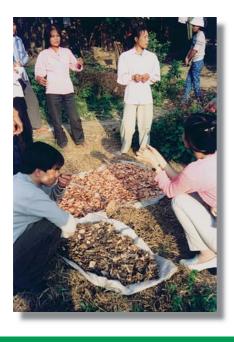
Finding new things and ways that work

A Manual for Introducing Participatory Innovation Development (PID)









Ueli Scheuermeier Elisabeth Katz Stephanie Heiland





About this manual

This manual contains a collection of training modules for initiating Participatory Innovation Development (PID) activities.

PID is a process of finding new things and ways that work (successful innovations) in interaction between rural people, research and extension service providers. The very basic principle of PID is that the local, situational, often more intuitive knowledge of villagers and the formal knowledge of scientists (researchers or other subject matter specialists) are combined to experiment on innovations. The interaction between villagers and scientists often needs facilitation. Extension is well placed to take on the facilitation function, as extension workers have the required communicative skills and a broad understanding of the local conditions, practices and knowledge. PID has its roots in agricultural development; the concepts, however, are applicable also for innovation development in many other areas, in particular other fields of natural resource management, like forestry and range management.

Based on this principle a variety of understandings and concepts of PID has evolved. This manual builds on the pragmatic PID understanding of the LBL International Department, and is mainly based on the experiences of LBL gained, and modules used, during PID introduction workshops with different partners in different programmes and countries.

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Foreword and acknowledgements

This document contains a collection of training modules for initiating Participatory Innovation Development (PID) activities, and provides an overview of the pragmatic understanding of PID of the International Team of the Swiss Centre for Agricultural Extension and Rural Development (LBL).

After having been involved in PID workshops in different programmes, we thought that the modules used in these efforts might be of use to other people who want to engage in PID efforts, and so we processed the modules into a form usable by others.

The modules were developed during PID introduction workshops in various programmes and countries. Some modules are new developments, others are adaptations of existing modules from various internal and external sources. The following programmes were contractors, participants, or partners in workshops which contributed to the modules:

- Indo-Swiss Project Andhra Pradesh (ISPA) (implemented by Intercooperation), in Andhra Pradesh, India (February/March 1994)
- Helvetas Cao Bang Programme, in Cao Bang, Vietnam (June 1999); Rural and Agriculture Services (RAS)/KSAP (Kyrgyz-Swiss Agricultural Programme) in Karakol, Kyrgyzstan (April 1999)
- Social Forestry Support Programme (SFSP) in Bac Thai Province (November 1999) and Dak Lak Province (March 2000), Vietnam
- Helvetas Ba Be Project in Ba Be, Vietnam (March 2000)
- ROCAFREMI Ouagadougou, Burkina Faso

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Some modules are adaptations from Jürgen Werner 1993: Participatory Development of Agricultural Innovations. GTZ: Eschborn.

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1 Introduction to the manual

1.1 Subject of the manual

This manual presents a collection of training modules for initiating Participatory Innovation Development (PID) activities, and provides an overview of the pragmatic understanding of PID of the International Team of the Swiss Centre for Agricultural Extension and Rural Development (LBL).

PID is a process of finding new things and ways that work (successful innovations) in interaction between rural people, research and extension. The very basic principle of PID is that the local, situational, often more intuitive knowledge of villagers and the formal knowledge of scientists (researchers or other subject matter specialists) are combined to experiment on innovations. The interaction between villagers and scientists often needs facilitation. Extension is well placed to take on the facilitation function, as extension workers have the required communicative skills and a broad understanding of the local conditions, practices and knowledge. PID has its roots in agricultural development; the concepts, however, are applicable also for innovation development in many other areas, in particular other fields of natural resource management, like forestry and range management.

Based on this principle a variety of understandings and concepts of PID has evolved. This manual builds on the pragmatic PID understanding of the LBL International Department, and is mainly based on the experiences of LBL gained, and modules used, during PID introduction workshops in different countries and programmes between the years 1994 and 2000 (see foreword).

1.2 Users of the manual

This manual is written for people practically involved in the planning, initiation and implementation of PID or other participatory research and development processes. These people may be, for example:

- trainers who facilitate PID training,
- extensionists (or persons with extension-like tasks) who devote part of their time to the development
 of innovations (e.g. in the fields of agriculture, forestry, natural resources, animal husbandry) and
 want to carry out PID trainings,
- professionals working in research institutions with programmes on rural development, who plan to involve themselves in PID training activities,
- development professionals concerned with project design, staff development and the planning of training activities, who want to inform themselves about and/or implement PID.

