



# Integrating participatory innovation development into government extension systems

## Highlights

- Decentralisation in agricultural extension gives space for local stakeholders to work together and make faster and more site-specific decisions.
- Stakeholder linkages and a positive attitude towards Participatory Innovation Development (PID) as an extension strategy play a major role in integrating PID into the existing extension system.
- Experience-sharing, training and coaching at all levels in an organisation and allocating budget for PID activities are key for integrating PID into an extension system.
- Special efforts need to be made to encourage innovative women farmers when using PID as an extension approach.

## Committed partners from grassroots level can integrate a participatory approach into hierarchical extension systems to improve smallholder agricultural development.

### Participatory extension to stimulate innovation

Participatory extension has long been promoted as an approach to improve the effectiveness of agricultural advisory services offered by government agencies, NGOs and other organisations working in agricultural development (Röling & Pretty 1997). Participatory Innovation Development (PID) builds on this approach with a focus on strengthening farmers' creativity in finding better ways of doing things. PID is a farmer-led and expert-supported process of extension that starts with bringing local knowledge and creativity and good practices together, and jointly trying out and adapting new ideas (Tesfahun & Amanuel 2009). Like many other participatory approaches, PID is designed to couple multi-stakeholder partnership and capacity development at both individual and organisational level. But PID always uses local innovation as an entry point.

Instead of transferring technology, which is still conventional practice in many government extension systems, extension agents in PID serve as facilitators who link farmers' knowledge, experience and indigenous innovation with knowledge from formal science. This takes place within a complex system of research and development in agriculture and natural resource management (NRM) in a variety of land-use systems and agro-ecologies. The social, cultural and political conditions and the norms of the extension system determine to what extent and how quickly such an approach can be integrated into the work of a government organisation within this system.

Even if such a participatory approach to agricultural extension were to be officially "adopted" by a particular organisation, this would not automatically change the attitude and behaviour of extension staff and farmers and magically convert the organisational structure and procedures into one that can effectively support PID. Such institutional change must be systematically sought. A process through which new ideas and practices are introduced, accepted and applied by individuals and organisations so that these new ideas and practices become part of "the norm" is called "institutionalisation". This process requires deliberate change and development within the organisation concerned (Ejigu & Waters-Bayer 2005).

### PROLINNOVA vision:

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

Attaining institutional change in government extension services is a very complex and often lengthy process, because it means re-orienting some fundamental characteristics of the organisation, such as formulating a new mission, drawing up new strategies, re-allocating budget and revising the way that human resources are managed. There are three major systems within any organisation: i) technical (structure, procedures and guidelines); ii) political (decision-making processes, power relations); and cultural (norms, routines, behaviour and attitudes). These are inextricably intertwined (Tichy 1982). PID can be truly integrated or “institutionalised” only if transformation of these three systems is harmonised.

### Requirements for integrating PID

Integrating PID into an extension organisation requires systematic capacity development, close follow-up and collaboration with many partners from the lowest to highest level in the organisation. Particularly challenging is finding ways to include PID in the formal job descriptions, reward systems and work procedures of the extension agents and in the mechanisms for planning, monitoring, evaluation and reporting. In conventional extension, the reporting is to higher level supervisors in the organisation whereas, in PID and other forms of participatory extension, the extension agents need to be accountable also to the farmers.

Studies on processes of integrating PID into government

extension systems at provincial and district level in Cambodia and Ethiopia, respectively (see Cases 1 and 2), revealed that these challenges can be surmounted if there are champions in the organisation who have decision-making power and commitment to incorporate PID into the existing system. The task is easier if good teamwork and internal knowledge-sharing mechanisms are already in place within the organisation.

### Changing structures

The studies showed that centralised and hierarchical organisational structures and insufficient human-resource capacities to promote PID slowed down the rate at which the approach could be internalised in the extension procedures. Deliberate efforts are needed to plan and strategise for integrating PID. Change in the organisational structure and operational system needs to be aligned towards introducing and gaining wide acceptance for new routines and new behaviour in interactions within the organisation and with other actors, particularly farmers. Structures need to be encouraged that facilitate teamwork among staff members and allow for frequent reflection sessions and discussions for planning on situation-specific frameworks – and this at several levels in the organisation.

In both Cambodia and Ethiopia, it was beyond the mandate of the provincial and district-level extension offices, respectively, to change the structure of the entire national extension system or to alter the ways in which



Experimenting farmers discussing with extension agent (far left) on progress of their rice intensification experiment, Kirvong District, Cambodia (Photo: Fanos Mekonnen)

### Case 1: Integrating PID into agricultural extension in Cambodia

Since 2004, the PROLINNOVA–Cambodia network has been working towards transforming conventional extension into a participatory and farmer-centred system in some provincial Departments of Agriculture under the national Ministry of Agriculture, Forestry and Fisheries (MAFF). PROLINNOVA–Cambodia’s efforts to internalise PID within the extension system were supported by many factors, but also constrained by some. The major supportive factors were the inclusion of staff from several levels in the Department and Ministry in the process of implementing PID, close follow-up on capacity-building activities and joint experimentation facilitated by extension agents, and conscious efforts to change MAFF policymakers’ perspectives on smallholders’ innovativeness. The major constraining factors were the limited staff capacity in terms of both number and level of education and experience, the “projectisation” mindset, insufficient financial resources for facilitating PID, the hierarchical organisational structure and system of management,

and the absence of a reward system for staff members who engaged in PID. In its efforts to institutionalise PID, PROLINNOVA–Cambodia deliberately focused initially on supporting technical activities of joint experimentation in farmers’ fields and documenting these, e.g. in a monthly magazine and at a national forum on farmer innovation, rather than trying directly to re-orient the organisational culture.

