

# Model and upscaling strategies for the Local Innovation Support Fund (LISF) in Ethiopia

by Yohannes GebreMichael on behalf of the PROLINNOVA–Ethiopia Core Team

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## 1. Introduction

The economic and environmental challenges in Ethiopia, which is manifested by food insecurity, poverty and land degradation, can be partly attributed to the vulnerability of rural communities (by far the majority of the population) in decision-making. With the government policy of fast growth and economic transformation, the promotion of modern technologies and inputs has further marginalised the rural poor with limited purchasing power. The existing government research and extension services have many limitations in addressing the needs and priorities of the majority of rural people. Moreover, in rural areas of Ethiopia, there are only a few grassroots institutions and platforms where the poor and vulnerable could make their voices and concerns heard for improvement. Poverty is not only lack of food and resources but also lack of rights. In this regards, absence of proper governance and grievance-redressing institutions have further aggravated the economic and environmental problems that the poor are facing.

On the other hand, land-users in Ethiopia have been adapting to the many environmental, social and policy changes by depending on their deep-rooted experiences in local experimentation and innovation. As the land-users are very heterogeneous in terms of socio-economic status, access to resources and microenvironments in which they live, they have been experimenting on a micro scale to address their specific problems. Many of their innovations are site-specific and invisible even to neighbours, let alone to the outsiders.

There is increasing recognition among agricultural researchers, extension workers and policymakers of the land-users' local knowledge and competence to innovate. However, this recognition has not yet led to empowerment or stimulation of the land-users to do more experimentation and innovation to solve their own problems and to attain food security and sustainable resource management. Unfortunately, the top-down transfer-of-technology approach from formal research to land-users still predominates in the research and extension system in Ethiopia. This has led to at least four fundamental problems:

1. Because the land-users are marginalised from decision-making, the needs and priorities of the rural communities are not being adequately addressed and it has become difficult to achieve food security and sustainable resource management;
2. Outsiders' understanding of the local dynamics is minimal and biased to solve old problems with old solutions, while the reality has completely changed at local level. Communication is difficult

because of the mismatch between the one- or, at most, two-dimensional approach of formal research attempting to solve old problems with old solutions and the three- or four-dimensional issues at local level resulting from rapid changes in conditions and therefore in needs and priorities;

3. Appropriate local innovations that could offer an option or have a synergetic effect together with modern technologies are marginalised, while land-users' own experimentation is undermined;
4. The Ethiopian Government's enabling policy to empower the communities in decision-making and to assure good governance has not yet been implemented at the expected scale and needs further acceleration.

The Local Innovation Support Fund (LISF) that has been piloted in three areas in Ethiopia (see Hailu *et al* 2012) is an innovative mechanism that empowers rural people to solve their own problems and to improve food security and sustainable resource management by giving them access to funds for farmer-led research and development. This report, based on the experience made during the piloting, presents an LISF model judged to be suitable for Ethiopia and suggests a range of options for scaling it up.

## 2. Aims and principles of the LISF

The LISF seeks to make funds directly available to land-users for agricultural experimentation, innovation, documentation and information sharing. It thus seeks to strengthen the visible and invisible self-initiated local innovation and experimentation being carried out in the rural communities.

Some of the fundamental principles of the LISF approach are:

- addressing community needs and priorities
- decentralising power to grassroots communities
- assuring good governance with greater accountability and relevance of research and extension
- stimulating and supporting local experimentation and innovation
- reducing risks involved in local experimentation
- developing appropriate technical and socio-institutional innovations
- strengthening self-confidence and own problem-solving capacity in rural communities
- recognising the social fabric, including values and identities embodied in locally developed or adapted technologies and institutions
- stimulating the spirit of teamwork at local level
- aiming to attain food security and sustainable resource management
- supporting networking and partnership
- Stimulating a paradigm shift in working with farmers (from invisibility to visibility of local initiatives, from seeing farmers as recipients to seeing them as sources of ideas, from seeing farmers as clients to working with them as partners, and from transfer of technology to joint experimentation).

