

## CASE STUDY

### **Promoting local innovation and participatory innovation development as a means of adapting to climate change: sharing and learning within the PROLINNOVA network**

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Promoting Local Innovation in Ecologically-oriented Agriculture and Natural Resource Management (PROLINNOVA) is an international multi-stakeholder network initiated by civil society organisations (CSOs) with the vision of recognising and promoting local innovation as a pathway towards more sustainable forms of agricultural development and natural resource management (NRM). PROLINNOVA acknowledges that local people's own innovation is a driving force in development. This refers to the dynamics of indigenous knowledge in constant adaptation to change by farmers who grasp new opportunities and discover affordable, locally specific and appropriate solutions to their problems. These local innovations serve as entry points for initiating Participatory Innovation Development (PID) or farmer-led joint research, a process in which scientists and development agents join local people to further develop, adapt and test these local ideas and initiatives, integrating local knowledge and scientific knowledge. At its core, the PID approach enhances the farmers' capacities to adapt to change, developing their own site-appropriate systems and institutions of managing resources to gain food security, sustain their livelihoods and safeguard the environment.

This approach to development takes on even greater importance in the face of climate change. Poor rural communities are often the most vulnerable to climate change and their capacity to adapt to this and other changes is vital. This paper examines how sharing, reflection and co-learning are stimulated within the network, particularly related to local innovation, PID and climate change adaptation. Using several examples, it demonstrates the added value that a learning network can have in safeguarding and sustaining the lives and livelihoods of poor rural communities faced with the challenges of climate change.

**Keywords** local innovation, local knowledge, climate change, knowledge networks, capacity strengthening, participation, research, social learning

## **Introduction**

Promoting Local Innovation in ecologically oriented agriculture and natural resource management (PROLINNOVA) is an international multi-stakeholder learning and advocacy network/community of practice initiated by civil society organisations (CSOs). Its vision is a world in which men and women farmers play decisive roles in agricultural research and development. It recognises and promotes local people's innovation as a pathway towards more sustainable forms of agricultural development and natural resource management (NRM). Currently, PROLINNOVA consists of 19 country multi-stakeholder networks or "platforms" with an International Support Team (IST) consisting of partners from different organisations, an international governance body called the PROLINNOVA Oversight Group (POG) and a PROLINNOVA yahoo group that brings together more than 500 people in a global community of practice. The international secretariat of PROLINNOVA is hosted by ETC Foundation, a non-governmental organisation (NGO) based in the Netherlands.

## **Participatory Innovation Development (PID) as a means of adapting to climate change**

### **Local innovation and PID**

The partners in PROLINNOVA regard local people's own innovation as a driving force in development. They see indigenous knowledge as dynamic in a process of constant adaptation to change by farmers who explore, experiment and adapt to grasp new opportunities and discover affordable, locally-specific and appropriate solutions to their problems. These local innovations serve as entry points for initiating PID or farmer-led joint research, a process in which scientists and development agents join local people to further develop, adapt and test these local ideas and initiatives, integrating local knowledge and scientific knowledge.

### **PID's role in strengthening adaptive capacity**

If scientists and development agents recognise local innovation, they can enter into a partnership with farmers and other local actors in agricultural research and development on a different and more equal footing. Such a partnership among all actors as equal partners strengthens the motivation and capacity of all to interact effectively, enhances joint learning and enables the capacity of the innovation system as a whole to respond more quickly to new challenges and to recover more quickly from shocks. In other words, it increases the resilience of the system to change.

The PID approach has many attributes that encourage joint learning: it focuses on the positive, namely on local people's strengths and creativity; it gives non-farmer partners in the process (such as scientists and extension workers) a greater appreciation of local capacities; it builds mutual respect among all partners in joint research; it stimulates local people to value their own knowledge, ideas and skills; it provides solutions that are less costly and more site-appropriate in comparison with most conventional agricultural research and development approaches; and it increases the confidence of local communities and gives them greater control over their own development. All of these attributes contribute to the core of the approach most valued by PROLINNOVA partners: it *builds the adaptive capacities of farmers and their communities to deal with change*. Local people involved in this process become

more proactive, are better able to analyse their situation, learn to pool their energies and knowledge, and become better linked with other actors with whom they can continue to design and implement adaptive actions to address emerging problems. They thus become more resilient to shocks and stresses in a constantly changing environment.

### **PID as a means of adapting to climate change**

Working among smallholder farming communities that face the challenges of climate change, PROLINNOVA partners realised that this farmer-led approach to enhancing local adaptive capacity can play a key role in strengthening community resilience to change. Studies by PROLINNOVA partners ([www.prolinnova.net/climate](http://www.prolinnova.net/climate)) revealed that many rural people have, on their own initiative, developed a wide range of technical and socio-institutional innovations to cope with perceived changes in rainfall, wind patterns, temperature etc. These innovations offer starting points for joint action (PID) by farmers and other actors, such as scientists, extensionists and government administrators, to support local efforts to deal with climate change. Scientists' expertise may be needed to validate or improve local adaptation mechanisms or to reveal aspects that farmers overlooked. Extensionists can help spread successful innovations and can facilitate the collaboration between farmers and scientists. Carefully introduced new ideas can stimulate local creativity, leading to innovation processes that strengthen rather than undermine local adaptive capacity.