The manual provides a collection of modules to be used for preparing and training field staff to implement PID activities. The set of modules should not be considered as a predetermined arrangement with a fixed sequence, but rather be seen as a toolbox. Whenever a trainer is preparing a learning workshop, he/she must choose and possibly adapt the modules to make them adequate for the specific training situation and participants. It is assumed that users of this manual have already acquired know-how in training methodologies and facilitation skills, and know the basics about participatory approaches and tools.

1.3 Structure of the manual

The manual comprises this introduction (**Chapter 1**), three main chapters, a list of selected sources and contacts, and annexes.

Chapter 2, «Basics about PID», describes the principles of PID, in which context of approaches it is positioned, related approaches, and the different steps of PID. A good understanding of these points is a precondition for a satisfactory use of the workshop modules given in Chapter 3.

Chapter 3, «Learning PID», is the heart of the book. It helps you to design learning workshops to initiate PID in an area.

First (3.1), a short introduction describes the learning process and the sequence of workshops and debriefing of the workshops. In section 3.2 you find some tips on the things that have to be organised, decided and prepared before starting the PID workshops.

In the following three sections (3.3., 3.4. and 3.5.), the workshop modules for a sequence of three workshops are compiled. Each section starts with a table that gives you an overview on all modules it contains, and on their objectives. Each module includes 1 or 2 pages of description (objective, situation, intended learning-effects, procedure, time, material, author, source), mostly followed by materials needed (e.g. transparencies, handouts, examples, etc.).

The first workshop, "Preparation for work in the village", introduces the basic concepts of PID and provides opportunities to practice the use of various tools. It also includes a preparation for the work in the village, which takes place during the second workshop, "Initiating PID in a village". In this workshop, several steps lead to the design and planning of PID experiments to be actually implemented, together with villagers. In the third workshop, "Continuation of PID activities", the monitoring and documentation system of the planned PID experiments is designed, and the follow-up actions defined.

The annex comprise examples of tools such as Idea Sheets, Experiment Sheets and Activity Plans¹, elaborated in India, Kyrgyzstan and Vietnam.

1.4 How to use the manual

The structure of the manual facilitates the study of different chapters and subchapters independently and selectively, according to the specific needs of the reader. It is highly recommended to read the present chapter of the manual in order to understand what it is about, who it is for, and how it is conceptualised and structured. If you just want to get informed what PID is, its approaches, principles, phases, and challenges, you will find what you need in Chapter 2. Although the workshop modules are mainly for trainers and field workers, you should not hesitate to have a look into Chapter 3 as well, because the modules comprise a lot of interesting theoretical information and practical examples on PID (see **Reader A**»).

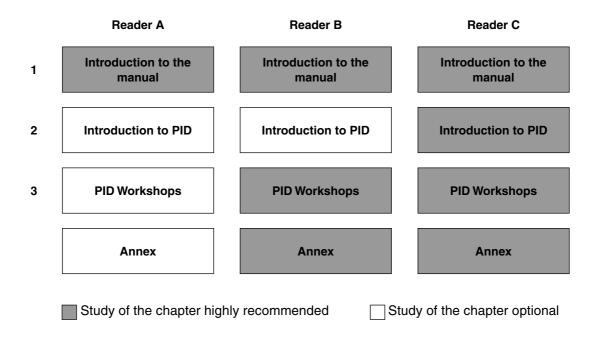
If you already know about PID, maybe have some experience in facilitating PID workshops and want to do further workshops, Chapter 3 and the examples in the annex will be the most relevant for you (see **«Reader B»**).

If you are a total newcomer to PID and want to carry out PID learning workshops, you should read the whole manual! (see **«Reader C»**).

Persons, who are accompanying ongoing PID processes, may find it helpful to use the materials provided in this manual, as there are tables, figures, forms, photos and examples, which you best find by means of the index, and lots of handouts, transparencies, group assignments etc.

¹ These tools are part of the PID experiment planning process and documentation. See Modules 25 and 27 a-d in Workshop I.

Relevance of chapters for different kind of users



1.5 Notes on semantics

Semantic consensus across language barriers

Achieving semantic consensus across language barriers is a challenge which goes beyond just simple problems of translation. It has to do with basic concepts of thinking and the values attached to them. Therefore translations require a lot of empathy, flexibility and adaptability of trainers and translators. It has proved helpful not to explain too much about new concepts, but rather explain what they mean in practical terms, or to let participants experience the practical implementation themselves and ask them how they want to call the concepts in their own language, and document these terms in a glossary.