## 3. The LISF model

### 3.1 Governance

PROLINNOVA–Ethiopia has members from different organisations in the national and regional multi-stakeholder "platforms". The network is governed by a National Steering Committee (NSC) that comprises governmental organisations, NGOs, international organisations and committed individuals. A Core Group (CG) elected from and by the NSC facilitates the day-to-day activities. The PROLINNOVA–Ethiopia National Coordinator is a member of the NSC and the CG and refers to this group for decision-making. The CG has overseen the piloting of the LISFs. A similar multi-stakeholder governance system will be needed for scaling up LISFs in Ethiopia, and PROLINNOVA–Ethiopia could serve this purpose.

**Tip:** Make sure that the stakeholders involved in governance are functional, can take responsibility and show genuine commitment. A combination of centralised and decentralised decision-making about the

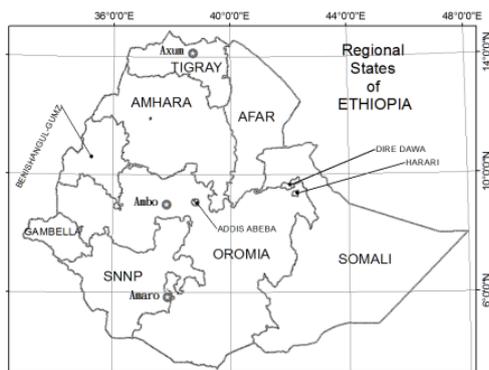
LISFs is fundamental to strengthen self-confidence at different levels and to encourage institutional innovation, partnership and networking.

### 3.2 Piloting

The pilots were in the operational areas of the NGO members of PROLINNOVA–Ethiopia that offered to try out the LISFs. This had three fundamental advantages: 1) the operational costs of the LISF could be minimised, as the piloting could be combined with other NGO activities, such as for transport, fund transfer, training and monitoring and evaluation (M&E); 2) the LISF approach could be easily scaled up in the operational areas of the NGOs; and 3) the LISF management group at local level served as a platform for the NGO, government extension service and community members where they already knew each other.

Other factors considered in selecting the pilot areas were representation of different farming systems and agro-ecologies. This strategy helped to scale up the participatory innovation development (PID) approach in the different agro-ecology-based platforms that had been created within the PROLINNOVA–Ethiopia network. It was also assumed that, no matter which location was chosen, the land users would have some undocumented local innovations and experimentation experiences.

Accordingly, the three pilot areas chosen were: 1) Amaro District, representing major livestock-keeping and *enset*- and coffee-growing areas of the Southern Nations, Nationalities and Peoples Region; 2) the Axum area in Tigray Region in northern Ethiopia, representing small-scale mixed crop-livestock farming with chronic drought and food insecurity; and 3) the Ambo area in central Ethiopia (Oromia Region) with highland mixed farming and *enset* culture (see Figure 1).



**Figure 1: LISF pilot sites in Ethiopia**

LISFs were initially piloted in 2006 in Amaro and Axum with the support of the DURAS (Promoting Sustainable Development in Southern Agricultural Research Systems) project of the French Government as well as the Directorate General for International Cooperation (DGIS) of the Netherlands Government (Tesfahun *et al* 2008). In 2008, the third pilot area was established in Ambo with the support of Rockefeller Foundation, which also supported continued piloting in the two other areas.

**Tip:** The PROLINNOVA–Ethiopia experience showed that piloting in operational areas of existing NGOs not only creates an enabling environment for multistakeholder partnership and scaling-up but is also cost effective, as support to the LISF functioning can be given through the existing government and community structures.

### 3.3 Feasibility study

After the first two pilot areas had been identified, PROLINNOVA–Ethiopia commissioned a feasibility study (Yohannes 2006) to understand the policy environment for introducing an LISF, to document

grassroots institutions that support local innovation, to scan community needs and priorities as an input to the local priority-setting in experimentation and to highlight the opportunities and challenges of operating an LISF.

**Tip:** This feasibility study was conducted by a consultant but it would be more constructive if the local stakeholders would also be involved in the study as a part of capacity building and to enhance their understanding of community needs and priorities in different agro-ecological, farming-system, wealth-rank, and age and sex categories. The process of jointly studying the local feasibility would also lay a foundation for the focus on farmer-led experimentation and would help in setting criteria for selecting local innovators to be supported through the LISF.

