

**Institutionalisation of Participatory Innovation Development:
experiences of the Provincial Department of Agriculture,
Takeo Province, Cambodia**



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Acronyms

ARD	agricultural research and development
ASDP	Agricultural Sector Development Program
AusAID	Australian Agency for International Development
CARDI	Cambodian Agricultural Research and Development Institute
CEDAC	Centre d'Etude et de Développement Agricole Cambodgien (Cambodian Centre for Study and Development in Agriculture)
FAO	Food and Agriculture Organisation of the United Nations
FSS	Farmer Field School
GRET	Group for Research and Exchange of Technology
IPW	International Partners Workshop
LISF	Local Innovation Support Fund
MAFF	Ministry of Agriculture, Fisheries and Forestry
NEDC	Network for Eco-Agriculture Development in Cambodia
NGO	non-governmental organisation
NSC	National Steering Committee
NWG	National Working Group
PDA	Provincial Department of Agriculture
PID	Participatory Innovation Development
PROFIEET	Promoting Farmer Innovation and Experimentation in Ethiopia
PROLINNOVA	PROMoting Local INNOVation in ecologically oriented agriculture and natural resource management
SRI	System of Rice Intensification
ToT	Training of Trainers
WIN	Empowerment of Women in Irrigation & Water Resource Management for Improved Household Food Security, Nutrition and Health

1. Introduction

1.1 A study on institutionalisation of PID

In the last two decades, increased attention is being given to the need to institutionalise participatory approaches in agricultural research and development (ARD) organisations. 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” (Sutherland 2000).

Institutionalising participatory approaches such as Participatory Innovation Development (PID) into public agricultural organisations can make agricultural development more effective and sustainable. Application of PID can lead to social and political transformation. *“When people start to innovate something and get good results, they become more confident and empowered. This leads them to more freedom. It is also about changing the mindset of scholars who say ‘poor people always need our support’. Such mindset encourages poor people to be dependent and always expects support from outsiders”* (CEDAC president, personal communication, 2009).

There is much literature discussing what institutionalisation should be and listing conditions that need to be in place (e.g. Thompson 1995, Pretty & Chambers 1994, Stroud 2003). However, few case studies have looked deeply into the process of PID institutionalisation in a particular context. The study reported here tries to fill that gap by analysing in detail the efforts and their outcomes in bringing PID into a government extension organisation: the Provincial Department of Agriculture (PDA) in Takeo Province of Cambodia. The study shows that, although there was no systematically designed process of institutionalisation in this case, a clever combination of diverse training, implementation and support activities resulted in a certain degree of integration of PID within PDA Takeo. Important lessons have been learned on what supports and what hinders such integration in practice.

1.2 Study approach

The study was undertaken by the main author for her final MSc thesis under the programme “Management of Agro-Ecological Knowledge and Social Change” at Wageningen University and Research in the Netherlands. The fieldwork for the study was carried out in Cambodia from 8 September to 10 December 2009. This relatively long study period allowed for intensive interaction with all involved, formally during office hours as well as informally over meals and coffee after office hours.

The study was undertaken in close collaboration with the PROLINNOVA–Cambodia programme. This is one of the 18 country programmes of PROLINNOVA, a global network working towards integration of PID into the regular work of agricultural extension, research and education organisations. Section 4.1 describes the process of building the PROLINNOVA–Cambodia partnership in more detail. The PDA in Takeo Province, the focus of this case study, is one of the first partners of PROLINNOVA–Cambodia.

In-depth interviews with PDA staff directly or indirectly involved in programme activities formed a key component of the study. Equally important were the study of documents of the PDA, focus-group discussions with PROLINNOVA–Cambodia members and farmers, and participant observation of the PDA’s day-to-day activities including internal meetings, training

events as well as training and monitoring in the field. The draft findings of the study were presented and reviewed during a one-day workshop with representatives from both PDA and the wider PROLINNOVA–Cambodia partnership.



Figure 1: Joining PDA staff providing training to women farmers

2. The main concepts

2.1 Local innovation

Farmers (men and women), fishermen, and other resource users are innovative on their own initiative. They adapt and improve current practices, when necessary or opportune from their own perspective. They create what is called local innovations, developed, understood and owned by local people. This process of local innovation often involves informal experimentation by the resource users. It is PROLINNOVA's basic message that ARD programmes will be more effective if they take this local innovation capacity seriously, link up with local innovators, and seek ways to integrate formal ARD work with these local initiatives.

2.2 Participatory Innovation Development

An approach that has been discussed and tried out by many development practitioners is "Participatory Innovation Development" (PID), which is designed to couple technical participation with organisational empowerment. It is a farmer-led and expert-supported process of developing innovations that often takes local innovation as an entry point (Amanuel Assefa *et al* 2009). At the heart of PID is "farmer-led joint experimentation" – or, more broadly expressed, "farmer-led joint research" – in which farmers together with support agents investigate possible ways to improve local livelihoods. The word "research" suggests that the activities can go beyond field-based trials to include investigation of other questions, such as jointly exploring a value chain or trying out a different way of managing communal resources.

The approach of identifying local innovations is one entry point to PID: start by looking at what farmers are already trying to do to solve problems or grasp opportunities they perceive.

Looking at these concrete local examples can lead into a situation analysis with farmer innovators and community members, as a starting point for planning joint experimentation and development activities. PID is an approach to research, extension and – above all – development. Often, it is undertaken by farmers together with development agents, without the involvement of formal researchers (Waters-Bayer *et al* 2004).

2.3 Institutional change

In order to allow for PID methods to be developed, sustained and spread, PID and its mechanisms need to be integrated into the formal ARD system, creating space for a flexible organisation of collaboration and partnership with farmers (Almekinders & Elings 2001). This so-called “institutionalisation” is a process in which new ideas and practices are accepted and used by individuals and organisations so that they become part of the norm and regular practices of an organisation (Sutherland 2000). Institutionalisation of PID implies an institutional change and transformation process. This is generally a complex process that requires different patterns of change in structures, procedures, strategies and decision-making processes.

Just as a rope is made of intertwined but separate strands, each having its own substrands, each organisation can be understood to have complex subsystems. Three such subsystems identified by Tichy (1982) are Administrative-Technical, Political and Sociocultural, which jointly determine an organisation. Figure 1 shows the intertwinement, where the black strand suggests the Administrative-Technical, the red strand the Political, and the blue strand the Sociocultural subsystem.



Figure 2: Intertwinement of the three subsystems in an organisation

The Administrative-Technical subsystem refers to the operational part of an organisation: the planning, forming of teams, departments, staffing etc. Constraints or drivers of change in this system include pressure from donors, the global and local economy, innovations, strategies in agriculture and information systems, and changes in investments in ARD. How these facilitate or hinder change in the administrative-technical subsystem depends on the context. To institutionalise PID, fundamental aspects of this subsystem may need to be changed, such as reformulation of the organisation’s mission and strategies, restructuring of budget allocations, and adapting human resource management (Tichy 1982).

The Political subsystem of an organisation refers to how decisions are being made, how power is structured, the role of the management *vis-à-vis* the staff, how conflicts are settled,

and how staff is rewarded or punished (Tichy 1982). Major enabling or obstructing factors are often found in this subsystem. Pressures from decentralisation, government regulations and policy, and resource and power allocation influence the existing power system of an organisation. In public agricultural extension organisations, this subsystem is often characterised by a centralised hierarchical authority, leaving little room for manoeuvre. Personal promotion and institutional survival depends on internal criteria of professional norms rather than external criteria such as farmers' adoption of a technology (Pretty & Chambers 1994) or the need to meet local peoples' interests and demands.

The Sociocultural subsystem refers to the organisational culture of an organisation, norms and values that staff members adhere to and that influence their behaviour. Past practices and decision-making processes as well as rewards and incentives shape an existing organisational culture. External pressures such as expectations for job fulfilment, definitions of rewards/incentives and equity, and demographic changes in society are major factors that can easily initiate a change in the sociocultural subsystem (Tichy 1982). Change in staff attitude – part of this subsystem – is often seen as the first step towards organisational change and institutionalisation of a new approach (Hagmann *et al* 1998).

