

# Policy Brief

## Farmers' direct access to R&D resources accelerates local innovation



### Policy pointers

- Include LISF components in competitive grant schemes for agricultural development, innovation and adaptation where they exist.
- Make LISF part of regular funding systems for agricultural development, innovation and adaptation, where feasible, through support to a national innovation fund.
- Encourage development and testing of country-specific forms of LISF where they do not exist already.
- Create space for research and extension staff to support local experimentation as part of their regular work through relevant policy statements and programme design.

### Focused funding to local innovation and adaption initiatives adds value to production and enhances local adaptive capacities

In today's volatile and unpredictable world, farmers face both challenges and opportunities created by a myriad of changes: price fluctuations, new markets, climate-change induced problems and issues related to wider political or socio-economic development. To respond to this fast-changing environment, farmers need to search for new and better ways of doing things. In this process, they are not only recipients of new knowledge and practices developed by others but also innovators in their own right (Richards 1985, Reij & Waters-Bayer 2001). Innovation "experts" from government agencies, NGOs and the private sector will be most effective if they work with and strengthen farmers' own experimentation and innovation processes through "Participatory Innovation Development" (PID) (Critchley *et al* 1999, Hocdé *et al* 2008, Huis *et al* 2007, Scheuermeier *et al* 2004). This approach helps to strengthen farmers' own capacities to experiment and adapt.

Most conventional agricultural research and development (ARD) funding mechanisms intended to encourage interaction between ARD stakeholders – including farmers – do not effectively support local innovation processes. They are usually managed by formal ARD institutions with little or no influence of farmers and other land-users on funding decisions. As a result, promising local initiatives and innovations rarely receive the support they deserve.

### Creating direct farmer access to innovation funding

Inspired by work in decentralised competitive funding in Latin America and elsewhere (Ashby *et al* 2000, Veldhuizen *et al* 2005), PROLINNOVA, an international partnership programme promoting local innovation and PID, is piloting alternative funding mechanisms that allow local innovators to access resources to support their own research in collaboration with other professionals. The "Local Innovation Support Funds" (LISFs) imply a fundamental change in how research and development (R&D) funding is allocated.

Three central principles of LISFs:

- Funds made accessible directly to farmers or their groups, not via development agencies

PROLINNOVA vision:

*A world where women and men farmers play decisive roles in ARD for sustainable livelihoods*

- Grants used for innovation, experimentation and learning by and with farmers
- Farmers and their organisations play a strong role in deciding on fund allocation.

Recent action research (2007–11) on LISFs conducted by PROLINNOVA with funds from the Rockefeller Foundation and the Netherlands Government (DGIS) involved eight countries: Cambodia, Ethiopia, Ghana, Kenya, Nepal, South Africa, Tanzania and Uganda. Key LISF performance data were captured in an MsAccess-based monitoring and evaluation (M&E) system. Analysis of the data together with findings of recent impact assessments allowed the country teams to prepare detailed action-research reports, which form the basis of this policy brief.

The main purpose of the LISF pilots was to provide recommendations for scaling up and use of LISFs by the formal ARD system, by demonstrating that 1) *LISFs work effectively*, generate good grant applications that are processed using sound criteria, disburse money on time and monitor its use effectively; 2) *LISFs are cost efficient*, performing all tasks with acceptable handling and management costs; and 3) *LISFs can find a sustainable institutional arrangement* that allows them to continue functioning independently beyond the pilot phase.

### Design and operation of LISFs

LISFs are decentralised to the extent possible to facilitate easy access by smallholders. Farmers send in applications using simple formats to a local fund management committee (FMC), either directly or through a local organisation. Wherever strong farmer/ community organisations exist, the FMC is embedded within them, while external agencies serve as members/advisers. In other cases, a multistakeholder FMC is hosted by a district agricultural office or a local NGO. The FMC screens and generally approves grant applications. Working together in the FMC creates a platform for stakeholder linkages and cooperation with impacts beyond LISF activities.

At national level, a relatively small team gives technical support, develops and shares formats and guidelines, and provides overall quality control. In the initial stages,

the quality control role may require checking of all applications approved at the local level before release of grants. As local capacities increase, such checks can be limited to larger grants. The national team also handles the flow of funds to the FMCs and through them to the farmers, except where FMCs have generated funds at their own level.