### **3.4 Capacity building**

Before starting to pilot the LISF, PROLINNOVA–Ethiopia gave training to the stakeholders in the pilot areas (land-users, extension workers and NGO staff) on LISF principles, local innovation and experimentation, M&E and documentation. Training was considered as a continuous process in the project cycle, where the findings from the experiments were reflected on and feedback from the different stakeholders was collected. The training sessions offered a platform for the different stakeholders to share experiences and paved the way for scaling up the LISF approach in the area.

**Tips:** Make sure that the different segments of the community, e.g. innovators, non-innovators, women, men, youth and elders, self-help group members, as well as development agents (DAs) and NGO staff are included in the training. Make sure that the individuals trained within the support organisations involved also hold similar training sessions within their organisations. Targeting the government DAs in the capacity building helps spread the approach more widely in the rural areas.

### **3.5 Establishment of the Fund Management Committee**

The NGO staff and government DAs identified farmer innovators in the pilot areas and documented the innovations. They facilitated the innovators to form a group and elect a Fund Management Committee (FMC) that ranged in size from five to seven persons and included women. The main functions of the FMC were to coordinate the innovators, to make a call for applications to the fund, to set criteria for selecting grantees, to screen the applicants, to purchase materials for the experimentation, to monitor and evaluate the experiments and to help the farmer experimenters show their findings to other farmers. The FMC did this with support of the local DA and usually had its office with the DA at the local Farmer Training Centre (FTC).

**Tips:** Including other stakeholders (in addition to farmers) in the FMC might be an opportunity to bring in more new ideas and more interdisciplinary work and could also speed up decision-making about the experimentation and the handling of the funds for this purpose. However, care would have to be taken to make sure that the non-farmer stakeholders do not dominate in the decision-making. Transparent discussions with the innovators on this issue would be fundamental.

### **3.6 Disbursement of funds to the FMC**

The supporting NGO usually helped the FMC in obtaining the funds transferred from the PROLINNOVA–Ethiopia Secretariat in Addis Ababa. In the Amaro pilot area, there was already a legally registered community-based institution (CBI), and the supporting NGO sent the funds to the CBI account for local handling by the FMC, which was set up within the CBI. However, there were no registered CBIs in Axum or Ambo. Government policy does not allow the establishment of non-profit-making community-based organisations, but it is possible to work through the existing legal cooperatives and micro-finance institutions to make funds for local innovation directly available to people in rural areas.

**Tips:** Members of innovator groups can contribute a small amount of seed money and use the experimentation to support service delivery or to create a “centre of excellence” as a business that can be sustainable in the long run. In many communities, there are some farmer innovators who use different medicinal plants for livestock disease (ethnoveterinary medicine) and who are paid in kind or cash for their services. Part of this could be contributed to the group fund for experimentation.

### **3.7 Modality of support from the LISF**

Based on the budgets in the proposals approved by the FMC, initially money was distributed to the winning grantees. Then some experimenters come up with an innovative idea of asking the FMC for support in form of the materials rather than the cash needed for the experimentation, as that would minimise the misuse of funds and save their time in finding and purchasing the materials themselves. However, either cash or material support was always available on the request of the experimenter.

**Tip:** Since most of the materials for the experiments can be locally made, it would be wise to connect with local craftspeople to produce the materials needed. This would also support local innovativeness among the craftspeople and minimise the time investment for purchasing from urban areas.

### **3.8 Calls for proposals**

The budget available for the experimentation and innovation was made known by the facilitating NGO to the FMC, the community and its leaders, and the DAs. The FMC, DAs and NGO drew up the call for proposals to be funded and made written and oral announcements at different gathering areas and through customary institutions, cooperatives and self-help groups. The farmer applicants filled in the application form with the assistance the DAs and the facilitating NGO.

**Tips:** At different community gatherings, it would be good to give full information on the annual plan of the LISF and to agree with the community on adequate time for submitting proposals and appropriate grant periods. Moreover, when the call is made, particular emphasis should be given to encouraging applications from women and from women’s and mixed groups in order to lay a foundation for gender-balanced upscaling of the approach.