Different names - similar underlying ideas

Different names have been given to the type of experimentation for innovation and technology adaptation that intends to find new things that work in interaction between farmers, researchers and extensionists. Besides PID, "Participatory Technology Development", "farmer-participatory research", "farmer-led research", "participatory action research", "action research", "participatory on-farm research" are in use as designations for PID-like activities. It is neither possible nor desirable to clearly and definitely distinguish between the activities behind the different expressions.

Why "Participatory Innovation Development"?

We decided to call the process of finding new things and ways that work «Participatory Innovation Development». In the more commonly used concept of «Participatory Technology Development» the

term «technology» was often questioned. Many problems of, and opportunities for, farming families are not technological ones. New things and ways in PID may include new crops, varieties, tools, machines, inputs, cultivation and land management practices, new ways of interaction between different people and institutions, or new ways of organising work, combinations of existing materials and practices, new marketing ways, new ways of accessing means of production, new processing methods, new sources of information etc. Consequently we replaced the term «technology» with «innovation», as this reflects the idea of «new things and ways that work» more accurately.

The terms "participation" and "development", in general, often cause discussions and questions. We will not go into extensive definitions here, and just refer to the ongoing theoretical debates. However, our understanding of participatory development will hopefully be understood from the contents of this manual.

Designation of PID players

To avoid confusion, we will use the term «trainers» when we refer to the persons facilitating the PID learning workshops. The people participating in the PID learning workshops are the «participants». They are learning to become future «PID field workers» and possibly trainers. Participants and PID field workers may be researchers, extensionists, farmers, craftsmen and craftswomen, traders, etc. In some countries, the term «adviser» is used instead of «extensionist» but refers to the same professional activity. The terms «villagers» and «farmers» are in general used synonymously, as well as the terms «researchers» and «scientists», which both refer to subject matter specialists investigating in a specific field. «Key farmers» are representatives of a village/farming community, «local innovators» are persons who are known for having developed new things on their own.

Whenever we use terms that refer to groups of people, they explicitly apply to both men and women.

2 Basics about PID

2.1 What is PID (Participatory Innovation Development)?

Combining local and scientific knowledge in experimentation

PID is based on the notion that for rural development the local informal knowledge of villagers is equally important as any scientifically generated, formal knowledge. However, the two types of knowledge are different. In PID the systemic – often unreflected – knowledge of villagers about their own complex situation is combined with external knowledge, which includes scientific knowledge, as well as the knowledge of farmers from other areas, extensionists etc. The challenge in PID is to arrange for creative interaction between the knowledge, experiences and skills of villagers with those of scientifically trained researchers and of extensionists.

The emphasis then is on conducting practical experiments together in villages. The objective is to find new things and ways that work. Of course, in most cases these are just the clever recombination of elements of familiar technologies, or the combination of known elements with new elements which are brought into an area. The new things and ways have to be compatible with, and embedded in the culturally based local knowledge system.

New things and ways work when they are practical and applicable for the concerned farmers without major outside support. Means of production must be available and affordable, and markets accessible. Processes and organisation must be manageable with the locally available capacity.

Roles in PID

Farmers are continuously experimenting, trying out new things and seeing how they work out, and adapting their farming practices. Searching for useful innovations is nothing new to them. The trick in PID is to arrange for an environment which enhances such processes. Towards this end, development workers try to link up with, and strengthen, the farmers' innovation process in a joint process, and facilitate an explicit and systematic experimentation process. In PID, development workers participate in experimentation undertaken by villagers, and not, as it is still often the case, farmers participate in scientists' research. Such development workers are scientists (researchers or other subject matter specialists) who contribute their scientific knowledge and analytical thinking, and extensionists who contribute their own knowledge and skills that include three important aspects – basic scientific knowledge specific to the local conditions, an overall understanding of the local practices and knowledge system, as well as facilitation and communication skills.

The PID triangle illustrates how villagers, researchers and extensionists all contribute their own specific knowledge, experience and skills, in order to develop new things that really work under local conditions.