Each of these three subsystems in an organisation can again be broken down and analysed further. Three areas of attention can be distinguished in each of them:

- Issues related to the mission, mandate and planning of the organisation
- Issues related to how the organisation is structured, the various units and their tasks, procedures, supervision and control, budget allocation and control
- Issues related to the individuals working in the organisation.

The matrix in Table 1 brings these three dimensions together for the three subsystems in an organisation and thus provides a framework for detailed analysis of organisational change. It helps to understand how institutionalisation takes place in an organisational context.

Table 1: Systems and their components in an organisation (Lizares-Bodegon et al 2002)

	Mission/ mandate	Structure	Human Resources
Administrative-Technical: 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; training and coaching
Political: the power game	Influence from inside and outside in developing policies and strategies; role of management	Decision-making; formal and informal mechanisms; supervision and control; conflict management	Room for manoeuvre: space for innovation; rewards and incentives; career possibilities, working styles
Sociocultural: identity and behaviour	Organisational culture: symbols, traditions, norms and 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, objectives and to partners/clients; stereotyping: willingness to change

3. The context

3.1 Cambodia in brief

Cambodia is a small, predominantly rural country in southeast Asia (Figure 3) with a size of 181,035 km² supporting an estimated population of about 13.4 million (Kingdom of Cambodia 2009). The ethnic groups include 90% Khmer, 5% Vietnamese, 1% Chinese and 4% others. About 95% of the people follow the Theravada Buddhism religion and the remaining 5% other religions (Hessa 2009). The national Gross Domestic Product (GDP) has been growing at a rate of 4.4% over the past decade. According to the Government's National Poverty Reduction Strategy, 36% of the total population lives below the poverty line of USD 0.46 per day (World Bank 2004).

Cambodia has a monsoon climate with two distinct seasons. The wet season lasts from May to October, with lowest day temperature of 22°C and high humidity. The average annual rainfall is between 1000 and 1500 mm; the heaviest rainfall is usually in the southeast part of the country, including Takeo Province. The dry season lasts from November to April, with day temperatures as high as 40°C.

Cambodia is richly endowed with agricultural land and *Figure 3: Location of Cambodia in natural resources, notably forests, fish and a wide southeast Asia*

variety of natural habitats and ecosystems. In 2007, agriculture accounted for 29% of the GDP, with the rice-based farming system as the backbone of the sector. About 80% of production is subsistence, with 60% of produce used for household consumption (Yu & Fan 2009).

Cambodia gained independence from France in 1953. The years following Independence were characterised by political turmoil (Ear 2004). The Democratic Kampuchea (Khmer Rouge, 1975–79) regime put in place a centrally planned agrarian economic system. All existing institutional frameworks were destroyed, private ownership was banned, and new comprehensive resettlement programmes were introduced to replace the existing social structure. The genocide during this regime caused the death of a quarter of the country's population, ruining the educated human resources in agriculture and other professions.

After the overthrow of Democratic Kampuchea, a new government was formed supported by Vietnam and the Soviet Union (1979–93). Since 1993, there is national reconciliation, peace and stability in Cambodia. The Cambodian People's Party (CPP) formed a constitutional monarchy government, where the king reigns but does not govern (Ho-Seop 2004).

Since 2002, government administration below the national level is organised into four layers: provincial (*khaet*), district (*srok*), commune (*khum*) and village (*phuum*). The government system was decentralised and Commune Councils were formed to govern at commune level.



3.2 The development of agricultural extension in the country

The Department of Agricultural Extension of the Ministry of Agriculture, Fisheries and Forestry (MAFF) was established only in 1995 (Soeun 2005). From 1979–95, extension was carried out by technical departments of the Ministry of Agriculture in the so-called target areas of research stations and agricultural development organisations. The Department of Agricultural Extension in MAFF now supervises agricultural extension service delivery in all the 24 Provincial Departments of Agriculture (PDAs) in the country. MAFF allocates the (limited) annual budget, provides input support, and recruits staff for all PDAs.

In 1996, AusAID (Australian Agency for International Development) supported the introduction of new high-yielding rice varieties and improved livestock breeds by using a technology-transfer strategy in five PDAs. AusAID also facilitated the establishment of the Cambodian Agricultural Research and Development Institute (CARDI). CARDI releases high-yielding rice varieties and distributes these to farmers. On-station, adaptive on-farm trials and technology transfer are the approaches used by the institute to date. The role of farmers is limited to providing experimentation plots and labour.

AusAID phased out in 2005. MAFF then designed a national agricultural extension project named the Agricultural Sector Development Program (ASDP) to be executed in five provinces, including Takeo, from 2006 to 2009. It aimed to promote sustainable growth of market-based agriculture. The project required each PDA to plan its own implementation addressing specific problems. This flexibility in the design of the ASDP gave officials of PDA Takeo a chance to include local innovations as options for solving identified problems.

The Farmer Field School (FFS) approach was introduced to Cambodia in 1998 by the FAO-funded project WIN (Empowerment of Women in Irrigation and Water Resource Management for Improved Household Food Security, Nutrition and Health), which provided training in the participatory FFS approach in different provinces of Cambodia, including Takeo, for five consecutive years (1998–2002). To date, the concept of FFS is still used by staff members in Takeo and reflected in daily routines, planning and reporting documents.

3.3 The Provincial Department of Agriculture Takeo

To understand the possibilities and limitations of introducing PID in PDA Takeo, it is important to understand how the PDA is organised, its staff and facilities, and its room for manoeuvre within the larger national MAFF.

3.3.1 The province of Takeo

Takeo Province is 78 km south of Phnom Penh, the capital of Cambodia. It is easily accessible. The total land area of Takeo is 3563 km², which is about 2% of the land area in Cambodia, with a population density of 236 persons per km². About 80% of the people are farmers, with rice being the main crop by far. Takeo is Cambodia's third strongest source of rice and MAFF (2009) considers the agronomy sector as the first priority for future development of the province. Consequently, the agronomy section of PDA Takeo focuses on the providing extension services related to rice production and intensification.

3.3.2 PDA Takeo set-up and facilities

PDA Takeo was established in 1979, starting only with 10 people with little technical knowledge. Staff increased in number to 301 in 2000 and went down again to 170 in 2009 (PDA Takeo 2000, 2009) after restructuring of the MAFF.

The main building of PDA Takeo has limited office space and few facilities. Only one telephone line and one phone at the reception are supposed to serve the entire organisation. But since private mobile phones are accessible at reasonable charges, communication between staff members, farmers and other officials is mostly made through these phones. Computers are scarce in the office and many communications are written by hand and later typed by administrative assistants.



Figure 4: PDA Takeo offices

Figure 5 shows the organisational set-up of PDA Takeo. Being part of the national MAFF prevents PDAs from making important changes in the organisational structure, but some operational adjustments are possible. PDA Takeo, e.g., has three rather than the usual four deputy directors, as the work at the PDA was found to be manageable with this number.

The current director of PDA Takeo was deputy director of the PDA for many years and was responsible for the agronomy section of the PDA, among other assignments. He is one of the first three people who initiated the promotion of farmers' knowledge and the use of local innovations in Cambodia. He is closely acquainted with the president of the NGO CEDAC, who took part in the international workshop held in 1999 in Rambouillet, France, where the concept of a PROLINNOVA programme was originally developed. In his role at that time as deputy director of the Agronomy Section of PDA, the current director joined the first PROLINNOVA International Partners Workshop (IPW) in 2004 together with the president of CEDAC, and he has served on the PROLINNOVA–Cambodia National Steering Committee (NSC) regularly.

