings

and credit schemes, refining locally developed livestock-based social insurance system for children in HIV/AIDS-challenged communities.

Impact

The impact assessments conducted in late 2010 revealed important changes at community level in terms of better farmer organisation and improved delivery and effectiveness of advisory services. Involvement of different actors in piloting LISFs contributed to:

- stimulating local innovation initiatives and sharing of new ideas among farmers and with outsiders;
- strengthening farmer self-organisation on locally relevant research and development issues and increasing the capacities of these farmer groups to handle their own innovation and learning funds;
- increasing the capacity of smallholders to access relevant information on agriculture and NRM;
- building the farmers' capacities to formulate their own research and extension needs;
- increasing the farmers' confidence to interact with 'outsiders' (from government and the private sector) in joint investigation of new possibilities to improve their farming and livelihoods;
- enhancing community capacities to critically examine external interventions and to make informed decisions about whether to participate or not;
- stimulating the interest of development agents



and researchers to support farmer-led innovation.

Community members greatly appreciated the fact that the LISFs provided them with the means to design, implement and evaluate their own processes of exploration and development. They reported that the experimenters and other farmers learned from the results of the funded activities and achieved higher crop and livestock productivity, savings on output costs and higher incomes. In Ethiopia and Ghana, both farmers and government staff stated that participatory approaches to extension have become more widespread in the areas where the LISFs operate.

Only a small number of staff in State and non-State advisory services have been directly involved in supporting communities to manage LISFs to date. Particularly through participatory M&E and impact-assessment activities, they have seen how advisory services can draw on local creativity and build on the dynamics of local initiatives. Linking the local learning circles (in the FMCs and in the district- or zonal-level groups supporting the FMCs) and the learning circles at provincial and national level through field visits, workshops and innovation fairs has been particularly valuable. Making this link has introduced different perspectives and has stimulated reflection about how the research and extension system may need to change to respond better to farmers' needs and initiatives. The involvement of government field agents in the

piloting of LISFs is helping to institutionalise this farmer-led approach from the bottom up (Fanos *et al.*, 2011).

Emerging models for LISFs

Two main models are emerging for managing LISFs:

- 1) More centralised multi-stakeholder committees: made up of key partner organisations (including government advisory services) and farmers – this led to more mutual learning between farmers and support agencies, stricter screening of proposals according to the mutually agreed criteria, approval of fewer larger grants and relatively high costs of the staff involved.
- 2) More decentralised committees made up primarily or exclusively of farmers: this led to less involvement of other actors in the funded activities, as they had less opportunity to find out what the farmers were planning and doing. Initially, the farmers did not always use the funds for experimentation and learning, as it took time for them to understand the LISF principles, by reflecting on what the grantees did and whether the results benefited the wider community. More applications were made to the decentralised LISFs and the grants were fairly small, often covering only the direct costs of experimentation or travel by farmers to gain information, but little for bringing in other experts to support the farmers' work. The operational costs of these FMCs were lower than in the first model.

CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

Access to decentralised innovation funds has allowed farmers to work on a wide range of self-defined and self-developed ideas. Where bureaucracy was minimised, it was possible to disburse funds to meet local priorities fairly quickly. This has stimulated enthusiasm among the experimenting farmers, other community members and the local support organisations.

Experiences with institutionalising LISFs within the national ARD systems are incipient; this has become the current focus of work. In 2010 in Tanzania, a local government partner in one district contributed €7000 to the FAIR work - the first example of financial support from local government across all countries. In most countries, government extension services and a few research organisations took active part in implementing the LISF pilots and thus contributed through their staff time. However, this is still often carried out on a weak institutional basis, as support to LISF-related work has not been formally approved at higher levels. In Ethiopia, however, it has been welcomed at district level within the extension service (Fanos, 2011). In Cambodia, the agriculture ministry is supporting a recently established central institution for running the LISF under an existing national farmer organisation, Farmer and Nature Net (FNN).

Challenges

Apart from the major challenge of institutionalising LISFs, a key challenge has been to minimise administrative and support costs. Because the LISFs are experimental in nature and involve the design of new mechanisms, the costs of building capacity in FMCs and local support organisations to handle LISFs (including M&E) were initially high compared to the amounts granted to farmers. In the start-up phase, about two-thirds of the costs were for operational costs and about one-third were for the grants. Over six years, the cost structure changed to about two-thirds grants and one-third running costs, largely because the costs for advisory support to the FMCs had become part of the regular operational costs of the institutions concerned and greater decentralisation meant more tasks were taken over by farmers and other local stakeholders. The process of developing, testing and adjusting LISF models has taken considerable time. Many donors do not easily accept the fact that relatively high start-up costs are involved and that institutionalising LISFs takes much longer than a conventional project phase of three years.

Some other challenges faced during the piloting of LISFs were:

• Low involvement of scientists. It proved difficult to involve scientists, especially where the FMCs were composed primarily or exclusively of smallholders (Model 2 above), because the farmers wanted to experiment on their own using

local advice and scientists had their own agenda and little flexibility in responding to farmers' initiatives. In contrast, there has been an encouraging response from extension agencies that were involved in, or exposed to, the approach.