### **Forms of social learning within and beyond PROLINNOVA**

The PROLINNOVA network was deliberately set up to encourage people from different stakeholder groups to engage in joint action, learning and advocacy. The implementation of PID in farmer-led experimentation and innovation together with different actors in agricultural research and development is, in essence, a process of mutual learning in action. Social learning occurs within this process of action learning in which diverse stakeholders gain a mutual understanding of their situation and possibilities and co-generate relevant knowledge. Working together in recognising and supporting farmer-led innovation is designed to lead to individual, community, organisational and institutional transformation. Learning takes place across the network within and between all levels: sub-national, national, regional and international. Learning takes place among all the different stakeholders such as farmer innovators (both men and women), extensionists, researchers, market operators, educationists, input suppliers etc. Learning takes place in many forms and different spaces within the network, some of which are organised whilst others arise spontaneously. While social learning is at the core of PROLINNOVA, it is possible to identify activities that can be classified as specific forms of social learning. These are discussed below.

### **International Partners Workshop**

The International Partners Workshop (IPW) is a key event that brings together representatives of all partners of the network for the purposes of learning and sharing. Although finances have at times been tight, the network has attempted to hold this event annually, hosted by one of the countries in the international network. Since 2004, nine IPWs have taken place in Ethiopia, Uganda, Cambodia, Senegal, Tanzania, Nepal, the Netherlands, Mali and Kenya. Focused fund raising was done for these events in order to provide at least two members from each country network the opportunity to participate in the workshop. This also meant the each

country attempted to give each of its network members at least one chance to join the annual workshop by rotating the participation. The IST has always played an active role in organising the workshop content-wise together with members of the hosting country network. The duration of the workshop has varied from 2 to 5 days, depending mainly on the availability of finances. The agenda for the event is always set through an e-mail consultation in which the issues for discussion are agreed upon. A smaller organising group then works on the agenda and invites network members to facilitate different sessions, make presentations of their experiences, play the role of discussants, take notes etc. In addition to sharing of experiences, the IPW provides ample opportunities (e.g. Open Space, World Café) for participants to discuss and debate on various issues, reflect on them, learn from each other and develop joint initiatives. All participants display their posters, publications, audio-visuals etc. on the “dare-to-share” information market that is kept open throughout the workshop. In some years, participants have organised prizes for the best market displays. Evaluations of this face-to-face annual event confirms that it provides an effective space for mutual learning, which helps the CPs to draw lessons for policy influence and to strategise for scaling up the PID approach.

### **Training events**

Training on various aspects of the PID approach is a key activity within the PROLINNOVA network as part of capacity enhancement for its partners. This training takes place at international, national and community levels and attracts diverse stakeholders – men and women, old and young – often including both farmers and formal scientists in the same event. The training events differ in content covered, duration, forms and methods of training and depend on the target group. Training is built around experiential and participative learning in which various aspects of the PID approach are covered. A key aspect of training is sharing of experiences within small groups, reflecting on these experiences and building further on them through critical analysis. Training that takes place at international level provides the added advantage of learning from experiences across the network. Training that is done at national and sub-national level usually focuses on going deeper into and learning from the experiences within the country/locality in order to come up with new and better ways of doing things. Some of the broader themes covered during training events have included: facilitation of multi-stakeholder partnerships, local innovation and PID, participatory monitoring and evaluation, gender and PID, farmer-led documentation, local innovation in the face of climate change, integration of PID into institutions of higher education, policy advocacy for PID and training of PID trainers. Feedback from participants in training courses as they practice what they learnt in the field is used to further improve training content and methodology.

### **Exchange visits**

Farmer-to-farmer visits, both within and among communities, have proved to be valuable for learning and sharing. Within PROLINNOVA, such visits take many forms and have been adapted to encompass a range of stakeholders beyond farmers. Visits between country platforms have been one such adaptation. A group of stakeholders from one country visits their counterparts in another country for the purpose of learning across boundaries. In order to be affordable and effective, such visits have been between countries that are relatively close to each other and have similar agro-ecological, cultural, political and/or other conditions. For instance, there have been cross- visits between Nepal and Cambodia, Mozambique and South Africa, Niger and Ghana etc. The size of the group that made the visit depended on the available funds and the distance to be covered. However, the groups always were composed

of a variety of stakeholders and included both men and women – also smallholder farmers. Despite the fact that the groups were small, the intensive interaction within the group as well as with their counterparts in the host country meant that the cross-visits were highly valued not only by the visiting party but also by the receiving party, which benefited from the feedback and sharing from the visitors. Evaluations of the visits by both the visitors and the hosts indicated learning from each other as one of the significant benefits of this activity. The learning through such cross-visits have impacted on participants in many ways – farmer innovators, for instance, have tried and adapted techniques and practices they encountered in a different country; extensionists have adapted or enhanced the field methods they use to interact with farmers; network members from one country have taken on activities and ways of doing things they learnt from another country (e.g. the way the national steering committee is organised); training methods employed by trainers in one country are applied in another country.