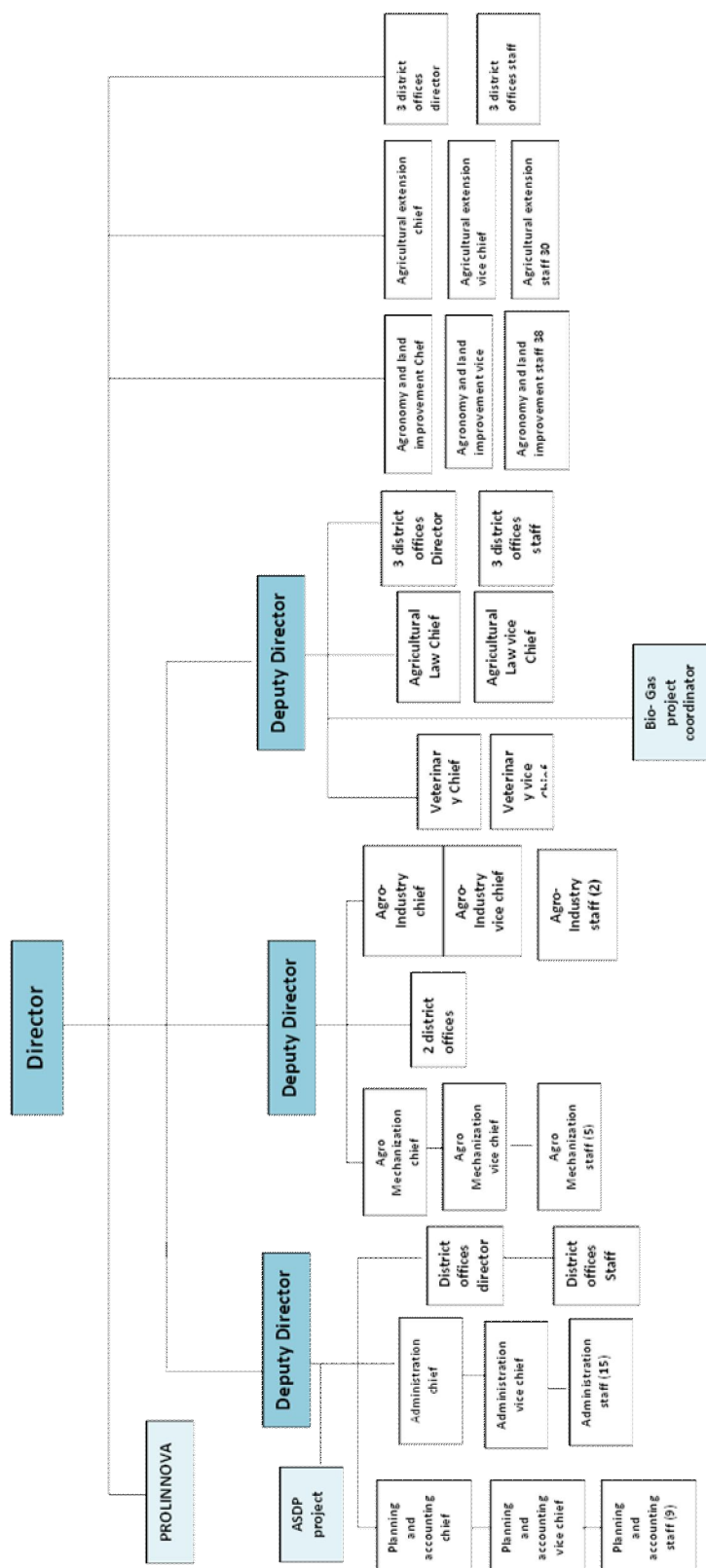


Figure 5: Organisational structure of PDA Takeo

3.3.3 Staffing and staff organisation

The *educational level* of the present 170 PDA staff is shown in Figure 6. Most staff members have only a high-school diploma and one year of training, mostly in agronomy.

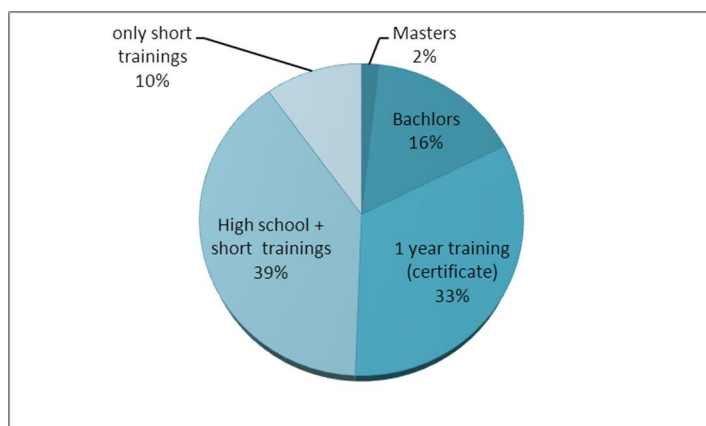


Figure 6: Analysis educational background of PDA Takeo staff

PDA offers or organises *staff training* only occasionally in collaboration with other organisations. Budget allocations from MAFF do not allow for capacity-building events. Training activities over the last decade included an extensive training on FFS funded by the FAO WIN project and one on SRI (System of Rice Intensification) by CEDAC (Cambodian Centre for Study and Development in Agriculture) and funded by German AgroAction.

Most PDA employees are in their mid or late forties, who started working at the PDA at a young age. *Their salaries* range from USD 20 to 100 a month, which is low considering that the very minimum cost of living is USD 35 a month (Kato *et al* 2000). The PDA has no direct influence in selecting technical staff, as this is done by the Ministry.

The work routines in the PDA office are influenced by the hierarchical Cambodian culture. There is a vertical structure of job delivery from the director to the field. In some foreign-funded projects, the deputy directors have decision-making power and directly report to national coordinators at MAFF. The vertical structure leads to a lack of horizontal interaction among staff members within and between sections and prevents staff members from openly discussing and sharing work-related issues, even when seniors motivate them to do so. Staff members may have limited awareness of what others in the same project are doing. The agronomy section chief may have little knowledge of the activities of the PROLINNOVA programme, even though staff members of his section implement them.

On the twentieth of every month, a meeting takes place with the PDA director, district directors, section chiefs and staff. Regular attendants are only the PDA director and district directors. On rare occasions, one of the deputy directors chairs the meeting, if the director is not in the PDA office. The monthly meetings are quite formal. Updates on production, problems and solutions are expected from all districts, and each district director must report when asked. The friendly, relaxed and open way of going about things that can be witnessed before entering the office becomes formal and stiff in work meetings.

PDA reports and documents indicate that *staff evaluation* is rare. In the past, only the director evaluated all PDA staff. Recently, section chiefs and directors are encouraged to evaluate their staff. There is no standard for staff evaluation. Personal commitment and motivation, communication, experience and education level are important, especially if a staff member applies for promotion. MAFF ultimately decides on promotion and salary increment.

4. The process & activities towards PID institutionalisation

4.1 Building the PROLINNOVA–Cambodia partnership

In 2004, with lessons learnt from previous partnerships in the country that had weak involvement of government organisations, five organisations – CEDAC, PDA Takeo, the Royal University of Agriculture and two local NGOs – started a partnership on promoting local innovation. The first three organisations are pioneer partners, with CEDAC coordinating the partnership. The partnership among these organisations started from an informal group of friends and colleagues who shared the same vision on promoting local innovation. A factor that facilitated the creation of the partnership and joining of the PROLINNOVA global network was CEDAC's own limitations in finance and human resources to reach out and promote local innovation widely in Cambodia (CEDAC President, personal communication, 2009). CEDAC is a national Cambodian NGO that aims to develop sustainable agriculture and rural development in Cambodia. It was established in 1997 with initial support from the French NGO GRET (Group for Research and Exchange of Technology).

In March 2004, the President of CEDAC invited the deputy director of PDA Takeo to attend with him the first PROLINNOVA IPW held in Ethiopia. Both had already been involved promoting SRI in Takeo Province since 2001 and recognised the PID approach as a way of adapting and spreading SRI in the Province and possibly more widely in Cambodia. At the IPW, they presented their proposal for establishing PROLINNOVA–Cambodia (PROFIEET/PROLINNOVA, 2004). After the workshop, PROLINNOVA–Cambodia became a country programme and a partner in the PROLINNOVA international network.