- Limited sharing of findings. There was limited sharing of the process and results within the countries; communication has taken place primarily during annual workshops of the organisations involved and locally from farmer-to-farmer. However, in some countries such as Ethiopia, extension services have brought advisors and farmers from other areas to visit the FMCs and experimenting farmers to learn about this different approach to development. Some CPs are now supporting farmer-led participatory documentation using photographs and videos in order to share their findings more widely.
- Difficult to generate in-country funding. It has generally been difficult to generate in-country funds for LISFs. In financial terms, some level of sustainability can be achieved if the CBOs put (partial) payback arrangements in place, i.e. the LISFs in Cambodia and Uganda. However, not all stakeholders want a loan-type mechanism for funding local research and innovation, as this approach is easily confused with a classic microcredit scheme for individual farm investment, whereas research using public funding is supposed to generate public goods (Wongtschowski et al., 2010).

Lessons

The experiences during the piloting phase have provided broader lessons for using LISFs to link farmers, local entrepreneurs, advisors and researchers in joint learning, driven by the interests of smallholder groups and communities:

- Stakeholders need time to appreciate the purpose of LISFs. The innovation funds are intended to support experimentation and learning, rather than to cover the costs of inputs for new technologies. Stakeholders often realise this gradually, primarily through support by NGOs with a clear vision of farmer-led innovation inspired by critical reflection during international sharing, selection of proposals according to transparent criteria and procedures, formalising grants through signed contracts that include agreement to share results, and frequent review of criteria and outputs.
- Farmers' experimentation can have a positive impact without external expertise. Local innovation with minimal technical support from outside generally yields results that are readily understandable by, and available to, neighbours of the farmers who benefited directly from the LISF grants. It also builds up farmers' confidence and capacity to engage with formal ARD actors.
- Farmer-led joint innovation can yield more up-scalable results. Joint innovation by farmers, advisors, scientists and local entrepreneurs can generate results that can be



scaled-up with greater certainty, but is more costly than experimentation by farmers only. It takes time to find the right mix of partners and to ensure adequate resourcing of the activities. Collaboration with non-farmers may delay implementation; external actors may 'hijack' the process; this may lower farmers' motivation to continue interacting with others. However, if it is well facilitated so that the different actors perceive the value of collaboration and develop mutual trust, several advantages emerge: the research is usually more systematically designed, the methodology more rigorous and the results better documented; and the different actors improvise together in a more effective innovation process.

- Grant size should differ depending on context and purpose. Small grants are relevant for innovation by poor, risk-verse farmers working on very location-specific innovations with little outside help and little equipment or infrastructure. These grants are primarily for farmers' own experimentation, and can cover a wide diversity of topics. They are also a good way to start trying out the LISF concept and process. Larger grants are relevant for group applications and for more elaborate farmer-led joint innovation, i.e. including costs of external advisers. These larger grants can be more carefully selected to focus on toppriority topics in the community that have greater impact scales.
- Farmers can more easily govern decentralised funding mechanisms. The appropriate set-up (local versus institutional, decentralised versus centralised) for managing an LISF depends on the context and opportunities offered by the policy environment. In most countries where they have been piloted thus far. the LISFs have moved toward more decentralised structures and farmer-led governance mechanisms. This shift has required support organisations to step back from managing funds directly and to focus on building the capacity of farmer groups to manage funds autonomously. LISFs work better when fund management is decentralised, if support organisations have the skills and experience to implement such an approach.
- LISF initiatives need to be carefully targeted.

 Best results were observed when funds were set up with existing CBOs or farmer groups that had prior experience in participatory approaches, supported by similarly experienced development organisations that could provide sufficient initial mentoring to the FMCs and experimenting farmers and then step back and allow full appropriation of the process by the local actors.

 LISFs should form part of long-term efforts to promote and strengthen sustainable farming systems and dynamic innovation processes, in which the role and skills of various stakeholders (particularly smallholders) are recognised and

supported. The support organisations also need to attract and involve major formal ARD actors, particularly in national extension and research institutions, so that both the process and the results of LISFs can be scaled-up.

Implications and outlook

Promising steps have been made toward a complementary funding mechanism that gives farmers direct access to resources for innovation according to their own priorities. The LISF has permitted decentralised farmer-led (joint) experimentation and sharing of findings, both from farmer-to-farmer and through formal extension channels. It has stimulated rural communities to identify how other actors - above all, agricultural advisors and researchers – can support local efforts to improve farming systems. The accompanying training and mentoring by the support organisations have built farmers' capacity to manage public funds at local level. By making innovation funds more readily available to farmers and other local stakeholders, LISFs are performing an essential role in strengthening innovation systems and promoting a greater role and voice for farmers in governance of publicly funded research and extension. This new institutional arrangement to promote farmer-led innovation has potential to make agricultural support services more accountable to, and relevant to, smallholder farmers.

LISFs are still being tested: more work is



needed to learn from the pilots in the different countries, to adapt the LISF concept to different institutional settings and to embed it in local structures and procedures. Comparative research is needed into how agricultural support services transform themselves so they can support farmer-led innovation. It will be especially important to work with farmer organisations to scale-up LISFs countrywide and to mobilise funds from in-country sources, while ensuring that the smallholder focus and the farmer-led character of the LISFs are retained.

ACKNOWLEDGEMENTS

The authors – as PROLINNOVA CP and IST members involved in conceptualising, implementing and assessing the LISF pilots – would like to thank DURAS (Promoting Sustainable Development in Agriculture Research Systems), Rockefeller Foundation and the Netherlands Directorate General for International Cooperation (DGIS) for funding support and the FMCs, experimenting farmers, all other members of the PROLINNOVA CPs and IST, and the PROLINNOVA Oversight Group for the time and insights they gave during the joint learning.

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