### **Innovation fairs/exhibitions**

Innovation fairs and exhibitions have offered other effective learning spaces for sharing and learning within and beyond the network. Such fairs have been held at different levels to serve a range of stakeholders. Gatherings of small groups of farmer innovators who wish to share their innovations with others within a community or a group of communities in an area are very common. Such gatherings are often piggy-backed on events that bring community members together such as field days, training workshops, monitoring meetings, farmer market days etc. At a higher level, similar innovation fairs have been held at district, provincial and even national level.

For instance, the national innovators fair in Nepal in 2009, showcased the innovations of more than 60 farmer innovators from across the country. It was also a public event which gave recognition to farmers as innovators and entrepreneurs to a wide audience beyond those in the ministries of agriculture, environment and rural development and put local innovation and PID firmly on the map of agricultural research and development in Nepal. Live tele/broadcasting through an FM TV/radio station ensured that the message reached every household in Nepal. Students from universities, secondary and primary schools came in their busloads from far-flung places. And each of the visitors was able to meet, discuss, engage and learn in a friendly and open atmosphere. The event was not only an overwhelming success in terms of getting innovative farmers the recognition they deserved, but feedback and requests that have been received by the farmers as well as partners of the PROLINNOVA network in Nepal suggest that it was very effective in stimulating learning that led to action. For most of the farmer innovators who travelled to the capital Kathmandu, it was the most impressive forum of their lives and a great opportunity to engage with policymakers, researchers, teachers and the general public and share their experiences and insights on an equal footing.

Realising the massive impact such innovation fairs can have on a broad group of stakeholders, PROLINNOVA has just organised – for the first time – a regional farmer innovation fair in East Africa in May 2013, bringing farmer innovators from Uganda, Tanzania, Ethiopia and Kenya together in Nairobi.

### **PROLINNOVA website and listserv**

The PROLINNOVA website [www.prolinnova.net](http://www.prolinnova.net) is a virtual learning and sharing space, not only for members of the network but also for the larger public. The website carries substantial information related to the network, its activities and achievements, both at international and at country level. Each country has its own page which, depending on the country and its connectivity to the internet, is updated periodically. The website is also a repository of PROLINNOVA's publications which are 'copyleft' papers, booklets, policy briefs, video clips and the like that can be accessed, downloaded and used by anyone who is interested. Most of the publications are prepared and edited through a participatory process and nearly always co-authored and co-edited by several people within the network. Such participatory publication processes are in themselves learning grounds as the drafts are discussed, analysed and revised collectively.

The PROLINNOVA listserv can be accessed through the website and is open to all who are interested in receiving relevant information and engaging virtually in the debates that take place. Although no comprehensive evaluation of the website or the listserv has been undertaken, the web statistics that are analysed annually and the e-mail requests/feedback received by the webmaster, the Secretariat and members of the IST and CPs gives an impression of its importance as an information sharing and learning space. For instance, the Secretariat has had several requests from new countries who wanted to start up national PROLINNOVA networks based on information they had found and studied on the website.

In addition to the learning spaces mentioned above, PROLINNOVA uses every opportunity, organised or informal, for the purpose of learning and sharing. These opportunities include: conferences and seminars organised by PROLINNOVA with other like-minded networks and organisations, backstopping visits that are undertaken by members of the IST to country networks, skype conferences on various topics and issues with selected network members, country network member meetings, dare-to-share fairs and information markets.. Learning is an iterative process that continues within PROLINNOVA, reflecting on what it does, analysing the results, and using the lessons to move on.

### **Conclusions**

The successes gained so far by PROLINNOVA in promoting and mainstreaming PID within agricultural research and development can partially be attributed to its emphasis on creating spaces and possibilities for social learning within the community of practice. Learning has become a habit within the network and, on every occasion that two or three people get together, even if only informally, they are drawn into discussion and dialogue on various related issues. This rather informal and non-threatening way of discourse that has been nurtured over time through the activities described in this paper has enabled people from various professional, social and cultural backgrounds to be reflective, constructively critical and sharp in analysing each other's work and drawing lessons that are beneficial both individually and collectively.

Despite the positive impacts of this approach in safeguarding the livelihoods of poor communities and in giving them a 'voice' in defining their own pathways to development,

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many in the global community of climate change adaption (CCA) seem to prefer conventional, transfer-of technology approaches, this time in the form of ‘climate-smart’ technologies. Thus, PROLINNOVA realises that awareness raising within the CCA community is still needed and is therefore seeking to make a lasting change in climate-change policy so that it meets the needs and challenges of poor communities. This is a long journey in building and strengthening a movement that is anchored on sharing and learning together.

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