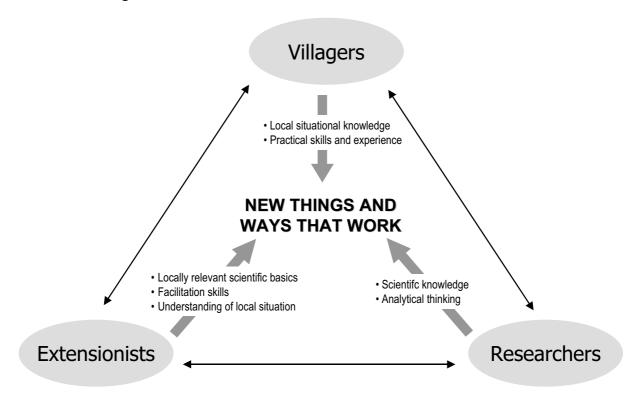
Outcomes of PID: innovations and competence for self-reliant local action and experimentation

PID activities are likely to have two-fold results:

First, of course, useful new techniques and ways of doing things which contribute to improved livelihoods of rural people, in particular of disadvantaged groups, should emerge.

Secondly, and of no less importance, PID activities foster a spirit of experimentation and exploration among the involved people, and improve their natural experimental skills. This is highly useful in adapting to an ever changing world and increases self-confidence. The villagers' competence to identify needs, opportunities and development strategies for themselves is strengthened, and local control over, and equal participation in, the development process is enhanced. Farmers take control of and own innovation processes.

The PID triangle



What new things and ways?

Although PID often deals with experimentation on agricultural practices, «new things and ways that work» are by far not limited to what is usually called «technology». Many problems of, and opportunities for, farming families are not technological ones.

New ways in PID may include

- new crops, varieties, tools and machines, inputs, etc.,
- new cultivation and land management practices (e.g. maize planting on ridges, erosion control structures, enrichment planting in forests),
- new ways of interaction between different people and institutions (e.g. designing rules for communal grazing, joint forest management),
- · new combinations of existing materials and practices,
- · new ways of organising work,
- new marketing ways (e.g. joint marketing to a distant urban market with better prices, bulking of produce),
- new ways of accessing means of production (e.g. how to organise joint fertiliser purchases, how to manage a village credit fund, how to establish a village or local private nursery),

- new processing methods (e.g. fruit processing),
- new sources of information.
- etc.

This list of areas where new ways can be found with PID indicates also that the use of PID is not limited to agricultural extension, but is equally useful to forestry and livestock extensionists, and probably to many other people with extension-like tasks.

PID methodology

Like for other participatory approaches (e.g. Participatory Technology Development (PTD), Participatory Learning and Action (PLA), Participatory Rural Appraisal (PRA)) there is no clearly defined and delimited methodology for PID. Rather PID is a tool box under development in many places, combining tools mainly from the PRA/PLA box and the adaptive research tool box. The PRA/PLA tools find their application chiefly in the process of opportunity and problem identification, prioritisation and selection of trials, whereas formulating experiment hypotheses and designing trials are common tasks in research. Possibly the element most specific to PID is the process of finding ideas on possible new ways and developing these ideas further into experiments.

Original tool box	Use in PID
PRA/PLA tools	Situation analysis
(e.g. resource map, ranking methods)	 Identification of opportunity and problems
	Priority setting
	 Selection of experiments
Research tools	 Formulation of experiment hypotheses
(adapted to PID requirements)	Experiment design
	Analysis of results
Tools and tasks specific to PID	Gathering ideas for innovations
	 Development of experiments from ideas for innovations
	 Marrying scientific requirements and village simplicity

Sources of tools for PID and their main use in PID

Participation of men and women

We define PID as the process of finding new things and ways that work in interaction between farmers, researchers and extension workers, stressing that all three groups consist of men and women.

Using a participatory approach does not guarantee that both men and women will benefit equally from PID, because the existing power relations might prevent it. However, persistent gender sensitivity can contribute to avoid a male bias in research and extension.

Usually, men and women have different roles, responsibilities, knowledge, access to and control over resources, according to socio-cultural norms, traditions, social position, legal systems, religion etc. This fact affects men's and women's interest in and access to finding innovations. The participation of both men and women in PID leads to more diverse experimentation and innovations, and a larger satisfaction of locally felt needs. Depending on the context, it is more advisable to work with gender separated groups or with mixed groups.

2.2 Different settings for PID

PID activities may be led by different players, with differing scope and objectives. Roughly the following settings can be distinguished. They will give you an illustration of how diverse the concepts of PID are.