### **3.9 Fund allocation to farmer experimenters**

Strategically, the LISF was used as seed money to give innovators direct access to funds for experiments and this was meant to trigger and support local innovation. A small amount of money was allocated to each experimenter (ranging from USD 75 to USD 310) and the experiments had to be completed in a short period (six months). The low amount granted per farmer meant that many innovators could be supported in their experimentation. During the piloting, the average time between fund application and fund approval ranged from three weeks to two months. However, with improvement of the application format, capacity building and appropriate planning, this could be shortened to 2–3 weeks.

**Tips:** It is important to consider also high-quality experiments that attempt to address high-priority community problem with larger grants and a longer period for the experimentation. With this in mind, priority should be given to funding proposals coming from groups of farmers working together with other stakeholders. Some of the funds could also be given as awards to farmers who have, on their own initiative, already carried out experimentation that is useful for the community, as well as to local innovators who support experimentation by other farmers. The FMCs should be encouraged to allocate some of the funding for documenting the different experiments and innovations, as this is important for scaling up both the approach and the innovations.

### **3.10 Selection criteria**

The criteria for selecting winning proposals from farmers were set by the FMC and included:

- addressing community needs and priorities
- involving new or modified practice
- suitable for and replicable by resource-poor farmers
- experiment can be completed within six months
- experimental results will be made available to the public.

**Tips:** As mentioned above, larger experiments that demand more funds and need longer than six months to complete should be considered. Individual farmer experimenters who have addressed a community problem and could, with their innovations, set up a service as a business and would like to protect their knowledge with intellectual property rights might also be worth considering. At least it should be discussed in the community whether community (public) funds should be used to support commercial services that could benefit the entire community. In cases when many applications have been received and/or some applicants are illiterate, the FMC could consider inviting the farmers to orally present and defend their applications. This could be useful for vibrant local learning as well as supporting sound decision-making about allocation of funds for community benefit.

### 3.11 Experimentation

During the piloting, most of the experiments dealt with technical issues such as plant and animal protection, beekeeping and improving land productivity. They did address some of the community needs and priorities, but the shortage of time and funds biased the farmers to design short-term experiments on specific technical problems. Moreover, most of the experiments were carried out by farmers on their own or in small groups, with little or no involvement of formal researchers.

**Tips:** The land-users should be encouraged to develop different innovations in management and institutional arrangements in addition to the technical ones. For example, many of the medicinal plants used in plant and animal protection come from communal land and even beyond the community borders; more attention could be given to the role of communal land and the interface between the boundaries of different communities in local innovation processes, possibly leading to forms of socio-institutional innovation. The facilitating organisations could also encourage farmers to involve other types of knowledge-holders in farmer-led participatory experimentation.

### 3.12 Monitoring and evaluation

During the LISF piloting, the FMC members periodically monitored the progress of the different experiments supported by the LISF in their locality. The local DAs and NGO staff, the PROLINNOVA–Ethiopia coordinator at national level and the PROLINNOVA–Ethiopia core group members were also involved in the M&E. The training given by a PROLINNOVA–Ethiopia member on M&E was a good entry point for the partners involved to consider the criteria of the different stakeholders and their dynamics.

**Tip:** The M&E needs to be complemented with further training and workshops for wider spread of the learning and to improve feedback mechanisms across the partner organisations involved in supporting the LISF process. This will be important for scaling up the approach and strengthening partnerships, also beyond the current PROLINNOVA–Ethiopia network.

### 3.13 Dissemination of the results of local experimentation

The findings of the local experimentation and innovation were disseminated to other members of the community during field and exchange visits and through the FTCs, facilitated by the DAs. Community radio stations also circulated information about the experiments and results. Some findings were also published for wider circulation among the PROLINNOVA–Ethiopia member organisations.

**Tip:** To disseminate the findings to a wider community, the FMC could allocate a small part of the LISF, e.g. to invite DAs and farmer representatives from neighbouring communities to visit the experiments.