### Effective handling of LISF grants to innovators

The pilot LISFs managed to generate and process a large number of applications from smallholders in a timely fashion (Table 1). An average of 35 grant applications per year were received and processed in each country, 64% of which met the criteria. In general, the processing of applications from receipt to approval took around 70 days on average, made possible through the decentralised design of the LISFs.

**Table 1: Processing of LISF grant applications in pilots**

Average period covered	Applications received	Applications approved	% approved	Average processing time (days)
4 years	1224	784	64%	71

The decentralised design provided opportunity for women to access LISFs. More than 40% of individual grant applications were submitted by women.

**Table 2: LISF grant volumes and typical use of funds**

Average period covered	Average size of grant (Euro)	Range (Euro)	Funds used mostly for
4 years	72	5–1670	1) Farmers' own experimentation 2) Joint experimentation with other ARD stakeholders 3) Learning/sharing visits



*Innovator and LISF grantee Simon Masila shows his millet field*

Simon Masila from Machakos District of Kenya has developed a system for planting finger millet through seedlings grown in a nursery to overcome the problem of small seeds and to make maximum use of the limited and unreliable rainfall. His initial success, a good harvest when other farmers failed, encouraged him to further develop the system. He applied for an LISF grant to allow systematic data collection and analysis together with other farmers. As a result of this work and increased exposure through the LISF grant, the practice has spread to neighbouring divisions and is raising the income levels of farmers. KARI researchers have initiated their own on-station experiments on this system with the intention of feeding the results back to the farmer-innovator group.

*Kamau GM, Kirigua V, Righa M & Nganga T (2012)*



Jifara showing his innovation to Government officials

Ato (Mr) Jifara Workineh from Ambo, Ethiopia, resolved the long-standing problem of propagating *Podocarpus*, a tree with high economic value because of its good-quality timber. As its seed has a very long dormancy period, few farmers were interested in planting it. In 2007, Jifara started experimenting with ways to break the seed dormancy. When he heard of the LISF, he made an application to experiment systematically with three germination approaches he thought most feasible. The successful completion of this experiment increased his visibility (an award received from the Ethiopian Government) and encouraged him to sign an agreement with an investor in July 2010 to produce 2000 *Podocarpus* seedlings. He is planning to extend his experimentation to tackle wilting of *Podocarpus* seedlings. Farmers in the area have been encouraged by his success and have started growing these trees on marginal land.

Yohannes Gebremichael, Hailu Araya & Tesfahun Fenta (2011)

**Table 3: Cost analysis of LISF pilots**

	% budget as grants to farmers	% budget for capacity building	% budget for local partners <sup>1)</sup> handling LISF	% budget coordination, policy work & action research
Cost analysis action research	30–40%	10–15%	10–15%	35–40%
Forecast regular LISF	60%	10%	10%	20%

1) Partners are organisations involved in LISF handling apart from the country coordinating NGO

Typically, LISF innovation grants involve relatively small amounts of money from a donor's point of view. However, they take on greater significance in the hands of small-scale farmers in the pilot countries. Grant volume ranged widely. Smaller grants were mostly used to buy tools to improve (develop) a farmer innovation and try it out, or to buy inputs such as seeds for simple experiments by farmers. The grants were larger in the case of more complicated, capital-intensive innovations or for joint experimentation activities, including costs of external services such as laboratory analysis, costs of research or extension staff supporting the activity etc.

In order to enhance ownership, innovators receiving LISF grants were required to cover 15–20% of costs from own resources. Though farmers receive LISF funds to generate public goods – new insights and practices for sharing with others within and beyond their communities – (partial) payback arrangements have been used to generate resources for sustaining LISF operations. Payback is recommended when the funded activities directly lead to increased income of the grantee, when funds cover usual farming costs, and when an experienced community-based organisation or farmer group is involved to handle the payback and manage the revolving fund that is formed as a result.

### Cost efficiency of LISF

Given the relatively small volumes per grant and the need for capacity building at various levels due to the newness of the approach and the involvement of staff and farmers at local level, a relatively high level of “overhead” could be expected. Current evidence on LISF operation under action-research conditions confirms this to some extent. When costs of action research and capacity building are taken into account, 30–40% of LISFs have actually been disbursed to farmers.

