



Tropentag 2012
Göttingen, 19-21 September 2012
Conference on International Agricultural Research for Development

Institutionalising Participatory Innovation Development in Agricultural Extension: Case Study of Tahtay Maychew Office of Agriculture in Ethiopia

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Introduction

PROLINNOVA–Ethiopia has been working with Tahtay Maychew District Office of Agriculture (DOA) in Tigray Region to promote local innovation and institutionalise an approach called Participatory Innovation Development (PID). PROLINNOVA–Ethiopia is one of 20 national multistakeholder platforms in PROLINNOVA (**P**ROmoting **L**ocal **I**NNOVATION in ecologically oriented agriculture and natural resource management), an international network seeking to integrate PID into the regular work of agricultural extension, research and education organisations. “Institutionalisation”¹ of PID implies increased attention to local innovation processes as a starting point for farmer-led joint research and development.

Waters-Bayer *et al* (2009) state that keeping track of small changes and challenges faced in the process of PID implementation is crucial for social learning and institutional change. This paper therefore highlights practices and perceptions in applying PID and discusses some pertinent issues related to integrating this approach into the existing agricultural extension system. It is based on a case study made in October–November 2010 by an independent researcher to track the process of PID institutionalisation in the Tahtay Maychew DOA. It describes procedures and processes taken towards institutionalising this approach of recognising local innovation and engaging in PID, and points to factors that trigger or hinder the change process.

Methodology

An organisation – be it of research, extension or development, be it governmental, nongovernmental or in the private sector – is a system by itself. Tichy (1982), a specialist in organisational management, argues that each organisation of any type has three major subsystems: Technical, Political and Cultural, which intertwine and interconnect to determine the identity of ‘the system’ as a whole. His TPC framework, based on the concepts of organisation theory, was used as a guide to understanding the subsystems of the DOA as separate entities and their intertwinement.

Table 1: Sub-systems and their components in an organisation

Sub-systems	Components		
	Mission / mandate	Structure	Human resources
Technical / administrative: the tangible “nuts and bolts”	Operations: planning and implementing action plans, monitoring and evaluation, budgeting	Tasks and responsibilities: levels, positions and tasks; procedures and instructions; information and coordination systems	Expertise: quantity and quality of staff; recruitment and job descriptions; staff facilities & infrastructure; training and coaching

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¹ Institutionalisation is understood as “a process through which new ideas and practices are introduced, accepted and used by individuals and organisations so that these new ideas and practices become part of the norm. Institutionalisation of a new approach involves change and development within the targeted organisations” (Ejigu & Waters-Bayer 2005).

Political: the power game	Policymaking: developing policies and strategies; influencing from inside and outside; role of management	Decision-making: formal & informal mechanisms; supervision and control; conflict management	Room for manoeuvre: space for innovation; rewards and incentives; career possibilities; working styles
Cultural: identity and behaviour	Organisational culture: symbols, traditions, norms & values underlying organisational and staff behaviour; social and ethical standards	Cooperation and learning: norms and values underlying arrangements for teamwork; mutual support; networking; reflection; learning from experience etc	Attitudes: dedication to the organisation; commitment to work, to objectives and to partners/clients; stereotyping; willingness to change

Source: after Lizares-Bodegon *et al* (2002)

The case study is based on empirical information collected mainly through: i) interviews in the field (extension experts and farmers) and with stakeholders at regional and national level; and ii) focus-group discussions with partner organisation representatives and innovative farmer groups. Since there was little documentation on local innovation at the study site, it was hardly possible to find secondary information in the archives of the partner organisations. The case study was carried out over a period of six weeks: three weeks of data collection in the Tahtay Maychew DOA and farmers' fields, followed by a stakeholder analysis of partner organisations and potential stakeholders in order to identify the importance and influence of these stakeholders in institutionalising PID in Tahtay Maychew. In the course of operationalising the objectives of the study, a self-assessment tool was developed, which the stakeholders used to assess and reflect upon the status of PID institutionalisation in their respective organisations.

Results and discussion

Culture of improving farming. The fact that Tigray Region was a war zone during the Ethiopian civil war from 1975 to 1993 led to reliance on using resources available at local level to develop and improve agriculture. This led, in turn, to recognition and utilisation of local innovations by the farmers and Tigray People Liberation Front (TPLF) soldiers. This system became a normative standard and value pattern of the TPLF development approach (Berhane 2001). After the civil war, the focus of agricultural extension changed to high use of external inputs, mainly related to soil fertility and crop production. This weakened the approach to promote local innovation and best practices that had prevailed until then in the Tigray Bureau of Agriculture (BoA). Then, the coming of ISWC-II (Improving Soil and Water Conservation Phase 2), a Netherlands-funded project, into the region revived the "tradition" of recognising and promoting local innovation. The subsequent PROLINNOVA-Ethiopia activities built on this.

Structure, strategy and techniques of extension. An enabling environment for institutionalising PID would include policy, leadership, organisational values and resources that support and promote local innovation (Demekech & Amanuel 2009). As is the case with many development policies in Ethiopia, also in agricultural development policy, the federal and regional authorities govern the strategy and budget of the DOAs in Tigray Region. The hierarchical structure in the government influences the work procedure and budget-allocation mechanisms of Tahtay Maychew District, giving the DOA little authority over the formal work procedures to decide to include PID. Causes of this non-enabling environment are: not enough awareness on PID processes at regional level to bring about a change of attitude among decision-makers and higher officials; government focus on attaining food security through external technologies and inputs; and the organisational values that support the use of external inputs for better livelihoods.