Figure 7: Participants in a PROLINNOVA–Cambodia workshop, June 2008

The main objectives of PROLINNOVA–Cambodia are to build an inter-institutional partnership in promoting local innovation and participatory approaches in ARD and to institutionalise participatory approaches in agricultural research, extension and education institutions (PROLINNOVA–Cambodia 2009). PROLINNOVA–Cambodia intends to bring about institutional change by acting as a “catalyst for change”. After much discussion and reflection, the partners felt the need to work together to be strong enough to realise the institutional changes they were seeking. Therefore, through a number of meetings and workshops in Cambodia, awareness was created on local innovation and the intention to institutionalise participatory approaches to ARD.

The number of partners increased to 15 in a few months' time within the same year (2004). By 2009, PROLINNOVA–Cambodia had 21 partners. These include 10 Provincial Departments of Agriculture, the MAFF General Department of Agriculture (specifically the Rice

Department and the Department of Agricultural Extension), three universities of agriculture, four local NGOs and two farmer associations. Figure 8 presents the structure of the Cambodian partnership. The National Working Group (NWG) brings together all partner organisations and has overall authority.

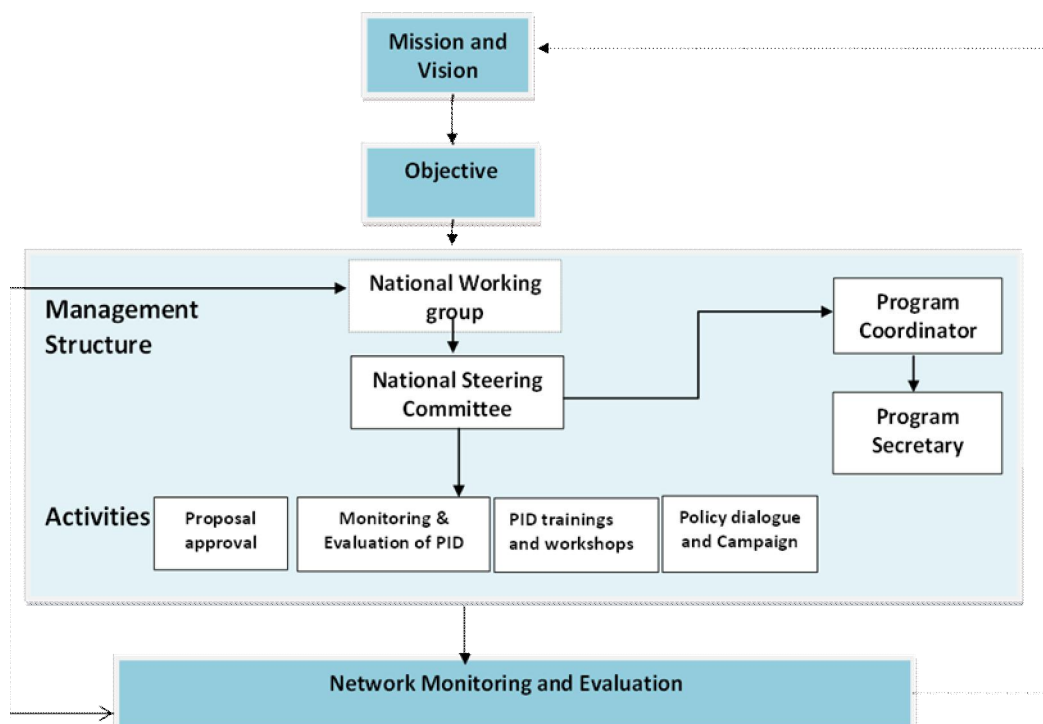


Figure 8: Structure of PROLINNOVA–Cambodia

4.2 Key activities

4.2.1 Awareness creation

PROLINNOVA–Cambodia creates awareness on the relevance of local innovation and the need for professionals to support this through PID, through workshops on local innovation and PID, organisation of field visits for staff and managers, co-organisation of conferences with various organisations (education institutions and NGOs), and distribution of publications, mostly in Khmer, such as a booklet on farmer innovation and the farmers' magazine called "*Farmer Innovation*". Partner organisations of PROLINNOVA–Cambodia receive this magazine free of charge on a quarterly basis, while other organisations receive it at a subsidised rate.

PDA Takeo has been an active participant in promoting PID among individual farmers and organisations in Takeo Province and among other partners of PROLINNOVA–Cambodia by sharing experience, participating in PID workshops, recognising best-performing and innovative farmers and inviting professionals, officials and farmers to visit PID activities in farmers' fields in PDA Takeo.

The extension work for the System of Rice Intensification (SRI), itself an innovation by a priest working with farmers in Madagascar, is used often as a point of entry for PID to work towards institutional change. CEDAC officials and representatives of PROLINNOVA–Cambodia, especially PDA Takeo's representative, have played an important role in convincing MAFF officials to incorporate SRI into the agricultural policy and the education curriculum, which in turn has strengthened the acceptance of the work of PROLINNOVA at PDA level.

4.2.2 Capacity-building

Building capacity is a very important component of the work of PROLINNOVA–Cambodia. The capacity-building programme has two levels: one focuses on practical implementation of PID in farmers' fields and targets regular staff; the other focuses on organisational development and strategising the management system, targeting directors, deputy directors and representatives of development organisation.

PROLINNOVA–Cambodia has organised six main courses of training-of-trainers (ToT) in PID for regular staff, as well as a refresher course. By the end of 2009, six participants – including one woman – from PDA Takeo had joined these training events. Full responsibility for selection of trainees is given to the partner organisation. In most cases, staff members with many years of service in the organisation join the training. These training events focus on processes and methods of working with people in a participatory way. The content of a typical PID training includes:

- Reflecting with trainees what they already know about participatory approaches
- Using the Johari Window to work on self-awareness of extension staff, group development process and understanding relationships with local people
- Discussion with the trainees what they want to know about participatory approaches
- Explanation on PID methods through group discussions, role-plays and games
- Practising facilitation of certain types of technology experiments in small groups, followed by group presentation and discussion
- Visit to an innovative farmer (PROLINNOVA–Cambodia 2008).

At the end of a PID training workshop, participants receive manuals and guidelines on the process of facilitating and working with farmers in joint experimentation. As part of the capacity-building effort, assistant facilitators are selected from people trained in previous training events. A PDA staff member from Takeo served as assistant facilitator once. Those trained in PROLINNOVA events do not commonly share the knowledge they have gained with other colleagues in PDA Takeo. Instead, such sharing is encouraged through direct implementation of PID activities in farmers' fields. We will later analyse the reasons for this (Section 5).

For the first PID training of trainers in 2004, the director of PDA Takeo selected two staff members – one man and one woman – from the agronomy section. They joined the director in the first five-day training of trainers on facilitation of participatory innovation development from 22–29 October 2004. The trend of sending staff members from agronomy section continued of the next years and all the six PDA staff members trained in PID are from that section. However, not all of them are involved in PID implementation. For instance, the staff members trained in 2005 were relocated to another province in 2007; another staff member trained in 2006 left the PDA in 2007. One of the pioneer trainees went abroad for study early 2010. As of August 2010, only one PDA staff member – the woman – who had been trained in PID is still facilitating PID activities and is involved in joint experimentation and related activities with guidance and support from the PDA director.

4.2.3 Joint experimentation

Often as a follow-up to PID capacity-building events, PROLINNOVA–Cambodia encourages trainees and their organisations to implement so-called “joint experimentation” activities. In joint experimentation, fieldstaff, extension, research and/or others work with and support farmers to study, try out and experiment with relevant agricultural practices or processes that have been jointly identified. This forms the heart of the PID process. PROLINNOVA–Cambodia encourages organisations to try to implement joint experimentation by providing limited financial support (about USD 1000 per experimenting group consisting of 10 farmers and one facilitator. It covers 80% of the costs (USD 800) with partners covering the remaining 20%

(USD 200). The allocation of funds for joint experimentation is discussed and decided upon annually in a meeting of the NWG.

