

Strengthening local adaptive capacity through farmer-managed innovation funds



**PROLINNOVA (PROMoting Local INNOVation
in ecologically oriented agriculture and
natural resource management)**

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Agrecol autumn seminar

“Smallholders Adapting to Climate Change”

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PROLINNOVA: PROMoting Local INNOVation in ecologically oriented agriculture and NRM

“*Global Partnership Programme*” under Global Forum on
Agricultural Research (GFAR) – initiated by NGOs



Nepalese researchers learn
from farmer innovator

Multi-stakeholder community of practice
focused on *smallholder farming*

Seeks to make *farmer-led joint innovation
processes* an everyday part of formal
agricultural research & development (ARD)

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

International network united in conviction that:



- Farmers are creative and generate relevant local innovations = *locally new & better ways of doing things*
- Linking local creativity with other sources of new ideas builds more resilient innovation systems to continue dealing with change
- Recognising local capacities lays basis for true partnership with other knowledge-holders in ARD



Therefore: initial focus on local innovators



Ethiopian farmer innovator developed water-lifting devices working with local blacksmith

- Farmers who innovate on own initiative, building on local knowledge, also integrating external ideas
- **Local innovation = entry point for farmer-led Participatory Innovation Development (PID):**
process that combines knowledge & suggestions from external experts with local knowledge, suggestions & creativity in joint exploration of new possibilities

Advantages of PID approach



Researcher supports farmer group in designing PID experiment in Tanzania

- **Focuses on positive:** farmers' innovativeness, using locally available resources in new ways
 - **Stimulates farmers to value own knowledge and skills**
 - **Builds mutual respect among all partners in joint research**
 - **Provides solutions that are less costly and more site-appropriate and manageable by resource-poor communities than many introduced technologies**
- ***Strengthens local capacities for a continuing process of adaptation to deal with never-ending change***

Main PROLINNOVA initiatives focused on strengthening resilience to (climate) change

- **Local INnovation and EXperimentation for Climate Change Adaptation (LINEX-CCA)**
 - with Misereor funding
 - in Cambodia, India and Nepal
- **Combining Local Innovative Capacity with Scientific Research: enhancing local resilience to change (CLIC-SR)**
 - with Rockefeller Foundation funding
 - in Ethiopia, Kenya, Tanzania, Uganda
 - linked with **Climate Change, Agriculture and Food Security (CCAFS)** Research Programme of CGIAR

Both initiatives seek to:

- 1. *Strengthen resilience to change of smallholders and their communities, especially women,* by enhancing their innovative capacity through PID**
- 2. *Build capacity of organisations* so they can effectively support farming communities in adapting through PID and (in CLIC–SR) local management of innovation funds**
- 3. *Increase insights and awareness* on relevance and effectiveness of PID through sharing and learning**
- 4. *Mainstream PID* as an accepted approach in policies and programmes related to agriculture, NRM and climate-change adaptation (CCA)**

How are we going about this (CLIC–SR)?

- ***Field studies*** on local perceptions of change (including CC) and local innovative responses
- ***Implementation and documentation of farmer-led PID*** through Local Innovation Support Funds (LISFs)
- ***Training community groups*** in PID, in managing LISFs and in CCA / “climate-smartness” in PID
- ***Training support agency staff in facilitating PID*** to build resilience and adaptive capacity through farmer-led joint innovation: basic principles, methods and tools
- ***Disseminating findings:*** Documents on local innovation, PID case studies, articles, fairs, PROLINNOVA International Partners Workshops, conferences, co-publishing booklet (LINEX–CCA + CLIC–SR), policy briefs & policy dialogue

Local Innovation Support Funds (LISFs)

Local communities can drive their own adaptation to (climate or other) change when they manage LISFs for farmer-led experimentation and innovation – deciding what will be researched, how and by whom, including hiring technicians or scientists to support this.