## **4. Scaling up**

Scaling up is a broad terminology with a wider range of definitions. For some, scaling up is a means of capacity building to plan and implement any development activity (Franzel *et al* 2001) while to others it is considered as an end, i.e. assurance of lasting benefits to more people in a wider area (IIRR 2000). In the case of the LISF, the concept is more complex when we ask what is to be scaled up: the outcome of the experimentation and innovation as technology or the approach to PID through farmer-managed funds. Inherently, new institutional arrangements need to be put in place to be able to scale up the technologies as well as the approach. If there is not a clear concept of self-reliance and good governance in the upscaling equation and if there is not a conducive institutional set-up to empower decentralised decision-making and to stimulate team spirit at the local level, the upscaling cannot be achieved. Therefore, in the case of LISF, the principles can be scaled up only if the institutions involved consider the whole package, which includes institutional change at community and higher levels.

### **4.1 Recognising informal community experimentation and innovation**

In the face of numerous risks and uncertainties in the environment and policy changes in the agrarian economy, the smallholder land-users have had to experiment and innovate to adapt to the various changes. Some of the innovations are site-specific while others are or could be more widely spread. Some innovations are easily visible, while others are invisible – especially the local innovations by women (Fetien *et al* 2001). Documenting the wide range of innovations and supporting the local initiatives in experimentation and adaptation are fundamental to strengthening and scaling up the LISF approach throughout the rural communities in the country.

### **4.2 Policy environment**

Before setting out to scale up the LISF approach, the existing policy environment needs to be carefully considered. In the case of Ethiopia, enabling aspects of the policy environment that offer entry points for scaling up LISFs are: the Government's acknowledgement of the value of indigenous knowledge (IK), the system of giving awards for local innovation, the encouragement given to farmers to organise themselves into groups, access to rural credit, decentralisation of power to the grassroots level and expansion of social and physical infrastructure in the remote rural areas. A strategy of seeking to understand the policy openings for scaling up LISFs is more promising and innovative than focusing on the policy limitations and challenges, which are discussed in Section 5.

### **4.3 Working through existing local structures**

At grassroots level, the LISF has worked through the existing institutional local structures. For example, the *kebele* (subdistrict) leaders facilitated training and demonstration of local experimentation in the community, the CBIs facilitated the disbursement of funds to the innovators, the DAs shared their offices with the FMCs and extended the experimental findings through the FTCs to the community, and the NGOs operating in the pilot areas facilitated LISF management as part of their regular work.

### **4.4 Entry points through different organisations**

As shown in Table 1, the different stakeholders have different core activities that directly or indirectly complement LISF principles. Some of these activities that can serve as entry points for scaling up the LISF approach are: the deep-rooted experience and tradition of the communities to experiment and innovate, the awards for local innovation and demonstration of local innovation at the FTC by the government extension services, the integration of Farmer Research Groups (FRGs) within formal agricultural research, the facilitation of proposals from the community for external support by the Environmental Protection Agency, supporting formal researchers with research grants and awards by the Ministry of Science and Technology, and the focus of some NGOs on low-external-input agriculture, participatory approaches, organising the community into groups, Farmer Field Schools (FFSs), PID, and documentation and dissemination of local innovations.