Absence of an enabling environment resulted in limited inclusion of PID in the formal work procedures, job descriptions, planning and reporting of the DOA. However, individual interest and commitment to PID in the DOA resulted in the use of the already existing structures to promote PID. For instance, Tahtay Maychew DOA has managed to internalise PID in the field practices by using already existing guidelines and structures for farmer-group formation to mobilise "innovative farmer groups". In addition, in order to strengthen the partnership with farmers and bridge the budget and skill gap, Tahtay Maychew DOA created linkages with

many other line offices in the district (e.g. Offices for Health, Land Tenure, and Water & Energy) to avail material and technical support for joint experiments by farmers and development agents. These experiences show the possibilities of creating room for manoeuvre to integrate PID into the extension work by jointly planning PID work as part of other routine activities, even though there is no direct budget for it.

Innovation and innovativeness. Recognising local creativity and initiative leads to changes in behaviour and attitudes of all actors in the innovation system. Findings of the study upon which this paper is based and a similar case study in Cambodia (Fanos *et al* 2010) revealed that, for better progress towards institutionalising PID, innovations that align with the priorities of decision-makers and higher officials need to be selected with due emphasis to the existing context. For instance, local innovation on soil and water conservation attracts greater interest from decision-makers in Tigray Region than a local innovation in animal breeding. This finding indicates the interconnectedness of type of technology (technical system) and the change in attitude (cultural system) and decision-making processes (political system), which in turn determines policymaking. This analysis indicates that PID institutionalisation depends on the type of technology/innovation and the level of priority given to these by decision-makers in the institutions concerned.

Attitudinal change. PROLINNOVA–Ethiopia’s approach to bringing about attitudinal change in Tahtay Maychew DOA involves mainly awareness creation, facilitating joint experimentation and facilitating self-organisation by farmers. These activities brought impact at the village level, where farmers have been empowered to run their own farmer experimentation groups, one of which has been made into a legal entity. The case study revealed that the farmers’ perceptions on local innovation and their confidence in their capacity to innovate changed more quickly when they were approached in groups and shared experience from each other than when development practitioners approached them individually.

In the DOA, the sensitisation and joint experimentation encouraged by PROLINNOVA–Ethiopia led to more awareness of farmer creativity and PID, especially in the Extension Team, which is directly involved in implementing these activities. The second contributing factor for the existing perception of PID in the DOA is the legacy of the ISWC–II project, which was a stepping stone for PROLINNOVA–Ethiopia and played a big role in recognising and popularising farmer innovation and farmers’ ability to innovate. A third contributing factor is the spirit of teamwork in the DOA in promoting local innovation. The fact that subject-matter specialists in the DOA work in groups helps to internalise PID into the norms and routines of the organisation. This also facilitates knowledge sharing and exchange of experience among staff, and minimises the need to start over when a new staff member joins. However, acceptance of the PID approach in Tahtay Maychew DOA has not yet been strong enough to bring about change in organisational values, policy and strategies. This is mainly because officials in the DOA have no mandate to change the decision-making process within the organisation. These officials in the regional BoA have only a vague idea of PID and therefore are not able and willing to incorporate it into the organisation’s formal plans, programmes and activities.

Although PROLINNOVA–Ethiopia, especially the “Northern Typical Highlands Platform” working mainly in Tigray Region, has made some efforts towards recognising innovations of women farmers in the area, innovative women farmers are not very visible. This indicates that conscious attention still needs to be given to bringing about changes in attitude about the contribution and capacity of women to innovate and also to gain acceptance by the rural communities for women to be in a spotlight.

Conclusion

The case study of the experience of Tahtay Maychew DOA revealed that the most effective factors that favoured progress towards institutionalising PID were: previous experience from the time of the civil war, capacity-building on PID, provision of full responsibility to the DOA to implement the activities, and close collaboration with the facilitating national non-governmental organisation (Institute for Sustainable Development) in identifying local innovation and supporting PID. However, because previous documentation of this process was unstructured and irregular, this brief study did not capture exhaustively all the lessons that could have been learnt about factors that allowed some degree of institutionalisation of the PID approach.

Major constraints identified were: limited room for manoeuvre in the formal organisational structure and strategy, insufficient resource allocation for development interventions, and insufficient organisational and individual capacities to promote local innovation at large. These constraints are mostly beyond the capacity of DOA officials at district level. The regional BoA in Mekelle is less aware of and less active in promoting PID as compared to the Tahtay Maychew DOA. The regional BoA has been involved only in awareness-raising activities and initiating staff capacity-building in PID, which is a first step towards institutionalising it.

PROLINNOVA–Ethiopia currently has only a loose multi-stakeholder partnership and has no clear strategy for institutionalising PID as a process for development on a wider scale within the country. Therefore, much work needs to be done in strengthening the multi-stakeholder partnerships – especially at national and regional level – and developing a clear strategy for institutionalising PID.

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