Farmer innovator group and agricultural advisor in Ethiopia discussing how to work with LISF



How LISF works

- Multi-stakeholder national team coordinates & facilitates implementation
- It sets up & builds capacities of local Fund Management Committees (FMCs)
- FMCs make open calls for proposals
- Farmers submit simple proposals
- FMCs select grantees (individuals or groups) & provide resources
- Farmers lead research & share results
- Participatory impact assessment



Kenyan farmer experiments with locally made feed supplements

Main screening criteria defined by FMC but tend to be similar across countries

- Idea driven by applicant(s)
- Innovation sound in economic, environmental & social terms
- Applicable by resource-poor
- Applicants willing to share
(public funds for public goods)
- Proposal for *experimentation and learning*, not farm investment



Members of FMC screening LISF applications in Uganda

Use of funds decided by FMCs, for example:

- Farmers' own experimentation
- Improving farmer innovations
- Farmer-led experimentation with research and/or extension
- Learning visits by farmers



Farmer-led joint joint experimentation in fish farming in Tanzania



Ethiopian farmer's own experimentation comparing modern beehive & her local improvement on it

Multiple levels of mutual learning

- ***Community:*** local research and M&E by farmer groups and FMC
- ***District:*** as extension, NGOs, researchers, college staff support farmer-led experiments, organise innovation fairs, facilitate M&E
- ***Country:*** through reflection workshops and joint impact assessment by national multi-stakeholder platforms



Kenyan farmers & researchers jointly monitor farmer's experiment

Example of PID starting with local innovation

Simon Masila, Machakos Region, Kenya

- **Innovation:** Finger millet nursery and transplanting into fields to make maximum use of limited and uncertain rainfall
- **Result:** Harvest when millet crops of neighbouring farmers failed
- **Received LISF grant for:**
 - further developing the innovation
 - collecting data more systematically
 - analysing results with other farmers
 - making results more widely known, e.g. through adult literacy classes



Leading to PID with KARI researchers



- Scientists first did own **on-station trials** to learn about new technique themselves
- They are now engaged in **joint experiments in field** with Simon and other farmers on:
 - timing of planting nurseries
 - timing of transplanting seedlings
 - spacing of seed in nurseries and seedlings in field
 - labour-saving ways to water nurseries (often women's task)
- They gave **Simon Masila an award as outstanding innovator** at National Council of Science and Technology exhibition

Initial impacts of this approach

Involvement of different actors in LISF:



Ethiopian farmer explains his experiment to MoA staff

- **Strengthens social organisation around managing local ARD and funds for it**
- **Builds smallholders' capacities to formulate own needs and access relevant information**
- **Increases smallholders' confidence to interact with "outsiders" in joint innovation**
- **Stimulates interest of extension & research to support farmer-led PID**
- **Generates positive response from some policymakers exposed to LISF**

But also challenges:

- **Depends on external funds / difficult to generate funds in-country:**
 - trying partial repayment
 - but should be public funds for local learning & producing public goods
- **High transaction costs while piloting:**
 - 30–40% of budget goes to farmers
 - rest for coordination, training, advisory support, M&E etc



Need for more policy dialogue and exposing policymakers to this approach

Need constant efforts to prevent scientists from “taking over”:

- Farmers therefore continuing to do own experiments alongside PID
- Continuous reflection by scientists needed to realise that farmers have own questions that need to be answered first

**Kenya Perm. Secr. for Higher Education
visiting farmer innovators at NCST exhibition**

Insights from past experience with LISFs in 8 countries in Africa and Asia

- **Smallholders can manage funds for locally relevant innovation development, with appropriate initial support**
- LISF needs to be custom-designed depending on local capacities, degree of organisation & available support services
- LISF works best when incorporated into existing participatory programme that can give needed support
- Involvement in LISF can enhance role of smallholders in governance of publicly funded ARD, including decentralised funds for CCA



Vision



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sustainable livelihoods**



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