**Table 1: Entry points for scaling up LISFs**

Organisation	Core programme	Grassroots activities	Entry points for scaling up LISFs
Farmers	Diversity of farming activities	Conducting visible and invisible experimentation on different activities (crop, livestock, NRM) to adapt or develop resilience to external changes	<ul style="list-style-type: none"> <li>- Competence &amp; flexibility to adapt to environmental and policy changes in a continuous process</li> <li>- Potential of experimentation and innovation</li> <li>- Some initiatives of contributing money/income</li> </ul>
Ministry of Agriculture (MoA)	Food security and sustainable resource management	<ul style="list-style-type: none"> <li>- Working through DAs (crop, livestock and NRM)</li> <li>- Selecting innovators for awards at regional and national level</li> <li>- Demonstrating technologies at FTCs</li> </ul>	<ul style="list-style-type: none"> <li>- Documentation of local innovation</li> <li>- FTC as demonstration centre for local innovation</li> <li>- Farmer Innovation Fund (FIF) supported by World Bank</li> </ul>
Environmental Protection Agency (EPA)	Adaptation to climate change (CC) Developing resilience to CC	<ul style="list-style-type: none"> <li>- Implementing at <i>woreda</i> (district) level across the country (soil &amp; water conservation, support with tools &amp; gabion, training)</li> <li>- Project development as focal point for donors</li> </ul>	<ul style="list-style-type: none"> <li>- Accommodation of local innovation in adaption to CC</li> <li>- Facilitate farmers' joint proposal-making for external support</li> </ul>
Ethiopian Institute of Agricultural Research (EIAR)	All programmes in agriculture and natural resource management (NRM)	Different agricultural and NRM programmes and projects closely working with farmers	<ul style="list-style-type: none"> <li>- Acknowledgement of IK</li> <li>- Integration of FRG approach into the research process</li> <li>- Farmers as members of interdisciplinary decision-making committees on research priorities at different levels</li> </ul>
Ministry of Science and Technology	Supporting national growth and transformation	<ul style="list-style-type: none"> <li>- Individuals and institutions have access to research grants</li> <li>- Awarding of individuals and institutions</li> </ul>	<ul style="list-style-type: none"> <li>- Some individual farmers have no access to the innovation awards or research grants at grassroots institution level but could through registered cooperatives</li> </ul>
Universities (Addis Ababa, Ambo, Axum, Mekelle)	In different subjects, PID is included in the curriculum at undergraduate and postgraduate level	Writing senior essays and dissertations on local innovation and experimentation	<ul style="list-style-type: none"> <li>- Acknowledgement of rural community competence to experiment and innovate</li> </ul>
Agricultural Transformation Agency (ATA)	Supporting the MoA in its strategy of agricultural growth programme; addressing bottlenecks	Addressing the narrow approach of the sector and skills to implement	<ul style="list-style-type: none"> <li>- Leverage of most appropriate technologies</li> <li>- Using FTCs as sites for farmer-led experimentation and PID</li> </ul>
Ethiopian Rural Self-Help Association (ERSHA)	Food security, NRM and social services (education, water, health)	Accommodation of local innovation mainly in NRM and food-security activities	<ul style="list-style-type: none"> <li>- Facilitating organisation of farmer committees to implement project activities</li> </ul>
Institute for Sustainable Development (ISD)	Food security, water management, soil fertility, crop protection, promoting local innovation	Functional in 4 regions of Ethiopia in collaboration with extension workers, university staff and farmers	<ul style="list-style-type: none"> <li>- Any local innovation complementing the project aim is supported in cash or kind</li> <li>- Partners are identified to facilitate interdisciplinary ideas</li> </ul>
Best Practices Association (BPA)	Document, demonstrate, publish and circulate	Closely working with innovator farmers	<ul style="list-style-type: none"> <li>- Raising awareness about local innovation; capacity building</li> </ul>

AgriService Ethiopia (ASE)	Food security, social services, NRM	Projects usually donor-driven but support any ideas and innovation in line with the project	- Establishment of community learning fora - Establishment of community innovation development fund would support the LISF aims - Farmer Field Schools
Precise Consult International (PCI)	Supporting local innovation	Spreading to rural and urban areas and working with various stakeholders	Innovation incubators

## 5. Challenges in scaling up

Despite the numerous enabling conditions for scaling up LISFs in Ethiopia, there are also some bottlenecks, such as:

- **Complexity and diversity of the LISF approach.** It is an opportunity that the LISF approach has multiple functions to address the complex and diverse problems of the rural community. The LISF approach includes many components already known in Ethiopia, such as farmer participation, FRGs, and documentation and dissemination of local innovations. However, practising one or more of these components cannot be considered to be the same as practising the LISF approach. Such a perception of LISF would call for capacity building on the inherent principles of LISF, which revolve around supporting land-users directly with funds to do their own experimentation and innovation. In other words, the essence is empowering rural communities to make their own decisions about how to address their needs and priorities through farmer-led experimentation and investigation.
- **Perceptions as “non-scientific”.** Many formal researchers still regard local experimentation and innovation as being “non-scientific”. They have little interest in becoming involved in such processes or to consider publication on such issues, as they feel it will not further their promotion. They need to recognise the benefits for their own research that can be derived from interacting with farmer experimenters and innovators.
- **Attitude to using seed money.** Usually, the government extension and research institutions and the NGOs have access to relatively large amounts of money to run various externally funded projects. They consider the LISF model involves too little money to do the different activities, including daily allowances, training and other personal benefits. Finding the right and committed focal persons in the different institutions to scale up the approach is difficult and very time-consuming. Using small amounts of seed money to stimulate local innovation processes does not fit well into conventional project thinking.
- **Inflexibility of donor-driven projects.** Most of the big projects implemented by the Government and NGOs are largely donor-driven and take top-down approaches. They have little or no flexibility to accommodate new ideas in the project cycle. Hence, supporting LISFs within the framework of such projects becomes difficult, if not impossible.
- **Limited sharing within partner organisations.** In the multistakeholder platforms of PROLINNOVA–Ethiopia at national, regional and district level, different organisations are represented by individuals called “focal persons”. However, sharing about the LISF approach by these individuals within their organisations has been very limited. The confinement of knowledge and experience of LISF to individuals, compounded by the frequency of staff turnover, has slowed down the process of integrating the concept and approach within each organisation.
- **Contradictory government policy.** As already mentioned, there are many enabling policies for scaling up the LISF approach, but there are also some policy bottlenecks, mainly because of the ambitious government plan for fast growth and the continued emphasis on transfer of technology, which in part contradicts some of the earlier mentioned policies. In addition, the absence of any legal framework in Ethiopia to establish non-profit-making community-based institutions constrains the setting up of LISFs.

## 6. Strategies for mainstreaming the LISF approach

### 6.1 Making the multiple impacts known

Many of the principles of the LISF approach have been achieved at pilot level. Good documentation that provides evidence of the multiple positive impacts of the LISF in the pilot areas needs to be widely spread within Ethiopia. These impacts include:

- **Improved food security:** Experimentation with support through the LISF, combined with other interventions such as the expansion of irrigation with integrated watershed development, crop protection and improvement of land productivity has led to greater diversification and increased intensification of production by the smallholder farmers involved. In addition, some landless people formed groups and are generating income from honey production using the locally improved beehives that the LISF supported for further development and dissemination.
- **Decreased vulnerability:** Many poor farmers, including women, who used to lose their livestock because of disease and had to lease their land because they could not afford to purchase external inputs have been acquiring more animals and avoiding sharecropping as a result of the availability of local inputs and knowledge developed through experimentation supported through the LISF. This has made them less vulnerable to shocks because of animal disease and poor crop yields.
- **Sustainable resource management:** Some of the innovations supported through the LISF, such as in managing water and indigenous trees, have enhanced integrated watershed management, helped to maintain biodiversity, decreased the cultivation of marginal land and stimulated the expansion of private tree nurseries as sources of income.
- **Revitalised local innovation:** The LISF created an enabling environment for promoting IK and endogenous innovation. Those local innovators who had been invisible and marginalised because of the focus of formal research and extension on “modern” interventions became empowered and the traditional healing systems for crops and livestock have been revitalised and further developed.
- **Decreased use of external inputs:** The DAs in the areas where the LISFs were piloted reported that, because alternative and appropriate local inputs were discovered or developed through the farmers’ experiments, the use of external inputs such as pesticides and artificial fertilizer has decreased. Demand for the modern “top-bar” beehive, which was relatively expensive, has declined because improved local beehives made from mud and dung have become increasingly available and are not only less expensive but also bring a better yield than the introduced beehives.
- **Improved community organisation:** The formation of the FMCs for the LISFs has facilitated the establishment of local cooperatives to gain the multiple benefits of being legally organised.
- **FMC members as agents of change:** Because the FMC members benefitted from capacity building about and experiences with farmer-led experimentation and innovation, they have become more vibrant members of the community who stimulate new ideas and reflect the community voice to the DAs and NGOs.
- **Greater self-confidence:** The experimentation and innovation supported by the LISFs have shown the competence of smallholders to solve their problems and stimulated partnership of the more confident smallholders with outsider actors on an equal footing.
- **Intensified farmer-to-farmer extension:** The results of farmer experimentation and innovation supported by the LISFs have been spread widely among the farmers in the *kebele*, thus further strengthening the innovators’ confidence in their own achievements; they are using both formal (through government extension and customary institutions) and informal means of communication.
- **Local demand for expansion of LISFs:** The local governments in all three pilot areas acknowledge the impact of the LISFs and have asked for expansion of this mechanism into other districts.