Since 2005, the agronomy section of PDA Takeo carried out five joint experiments with funds from PROLINNOVA–Cambodia. Four of the joint experiments were on SRI principles and practices and the fifth was on fish farming. The focus on SRI can be understood from the fact that Takeo is a rice-growing area and farmers are more enthusiastic to experiment on increasing their yield of rice compared to other crops. From PROLINNOVA–Cambodia’s side, experimentation on SRI was also encouraged, as rice is a priority crop for almost every Cambodian farmer and SRI was already an important extension issue not completely new for farmers. There is also interest from officials of the Ministry and PDAs in SRI. For these reasons, the SRI technology was used in a way as an entry point for PID. This is possible, as SRI itself is promoted flexibly as a set of principles and possible practices for farmers to experiment with.

All joint experimentation took place with farmers of *Triang District*, an administrative division 3 km from the PDA Takeo office, to allow close supervision by PDA staff assigned for the experimentation and by the director. Each joint experiment was done with a different farmer group. This had implications for sustainability of the groups. Only one of the four farmer groups specifically formed for joint experimentation was still active by the time of the study. One joint experiment was done with an existing farmer group (see Box 2).

Joint experimentation in Takeo typically starts in May and ends in December. There are usually ten farmers in a group plus one of the pioneer PID trainees as a facilitator. To give an idea of the number of farmers involved: in 2009, a total of 148 farmers participated in PID experimentation, including 37 women. The director explained that the allocated budget limits the number of joint experiments and the number of staff that can be involved.

To carry out the joint experimentation smoothly, the key facilitators from PDA Takeo developed and used their own protocol (Box 1). This protocol has not been written out on paper. It was verbally explained, indicating the emphasis on practical application of activities rather than strategising and structuring PID in PDA as an organisation.



Figure 9: Women and men farmers jointly harvesting their SRI experimentation plot

Box 1: Protocol for organising joint experimentation

1. PDA staff briefs the village chief about the goal and purpose of the programme and asks him to organise a general village meeting.
2. Village chief organises general meeting for both men and women farmers, sets the date and contacts the PDA.
3. 1st general meeting is facilitated by PDA staff to explain the idea and purpose of joint experimentation to the farmers and to select volunteers who are willing to do this. (It was reported that not many farmers join the village meeting, as no *per diem* is given). If 20–30 farmers attend, the meeting takes place and 10 volunteer farmers are selected by the facilitators for doing joint experimentation. If less than 20 farmers attend, the meeting is rescheduled for another day. The village chief attends the meeting.
4. 2nd meeting is organised in the village with PDA staff, one farmer group representative and village chief to inform the government through the Commune Council about the formation of the group and in which village the experimentation will take place.
5. 3rd meeting is organised to discuss on what to experiment, to give opportunities to farmers to share their experience on what they know and what they want to find out, and finally to decide on which technology to try out.
6. After gathering ideas from farmers on what to experiment with and how, a proposal is written to the PROLINNOVA–Cambodia Secretariat at CEDAC by PDA staff. The proposal is screened and decided by NSC. If the proposal is not accepted by the NSC, it is sent back to the PDA director for adjustment.
7. 4th meeting is to plan and prepare for experimentation and to discuss how to organise the group into subgroups for the trials.
8. The experiment is carried out and inputs are provided by PDA with the funds allocated for PID. The experimenting farmers record their activities and write monthly reports, which are later compiled into one by the farmer group representative.
9. Bi-weekly (sometimes monthly) follow-up on the experimentation and group discussions with farmers on the progress. Facilitator joins farmers during (in the case of rice) land preparation, transplantation and in identification of cases of disease and pest incidence.
10. Monitoring and evaluation is planned, but it is usually done by the NSC members of PROLINNOVA–Cambodia through a field visit at the end of the experimentation. The evaluation considers technical and social – including gender – aspects.
11. Report writing by the PDA staff on the work and results, referring to the monthly report submitted by farmers and the regular follow-up.
12. Local innovation workshop is organised where farmers present their results, share their experience and spread their knowledge to others.

Source: staff interview

As already mentioned, one joint experiment was done through an active existing farmer group – the Thloak Commune Farmer Association (Box 2) – that had been formed with support from CEDAC in 2005. This farmer group is also a partner organisation in PROLINNOVA–Cambodia.

Box 2: Joint experimentation by the Thloak Commune Farmer Association

Thloak Commune is a farmer association with 15 farmers from three villages of Trang District in Takeo Province. It was set up with support from CEDAC in 2005 and, in the same year, became a partner of PROLINNOVA–Cambodia. Thloak Commune is a very active and well-organised farmer association. The members share any new experience and knowledge in their monthly meetings.

Thloak Commune and PDA Takeo submitted a proposal for joint experimentation on the yield from SRI versus traditionally planted rice to the PROLINNOVA–Cambodia network in 2008. The role of PDA Takeo in this case was only providing technical support, as Thloak Commune is a partner or PROLINNOVA by itself. According to the Thloak Commune Council's representative, the reason for the joint experimentation was to convince farmers in the commune who did not believe in the principles of SRI. Therefore, the Council decided to let the farmers experiment on SRI versus traditional planting. After the experimentation, the farmer group organised a workshop (again with support from PROLINNOVA–Cambodia) and shared their experience with other farmers. The experimentation showed that more yield was obtained per unit area if rice was planted the SRI way.

Study of documents and actual observations suggest that the degree of participation of farmers in joint experimentation undertaken by PDA Takeo is still not very strong. The experimentation topic is often pre-planned, and inputs are supplied by PDA with co-funding from PROLINNOVA. This seems to create dependency instead of innovativeness. This contrasts with the experience of farmer groups involved in joint experimentation through the Local Innovation Support Fund discussed below. Here, farmers are empowered and confident in their experimentation.

4.2.4 Workshops on local innovation

PROLINNOVA–Cambodia encourages the sharing of results of joint experimentation and farmers' experience with others, farmers, government and NGO officials through so-called "*local innovation workshops*". These workshops are one of the major activities of PROLINNOVA–Cambodia towards institutionalising PID. These workshops were organised in order to select the best farmer innovators to participate in the national workshop on local innovation, which is organised once a year, usually in December just after the end of joint experimentation. The organisation process includes setting up a place for the workshop, sending out invitations, and helping farmers to prepare their own speeches for the workshop. The farmer leader works with the staff in selecting key farmers who can share their experience. PDA Takeo has organised such workshops from 2005 to 2007. So far, an average of 95 participants, mainly farmers, attended the workshops, and one third of the "best innovators" were women.

In the workshop, farmers with innovative ideas explain their innovations. Every year, three to four farmers present their ideas. At the end, participating farmers vote for the best innovation. According to the CEDAC president, selection of innovative farmers is not always given enough emphasis, as local innovation workshops are planned in a short period and farmers are told to share their new ideas at the last minute.

4.2.5 Local Innovation Support Fund

With separate support from PROLINNOVA International, PROLINNOVA–Cambodia started up action research on so-called Local Innovation Support Funds (LISFs) and selected PDA Takeo to pilot this in 2007. LISFs are envisioned to give farmers flexibility and independence in doing their own research relevant to local problems and conditions. LISFs are funds co-managed by farmers that they can access for innovative work and (joint) experimentation. The chief of the Agricultural Law Section of PDA Takeo coordinated the LISF pilot from 2007 to early 2010. He was trained in PID and previously facilitated joint experimentation in the Agronomy Section.

LISF also encourages farmer-led joint experimentation, but with more influence of farmers than in the joint experimentation described above and following the farmers' own procedures. The facilitator from PDA supports group formation only if needed and guides farmers in proposal writing. The budget for experimentation is not fixed; it depends on the topic and needs of each farmer's experiment. The funds for experimentation go directly to the farmer group representatives. In Takeo, there is no regular follow-up after farmers start experimenting; the model is "own experimentation" by farmers. When they finish, the facilitator organises a workshop where farmers can share their experience. Since 2007, only one farmer group with six members (including one woman) is experimenting on different innovations under LISF. Farmers are encouraged to repeat their experiment or to modify it in the following year. Farmers complain about difficulties in rewriting their proposals when told to make adjustments.