Detailed analysis of cost data suggests that efficiency can be further improved, leading to a disbursement forecast of at least 60% by phasing out specific action-research budget components, increasing the volume of LISF grants to reach economies of scale, reducing costs by streamlining and standardising procedures and formats, and taking into account revolving funds that continue LISF locally from payback on the (initial) grants.

### Institutional embedding

LISFs can be easily embedded into existing research and extension programmes and thereby reach many farmers. One sustainable option would be to build a LISF component into regular national structures responsible



for funding ARD. While more work is needed on this, initial evidence from the pilots shows that a National (Local) Innovation (Support) Fund can be formed, not only to create visibility for the LISF mechanism but also to set up the basis for a small national technical support and M&E team. Farmer co-management can be ensured by setting up the fund under a credible national (small) farmer organisation and giving other stakeholders clear support roles and mandates. Alternatively, the fund could be linked to the Ministry of Agriculture but with sufficient autonomy to enable light and flexible management. A third option is to create a new legal entity for the national innovation fund. In all cases, LISF implementation will remain decentralised to the local / district level.

### Evidence of impact

Initial impact studies identified key impact areas (see boxes). They revealed that LISF funding has led to (further) development of locally relevant, improved agriculture and natural resource management (NRM) practices and systems. This, in turn, has led to livelihood improvements for those farmer innovators who have received grants. The (improved) local innovations are not yet spreading widely; a longer timeframe is needed to see this impact of LISFs. Farmer capacities have increased in terms of access to information and linkages, self-confidence and recognition within the community and by external agencies, horizontal sharing, joint experimentation and management of innovation funds. Equally important is the increased interest shown by development agents and researchers involved to support farmer-led innovation and research.

### Lessons learnt

- Innovation funds can be handled effectively at local level; well-informed farmers show an interest in applying for (small amounts of) funds to develop, experiment with, test or spread their innovations.
- There is no single best LISF model. Country- and locality-specific forms of LISFs need to be put in place. The model may change over time with increased capacities at the local level.

- Starting a LISF in a new area requires a carefully designed introduction and operationalisation process.
- LISFs can flourish there where local organisations and farmers have basic experience in participatory agricultural innovation development. LISFs can strengthen such programmes.
- LISFs can facilitate successful local learning and experimentation as part of extension programmes. As farmers and support agencies gain more experience, joint experimentation supported by a LISF becomes more systematic and forms a sound basis for effective farmer-led participatory research.

### Implications for policy

- **Channel funding for strengthening local agricultural development, innovation and adaptation through LISFs.** Many current initiatives in agricultural innovation and extension, climate change adaptation (CCA) or strengthening NRM include competitive grant schemes. In countries where a functioning LISF system exists, part of these funds can be allocated to LISFs through its coordinating organisation to enable direct access from the grassroots.
- **LISFs as part of regular funding mechanisms.** Country budgets for agricultural development, innovation and adaptation should have a systemic component for support through LISFs. National innovation funds that build on existing LISF partnerships would be a promising option to realise this.
- **Encourage setting up of new LISFs.** Where LISFs do not yet exist, initiatives to develop and test country-specific forms of LISF should be supported. Partners who have been involved in the current action research can advise groups wishing to embark on LISFs.
- **Create space for supporting local experimentation.** ARD, NRM and CCA policy statements and programme designs should express support for research and extension staff who (wish to be) involved in LISFs and should recognise this as an important aspect of their regular work.

*This brief is based on the action-research synthesis report (PROLINNOVA 2012) and the research and impact assessment reports from the 8 countries involved. The full list of references is available from the PROLINNOVA International Secretariat.*



PROMoting Local INNOVation in ecologically oriented agriculture and natural resource management is a community of practice involving partners in several countries in Africa, Asia and Latin America. Initiated by NGOs, this Global Partnership Programme under the umbrella of the Global Forum on Agricultural Research (GFAR) embraces both state and non-state organisations. It promotes recognition of local innovation by women and men farmers as an entry point to farmer-led participatory research and development. The ultimate aim is to integrate this approach into institutions of agricultural research, extension and education. Funding comes mainly from the Netherlands and French Governments, Rockefeller Foundation and partners' own contributions.