## 6.2 Choosing new areas where LISFs can serve multiple functions

A fundamental entry point in implementing LISFs is to identify areas where different stakeholder organisations are already interacting with each other in supporting rural development. This will make the implementation of the LISF more cost effective as the funding mechanism will be functioning with the existing institutional arrangements and possibly other projects in the area. Moreover, the new areas should be chosen to serve as platforms and demonstration sites for sharing the experiences more widely and strengthening partnership between community members, government extension services and NGOs. Taking this approach could help to scale up the LISF approach more quickly among the different stakeholders.

## 6.3 Scanning grassroots institutions and working through existing structures

When seeking new areas where LISFs might be introduced, it would be a basic first step to scan the existing grassroots institutions and initiatives such as customary institutions, self-help groups, FRGs, FFSs, CBIs and cooperatives. Such formally organised groups can be used to stimulate group experimentation, so that LISFs could be scaled up through the existing institutions rather than creating new structures. For example, farmers organised to experiment on pest management in FFSs have been transformed into a big enterprise and continue to serve the community after the phasing out of the project (Box 1). Such strong community structures could handle LISFs.

### Box 1: Transformation of Farmer Field Schools

In northern Ethiopia (North Wollo and Waghimra zones), pest damage to crops (mainly Wollo bush cricket or *degeza* in the local language) ranged between 25% and 100% (in the case of massive pest outbreaks). The DFID-funded Emergency Pest Control Programme (EPCP) was therefore implemented in 1994–95. It initially introduced pesticides that were expensive and had a negative impact on human health and the environment. Gradually, the EPCP developed into an integrated pest management (IPM) programme using the Farmer Field School (FFS) approach. A total of 126 IPM FFSs were established in eleven districts in the two zones. The different group experiments by the FFSs led to the identification of more than 60 botanical pesticides to control *degeza*. After the project phased out, most of the FFSs became businesses serving the communities as centres of excellence, diversifying income activities as a group, functioning as local savings and credit groups, and supporting the development of local schools and orphanages.

**Source:** Yohannes GebreMichael & Esayiyas Sahlu (2005)

## 6.4 Scaling up LISFs within PROLINNOVA member organisations

In most cases, the PROLINNOVA–Ethiopia member organisations in the platforms at national and regional levels are represented by focal persons. The selection of the focal persons needs to be on the basis of interest and commitment. Moreover, the focal persons need to be trained in the basic principles of the LISF approach, exposed to functioning LISFs through field visits and involved in M&E. It would be very constructive if the focal persons would develop a strategy for diffusing the LISF principles, sharing documents and documenting the process of institutionalisation in their respective organisations. The documentation could include budget allocation, activities and training considered necessary, and exposure and exchange visits in the operational areas of the member organisations. This systematic planning and documentation would help not only to speed up the upscaling of LISFs but also to identify the opportunities and constraints in the process. It would be essential to capitalise on the entry points of each organisation as indicated in Table 1.

## 6.5 Designing training for multiple purposes

When introducing the LISF approach into a new area, training should be designed as a continuous process with multiple functions. The capacity-building component should include raising awareness about LISF principles and developing capacities to support farmer-led experimentation, documentation,

local M&E and dissemination. At the same time, the training can also serve as a platform where different stakeholders can come together and share their experiences, as well as being part of M&E by gaining feedback about the process and results of the experimentation and innovation.

Training should also be designed to serve as a bridge to mainstream the LISF approach within the partner organisations involved. It should therefore include key decision-makers from the organisations so that they can appreciate the approach and help circulate what has been learnt. At workshops, focal persons from the organisations should present the status of progress in mainstreaming PID and LISFs and the challenges encountered.

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## Acronyms

CBI	community-based institution
CC	climate change
CG	Core Group
DA	development agent
FFS	Farmer Field School
FMC	Fund Management Committee
FRG	Farmer Research Group
FTC	Farmer Training Centre
IK	indigenous knowledge
LISF	Local Innovation Support Fund
M&E	monitoring and evaluation
MoA	Ministry of Agriculture
NRM	natural resource management
NSC	National Steering Committee
PID	participatory innovation development
PROLINNOVA	Promoting Local Innovation in ecologically oriented agriculture and NRM