4.3 Summary analysis of PROLINNOVA–Cambodia – PDA Takeo interaction

The process of interaction between PROLINNOVA–Cambodia and PDA Takeo contributing to institutionalising PID in the province thus included a diversity of activities. The process can be summarised systematically through a timeline of key activities covering the period from 2004 to 2009 as shown in Table 2.

Table 2: Process of interaction between PROLINNOVA–Cambodia and PDA Takeo

Year	Activity in PROLINNOVA–Cambodia	PDA Takeo's involvement
2004	Inception phase of PROLINNOVA–Cambodia	PDA director ¹ joined the PROLINNOVA workshop in Ethiopia
	NSC formed	PDA director became member of NSC
	Network coordinator was hired; rules and regulations of PROLINNOVA network were written	PDA director participated in planning the activities of PROLINNOVA–Cambodia
	Local innovation platform was established and national workshop was organised	PDA Takeo hosted the workshop
	Strategic planning for promotion of PID was made	PDA director involved
	Training of trainers (ToT) on PID for extension officers of the partner organisations	Director and 2 PDA staff (one male, one female) from Agronomy Section joined
2005	Collaboration with NEDC ² on promotion of PID	PDA director facilitated organisation
	Refresher training on PID for previous trainees	2 PDA staff members from previous training attended refresher training
	2 nd round of ToT training on PID for new trainees	Previous trainee from PDA Takeo assisted the ToT, 1 new PDA staff joined
	Joint experimentation by 8 partners of the network	1 st experimenting farmer group compared yield from SRI vs. traditional method

¹ Who was Deputy Director for the Agronomy Section at the time

² Network of Ecological Agriculture Development in Cambodia (NEDC) is a network of 37 NGOs working on development of ecological agriculture through capacity building, sharing information and awareness creation. The network was established in 2004 and covers 17 provinces and around 100,000 farmers in 2000 villages. CEDAC is co-coordinator of this network.

Year	Activity in PROLINNOVA–Cambodia	PDA Takeo's involvement
	NWG decided that all joint experimentation should be on SRI	PDA director participated in the decision-making
	Local innovation workshop was organised	PDA director and 2 PDA staff organised the workshop in Takeo
	Farmer organisation Thloak Commune joined PROLINNOVA	Thloak Commune is in Takeo Province
	MAFF rewarded farmer with highest rice yield (SRI farmer won the prize)	The farmer was from Tramkok District, Takeo Province
	Evaluation of the joint experimentation by NSC	PDA Director is in the evaluation team
2006	3 rd round of ToT training on PID	4 th trainee from Agronomy Section joined; 1 st trainee repeated the training
	Joint experimentation by all partners encouraged	2 nd experimenting farmer group compared yield of SRI rice with organic vs. traditional fertiliser
	Cambodia hosted and organised annual PROLINNOVA International Partners Workshop	PDA director participated in the organisation and helped translating and explaining the work of PROLINNOVA to visitors
	NSC evaluated the joint experimentation activity in each partner organisation	PDA director was one of the five evaluating committee members
2007	LISF pilot programme was set up	PDA Takeo is the only state-owned extension organisation piloting LISF in Kirivong District; 1 group of farmers with 6 members (including 1 woman) was formed for the LISF pilot
	Training on proposal writing on request from PROLINNOVA members	Agricultural Law Section chief joined
	4 th round of ToT on PID	1 PDA new staff joined
	3 rd round of joint experimentation	3 rd experimenting farmer group compared yield of planting in rows vs. broadcasting
	Election of new NSC	PDA director was re-elected
	NSC evaluated joint experimentation	PDA director was in the team
2008	National workshop on “Can farmers be innovators?” organised	Organised by PROLINNOVA–Cambodia partners in Phnom Penh; farmers from Takeo and other provinces took part; Minister of MAFF expressed readiness to fully support promotion of local innovation
	4 th round of joint experimentation	4 th experimenting farmer group on fish raising and SRI through Thloak Commune: yield of SRI rice vs. conventionally grown rice
	5 th round of ToT on PID	1 previous trainee and 1 farmer group representative joined
	NSC evaluated joint experimentation	PDA director was in the team
2009	5 th round of joint experimentation	5 th experimenting farmer group compared yield of rice planting in rows vs. broadcasting
	6 th round of ToT on PID	1 PDA staff from district and 1 farmer joined the training

The table reveals several important features in the process of introducing PID in Takeo Province:

1. PDA Takeo has been involved in *a great diversity in types of activities* around local innovation and PID, from field-level experiments to training to workshops to NSC meetings to organising and joining international events.

2. The interaction has continued over a *long-time span*: 2004–10.
3. Throughout the process, there have been *regular opportunities for PDA staff to receive training* in PID through the annual ToT by PROLINNOVA–Cambodia, thus gradually expanding the pool of trained staff.
4. Each annual cycle of joint experimentation has been *evaluated at the end of the process* through a visit from the NSC.

5. Findings: progress towards institutionalising PID

Has the above process led to some form of institutionalisation of PID in PDA Takeo? Generally, the study suggests some progress in some areas and little progress in others. The following sections provide a detailed analysis of the transformations, or the lack of them, within PDA Takeo for each of the three subsystems discussed in Section 2.3. The final section summarises the findings, showing the interlinkages between the three subsystems.

5.1 Changes in administration, structure and capacity

There have not been major changes yet regarding *organisational structures, policy, mission and vision*. No changes in written job descriptions and/or procedures were observed. These types of changes are not directly within the mandate of the PDA but belong to the authority of the MAFF. Even the protocol for joint experimentation used by PDA staff has not been documented on paper and thus has not yet become an accepted PDA procedure.

Yet some important changes in the *operational* procedures – those actually practised – took place at office and field level. Some of the changes in operational procedures that took place at office level include:

- Increasing the general understanding of PDA staff on local innovation (though this does not go very deep yet) and its importance and increasing the awareness of farmers on the use of new technologies was expressed as a goal of the PDA since 2007 (PDA Takeo 2007), but has not yet been included in the annual plan and budget
- The workplan for 2009–10 foresees staff capacity building and trying out new technologies and approaches introduced by PROLINNOVA and others is proposed.
- Actual capacities of (some) staff have increased since 2000 through training by NGOs, PROLINNOVA–Cambodia and others. Six PDA staff members were trained in PID over the past five years. However, only two were actively working in the field, one on joint experimentation with farmers and the other coordinating the LISF pilot project, with the PDA director supervising the overall activities.
- Since 2005, PDA started writing its own proposals for fundraising to donors, but without success. Then in 2007, supported through the training on proposal writing for PID by PROLINNOVA–Cambodia, PDA was able to secure funding for participatory SRI training. The training includes participatory experimentation on planting SRI in rows and broadcasting. This proposal was written by the PDA director and the chief of the Agricultural Law Section, who was also facilitator of PID and LISF.

It is reported by the PROLINNOVA–Cambodia Secretariat that transformation of these operational procedures was caused by the repeated farmer-innovation workshops (locally and nationally), ToT on PID, campaigning and awareness-raising on local innovation in various contexts (at MAFF, at PDA and in farmers' fields). These activities have created a better understanding of PID implementation, which led to initiation of the institutionalisation process. Furthermore, the increasing interest of other projects and donors to use and promote participatory approaches has had its influence by demanding skilled PDA staff to

provide training on participatory approaches and creating incentives for them. Furthermore, the geographical location of Takeo – being near to the capital city and thus close to MAFF Headquarters – as well as the strategic significance of the province for rice production in the country contributed significantly to capturing the attention of officials for local innovation and PID type of work being pioneered there. The technical significance (rice-producing area) and the political significance (MAFF policy and interest) and the rice farmers themselves (culture of farmers in Takeo) all interact and lead to the success of joint experimentation, especially on innovation in SRI.