Source: Fanos et al 2010



Innovative farmer explaining individual and group experimentation at a regional workshop in Axum (Photo: Fanos Mekonnen)

### Case 2: Integrating PID into extension in mixed crop-livestock farming system in Ethiopia

Since 2005, PROLINNOVA–Ethiopia has been working with Tahtay Maychew District Office of Agriculture (DOA) in Tigray Region to promote local innovation and integrate the PID approach. Much was achieved in this respect despite the several challenges in the existing extension system. A large part of the success was due to the devotion of farmers, DOA staff and the coordinating NGO to PID, flexibility in the management style in the DOA, and the readiness of extension staff to acknowledge farmers as equal partners. Further enabling conditions for integrating PID into Tahtay Maychew DOA were: i) the stakeholders' determination to embrace opportunities to improve rural livelihoods, and ii) their previous experience in recognising and

appreciating best local practices. This experience was gained during the time when the Tigray People's Liberation Front built up the extension service in the 1980s and during more recent work (1997–2001) in identifying local knowledge and innovation under the Netherlands-supported Indigenous Soil and Water Conservation (ISWC) project before PROLINNOVA–Ethiopia was set up in 2004. Challenges to bringing PID further into the DOA are: external input/technology-driven extension system, hierarchical decision-making, insufficient resource allocation for development support, and insufficient organisational and individual capacities to promote local knowledge and innovation more widely.

Source: Fanos et al 2011

resources for extension work were allocated from the centre. However, even in hierarchical systems, possibilities could be found to implement PID to some extent. This was because changes in behaviour and routines were achieved among the frontline extension staff and the farmers with whom they interacted in identifying local innovations and jointly investigating the most promising new ideas developed by farmers. The success of the process depended on the openness and willingness of staff at grassroots level and the flexibility of decision-makers at the particular sites to accommodate the new approach in their own way. This could be best achieved in a decentralised organisational structure, where the implementing mid-level organisations had the full mandate to plan and implement activities specific to their site. A decentralised system also allowed better communication and knowledge sharing.

### Changing power relations and decision-making processes

PID was easier to integrate into extension activities when the farmers and extension agents who were doing the joint experimentation and the other stakeholders with whom they interacted were addressing issues in line with the interests of both higher-level decision-makers and local stakeholders. This was especially so when the innovations being explored fitted well into the extension policy context, such as the local innovations related to water harvesting in Ethiopia, which resonated with the government policy for efficient water use. This offered more space to implement PID and even allowed

awards and other incentives to be given officially by the government to people involved in PID. Close collaboration of the farmers and extension agents with nearby partner organisations such as nongovernmental organisations (NGOs) or agricultural colleges was also an enabling factor for integrating PID into district-level processes of making decisions about extension.

### Changing organisational norms

The studies in Cambodia and Ethiopia revealed that activities specifically designed to encourage frontline extension staff to identify and document farmers' innovations led to changes in behaviour and attitudes of both the staff and their managers. This was a first step toward change in the organisational culture and norms.

The frontline extension agents then tried to create awareness within their own organisation about local innovation, to learn (often by doing) to facilitate joint experimentation and to support formation of farmer-experimenter groups. This helped empower the smallholders with whom they were working and led to greater recognition among extension staff – also at higher levels in the organisation – that smallholders can develop locally appropriate solutions to common problems in their area. A good working relationship between extension agents and experimenting farmers on an equal level could be created.

It proved more difficult, however, to bring about change in behaviour among extension workers about the capacity

of women farmers to innovate. It was likewise difficult to gain acceptance among community members that also women can challenge the local customs in agriculture. Attaining this attitudinal change among both extension staff and farming communities requires a deliberate focus on women innovators and continuous awareness-raising about their contributions to improving farming, NRM, and the processing and marketing of agricultural products.

### Implications for policy and practice

- Smallholders are actively seeking and often finding their own solutions for their problems. Showing appreciation of their efforts in various platforms, such as technology fairs, encourages the farmers to innovate further and to learn from each other. It should become government policy to reward both farmer innovators and the extension agents who support them. Incentives at all levels can inspire, capacitate, and encourage smallholders and extension staff to further engage in PID.
- An approach like PID is best promoted and internalised within the extension agency through building staff capacity at all levels and stimulating active collaboration and linkages with nearby partners in research, education and business. Networking should be encouraged by strengthening existing multistakeholder platforms and organising knowledge-sharing fora that can also raise awareness and change attitudes of decision-makers.
- Working in a team to promote PID in an extension agency makes it easier to bring about change in the norms and routines of the organisation. It facilitates knowledge sharing and exchange of experience among staff, and minimises the need to start over when a staff member leaves the organisation.
- To provide convincing evidence for policy dialogue, partners from different stakeholder groups (extension, research, education, NGOs, farmer groups, private sector etc) need to engage in critical reflection on how PID contributes to improving food security and to document well the outcomes in this respect.

- PID is an approach to extension for holistic agricultural development, from production to marketing and consumption. However, appropriate processes and steps at each phase can vary and therefore specific attention on each is required.

### References

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*This brief was prepared by Fanos Mekonnen Birke on the basis of her research in Cambodia and Ethiopia.*



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 has come mainly from the Netherlands and French Governments, Rockefeller Foundation, GFAR, MISEREOR and partners' own contributions.