A negative factor preventing faster change in operational procedures for the PID approach is the fact that other development projects such as ASDP use different approaches that are implemented parallel to PID. Slow change in operational procedures again influences the pace at which PID is institutionalised into the norms and routines of the organisation.

5.2 Changes in power and decision-making

The hierarchical organisational culture in Cambodia, potentially a limiting factor, has been used to support the institutionalisation process. Verbal support from high-ranking officials and acknowledgement of PROLINNOVA increased the acceptance of the approach by other officials at MAFF and PDA. The policy dialogues by PROLINNOVA–Cambodia partners at high MAFF level have been relatively successful, resulting in a gradual change in the culture of nation-wide agricultural extension in terms of more attention to farmers' own innovation as a source for agricultural development. PROLINNOVA–Cambodia feels that pointing out good alternatives has been more effective in changing the mindset of decision-makers and policymakers in the direction of PID than would have been possible through confrontation. Another factor explaining the success at this level has been the right choice for point of entry. PROLINNOVA–Cambodia linked LI/PID advocacy to the introduction of SRI, which appears to have contributed to the success of introducing PID into public extension organisations.

The political context in PDA Takeo was observed to be more flexible in practice, though in principle it seems rigid and narrow. For instance, trying out new things and allowing PDA to plan and strategise its own activities was supported by MAFF as long as PDA is able to mobilise its own funding. Though the current hierarchical structure has actually helped to push PID forward as argued above, the same hierarchy is limiting transformation into participatory planning and knowledge sharing. Strategically balancing between these two extremes is a key challenge to stabilise the institutionalisation process of PID. It shows the impact of the political subsystem (decision-making process) and its impact on the technical system of strategising, planning and structuring the PDA. Nevertheless, though the required transformation into bottom-up organisational culture with participatory planning and knowledge sharing is not in place, the level of transparency and accountability has progressed by including deputy directors and section chiefs in the decision-making and planning processes.

5.3 Changes in the sociocultural environment

On a negative side, the Cambodian culture of hierarchy has limited the realisation of a crucial component for PID institutionalisation, which is critical reflection on processes of extension delivery in the presence of senior staff, farmers and facilitators. The general organisational culture also does yet not encourage internal sharing of knowledge. The negative legacy of collectivisation caused by the Khmer Rouge has resulted in a bad name for collective action, limiting the motivation of farmers to work in groups or form organisations – a critical part of PID and joint experimentation.

Transformation in the PDA organisational culture linked to PID can therefore hardly be observed. An additional constraint that hinders such cultural transformation is the fact that experience in PID implementation is limited to two staff members. If a good “critical mass” is not created, change in organisational culture towards openness for farmer-centred development approach will remain a challenge. In the absence of a critical mass, it is difficult to develop common values and visions that are capable of altering the organisational culture.

Still, some indications that reflect changes in attitude of MAFF officials and PDA staff towards greater awareness and respect for farmers and farmer innovations and recognition of the necessity to work together with farmers were observed. New in the organisational culture is also the rewarding of best-performing PDA staff and best-producing farmers, where for farmers the involvement in SRI is an important criterion. The Minister of MAFF, when visiting Takeo Province, acknowledged the importance of recognising and respecting farmers as innovators, but the PDA as an organisation does not consider a staff member’s recognition of and respect for farmers’ knowledge or involvement in PID as criteria for nominating him/her for promotion or reward.

Interest of and regular visits by the Minister and high-ranking officials to farmers’ fields and their closer contact with PDA staff has supported this partial cultural transformation. In addition, the political, professional and social linkages between the Minister, CEDAC president and PDA director strengthened the consistency of the visits. The active involvement of the director, his personal interest and commitment for promotion of local innovation, his belief in dialogical communication with farmers and his efforts to build partnership with private organisations and NGOs are crucial supportive factors that contributed to the transformations observed not only in the sociocultural but also in the technical and political subsystems.

On the negative side, the dialogue on PID and activities on the ground involved only a few staff members, some of whom did not stay in their position for long. The process of convincing officials is therefore repetitive, and integration of ideas into the larger organisation complicated. The lack of a platform for internal sharing among staff members aggravates this problem, as the staff members who know about PID may leave without sharing their knowledge. Here, the role of experience (cultural subsystem) and its impact on technical system (promoting collective actions) and the process of decision-making (political subsystem) to empower farmers on sustainable joint experimentation are evident.

A deeper analysis shows that other fundamental attitudes among staff persist. They seem to prefer demonstration to joint experimentation. While they appreciate the capacity building in PID, they consider the implementation of PID to be tedious and inconvenient for use at a larger scale. The main cause of this perception on PID may be the culture of “projectisation”: PDA staff members work with farmers only for a short period of time to transfer/introduce new technical resources and then move on. Such projects usually come with higher rewards and incentives compared to PROLINNOVA–Cambodia-supported joint experimentation (considered as one of many projects of PDA Takeo).

But reports also indicate that, even though the current joint experimentation is only partially farmer-led, farmers are enthusiastic to finish their experiments once they start and prefer joint experimentation to demonstrations. This contradicts the view of PDA staff, who suggest that joint experimentation makes farmers unnecessarily busy and it is too complex for them.

5.4 Summary analysis

We can now summarise the analysis of findings – both achievements and constraints – by looking at the organisation as intertwinement of the three subsystems, where an activity or situation in one influences or is influenced by an activity or situation in another. For instance,

PID implementation on an annual basis (technical subsystem) influenced inclusion of PID in the annual plan of the PDA and motivated staff members to look for project funds that support promotion of local innovation and the use of participatory approaches. These led the technical subsystem to influence the decision-making processes (political subsystem), creating a flexible environment for trying out new things and sharing while improving accountability and transparency in decision-making. The positive attitude of the people involved in the process (cultural subsystem) contributed to the positive impacts mentioned above. Furthermore, the results realised in the technical and political subsystems resulted in the emergence of a new organisational culture that favours the use of local resources and believes in partnership with many stakeholders.

Constraints in the systems are also intertwined and interconnected. Hierarchical decision-making in planning and strategising (political subsystem) results in closed planning procedures by officials (technical subsystem) that constrain transparency among staff, leading to a lack of accountability on the use of the development approach (cultural subsystem). In addition, PDA staff is not motivated to invest time in implementing PID with more farmers (administrative-technical subsystem) because of a lack of financial incentives (political subsystem), which influences personal interest and motivation (cultural subsystem). Visual presentation of the intertwinement of findings in the three subsystems is presented in Figure 10, where the black chord represents the administrative-technical system, the red chord the political subsystem and the blue chord the cultural subsystem in the organisation.

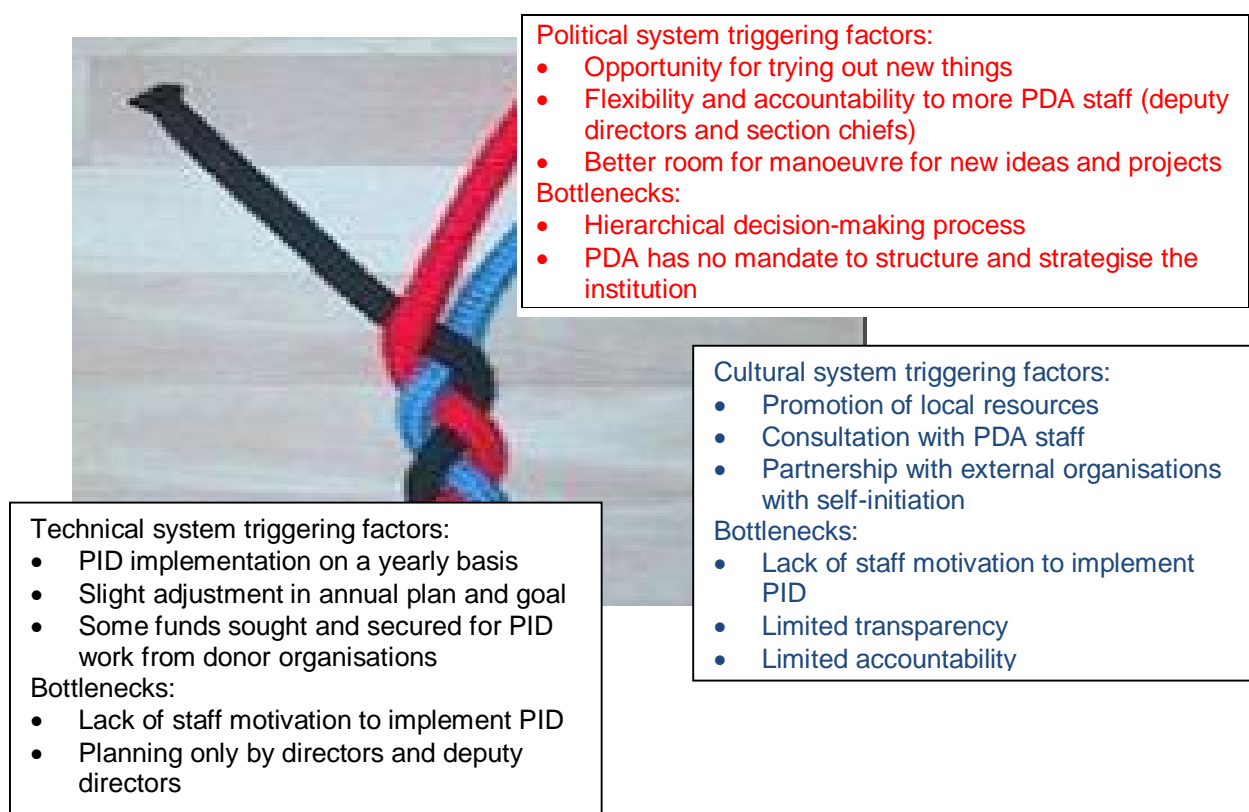


Figure 10: Overview of progress and bottlenecks of the three systems in PDA Takeo

A further detailed summary analysis is possible by using the matrix presented in Section 2. Table 3 presents this analysis, zooming in on actual changes observed as discussed in the previous sections.

Table 3: Detailed summary of changes observed in the three subsystems of PDA

	Mission/ Mandate	Organisational structure	Human resource development
Technical subsystem (goals, procedures, staff development)	Changing organisational structure and budget is mandate of MAFF, not PDA. Annual plans, goals incorporate local innovations		Capacity of some staff members in PID strengthened through training, fieldwork and field visits Capacity of the organisation in fundraising and proposal writing improved after active involvement in PROLINNOVA and attending workshop on proposal writing
Political subsystem (decision- making, succession, rewards)	PDA does not have a mandate in policymaking or altering official policies PDA more open for interaction with other stakeholders	New process of sharing responsibilities and accountability among deputy directors Flexible staff management on job delivery as compared to previous experience PDA started securing additional funds that enabled planning and implementing PID-related activities Section chiefs empowered to formulate own job description and plan their activities	Staff rewards and recognition for PID at national level Training and study-visit opportunities create some incentives for PID among (a few) staff members Better staff incentives in other projects discourages staff to facilitate PID supported by PROLINNOVA
Cultural subsystem (organisational culture, attitudes, norms)	No changes observed	A new culture of sharing accountability and responsibilities Farmer-to-farmer extension to promote local innovation is accepted as a norm A new culture of valuing and appreciating efforts of staff members that perform well	Strong personal commitment of director and a few staff to promote local innovation and use of local resources in the PROLINNOVA network Increased interest of senior MAFF officials in farmer innovation Visits to farmers' fields and dialogical communication with farmers have become new routine by Minister, PDA director and other staff members Better awareness and respect of PDA staff in farmers' capacity to innovate

6. Conclusions, lessons learnt and way forward

Based on this case study, it can be concluded that PROLINNOVA–Cambodia has successfully implemented a series of activities initiating a gradual integration of PID within PDA Takeo. The combined effect of these activities in the hierarchical context of the MAFF and PDA Takeo, coupled with social ties between the PDA director, the Minister of MAFF and the CEDAC president, and also the personal commitment of the PDA director, have led to some progress in institutionalising PID and its spirit within the PDA. This includes e.g. the importance now given to identifying and promoting local innovations as part of the annual plan in the PDA, initiatives for collaboration with other organisations to promote participatory approaches, some greater delegation of responsibilities to lower staff levels in implementation of other PDA projects, and inclusion of PID components in proposals by PDA to other donors.

The overall hierarchical system and culture of the larger MAFF of which PDA is part does seem to limit the possibilities for such changes. The study shows, however, that rigid policies and hierarchies can also be turned into opportunities. In this case, the hierarchy of MAFF is used as an advantage in the transformation process, and a partnership with the decision-makers at the higher level, gaining their support, was achieved by PROLINNOVA–Cambodia as a first step towards institutionalisation of PID in PDA Takeo.

The experience of PDA Takeo also shows that, within a hierarchical context, quite a bit can be achieved by creative management through a combination of measures and practical changes and restructuring. The following could be suggested under such conditions:

1. Encouraging teamwork among staff members and organising reflection sessions and discussions;
2. Involving younger extension officers less fixed or influenced yet through conventional top-down extension in training of trainers and facilitation of joint experimentation; investing in the younger generation might break the cycle of top-down approaches, as their mindset may be more open for change;
3. Promoting formation of strong and sustainable farmer groups, and encouraging self-organisation and decision-making powers by farmers as a basis for increasing their demand for participatory approaches;
4. Continuing to expand the Local Innovation Support Fund (LISF) approach, allowing more farmers and farmer groups to use this for experimentation as entry point to fundamentally change the extension approach;
5. Enhancing partnership with other agencies and finding a real common ground where ideas can be shared freely and experimented upon with enough funding;
6. Involving district officers rather than provincial headquarters staff in training and facilitation processes to encourage integration of PID development in practice; providing general facilitation training for district staff will help, as well;
7. Directors and deputy directors deliberately encouraging participatory management and open discussion in meetings for planning and budgeting;
8. Giving recognition and rewards for PID work that is done well, in order to increase staff interest in and commitment to PID work.

PROLINNOVA–Cambodia has contributed significantly to changes within PDA Takeo through a rich diversity of interactions and forms of support. The study shows that this combination of interactions, their diversity and the long timespan of continued support have been key in determining the progress of the interaction between PROLINNOVA–Cambodia and PDA Takeo towards institutionalisation of PID.

But it is equally important to note that support given developed mostly on a more or less *ad-hoc* basis from year to year. If there was a longer-term strategic plan behind this, it was not formalised or operationalised. This has led to the missing of important opportunities for promoting institutionalisation of PID in the PDA. For example, the study points to the lack of effort for wider training of staff by the staff members that graduated from the national ToT, and to the lack of regular reflection/analysis on the experiences of the various rounds of joint experimentation within the PDA as a basis for improving the approach and for sharing results widely in the organisation.

It is therefore recommended that PROLINNOVA–Cambodia consider implementing a more strategically planned process towards institutionalisation of PID in PDA Takeo and elsewhere in the country. Such a process should be led the PDA itself, or any other partner organisation with supportive management, with clearly identified support roles for PROLINNOVA–Cambodia.

If this is accepted, two potentially “new” important activity areas will be needed:

1. Policy dialogue and awareness creation for PDA directors and deputies as well as managers of other agricultural development organisations on organisational development/change towards institutionalising participatory approaches. The matrix and rope model discussed in this paper, this case study itself and the eight practical measures mentioned above could be part of the content of such capacity-building efforts, which should target those managers that have shown an initial interest in integrating PID into their organisation.
2. Capacity-building for PDA staff in farmer organisational empowerment, in supporting the emergence of farmer-owned groups that become sustainable promoters of own interests and partners to collaborate with, e.g., in encouraging local innovation through Local Innovation Support Funds.

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