PID in community development

The whole community is involved. Activities begin with a PRA as situation analysis and needs/opportunity assessment. PID experiments are just one component of a participatory learning and action process. Possible experiments are prioritised and those to be implemented selected by the whole community. They thus will focus on opportunities and problems of the whole village. In this way PID becomes part of community development programmes as they are often implemented by NGOs.

PID as a component of participatory extension work

Interested (groups of) farmers rather than a whole village community are involved. Experiments are designed to find locally adapted solutions to specific problems and to explore how to exploit new opportunities, which are useful to particular individuals and groups (e.g. testing new packing materials for apple growers), or a new way to earn some income for the poorest and most vulnerable groups. In this way PID can be used by any organisation with extension activities which works with a participatory approach, as one method among others. With this approach PID activities will usually be initiated and led by extension; individual experiments then may be kicked off by farmers.

Research-led PID

Researchers may use PID as one research methodology in a range of methodologies, as it may be the most promising method for many adaptive research questions. Thus they may initiate PID activities with selected farmers or a whole community. Preferably they would cooperate for this with the local extensionists.

Innovative farmers and their innovations as a starting point for PID

The starting-up of PID activities is preceded by the identification of villagers who have developed useful innovations. By making such local innovations known, respect and acknowledgement of local knowledge and innovation capacity among researchers and extensionists, but also among farmers themselves, is promoted, as a basis for starting up PID.

PID as rural development approach

PID is seen by various people as a full participatory rural or agricultural development approach. Behind this understanding is the notion that any innovation needs to be tried out locally, and thus, that without PID no meaningful development is possible. This is in contrast to our understanding of PID which views PID as a pragmatic process which can be used and integrated into different contexts and settings. In practice these two perceptions may not make much difference.

Farmer-led PID

Farmer and village organisations are encouraged to set up village agricultural research committees which then conduct experiments with the assistance of outsiders (researchers and/or extensionists). Such committees function in many places in Latin America.

Farmer Field Schools as a starting point

Farmer Field Schools (FFS) are an extension approach based on experiential learning and understanding of agro-ecological principles. A Farmer Field School lasts for a whole crop cycle. It is used in many places to disseminate integrated pest management (IPM) practices. FFS include the comparison of conventional with recommended practices on experimental plots. Such first experimental experiences during an FFS have led to groups of farmers initiating joint experiments on other topics on their own.

2.3 Using money in PID?

Trainers and fieldworkers might come across questions around payments in PID and should be prepared for them. However, there are no definite answers, because they depend on various factors e.g. the specific situation and the socio-cultural context of the farmers. In the following some thoughts on using money in PID are given³.

Pay farmers?

The question how much money should be paid to farmers, so that they participate in PID experiments, is frequently asked. Nevertheless, the answer is that no money should be paid at all. The objective of PID is to find out new things that work under the conditions of many farmers in the area. If the new thing only works because the experimenting farmers were paid to do the experiment, then this is not PID. The results of such an experiment are not a convincing demonstration to visiting farmers, because they will not get paid.

The design of a PID experiment should always be such, that the participating farmers can carry the risks of failure of the experiment. This principle ensures, that farmers give good consideration to the benefits they expect. The size of the experiment for each participating household must therefore be adjusted to their carrying capacity. The level of investments a household is willing to make in an experiment when they know that they have to carry the risks of failure are a highly interesting indicator for researchers.

Pay involved extensionists?

Ideally villagers pay an extensionist to do PID together with them. However, if villagers pay all, they can also refuse to share the results with neighbouring villages. But it is usually in the public interest, that successful experiments become known to as many farmers in the area as possible. This is particularly true for PID-experiments that try to find out how to better manage natural resources. So there is also a public interest that an extensionist contributes to PID in a village. The costs for the extensionist should therefore be shared between the villagers and whoever takes care of the public interest (Commune, District, Province, Donors). The money that the public provides for the extensionist should always be channelled through the public organisation or institution which takes care of the public interest at the

³ For further information on the subject read the article «Using Money in Participatory Technology Development», by Elisabeth Katz and Ueli Scheuermeier, in: BeraterInnen News 2/2000: 28-30. LBL, Lindau, Switzerland

appropriate level (ie. through the Commune when dealing with communal grazing, through the District when dealing with whole watersheds covering several Communes, etc).

Usually researchers are much less frequently in a PID-village than the local extensionist. Researchers therefore have an interest in making sure, that the local extensionist takes care of the frequent visits to the PID-experiments, maintains the contacts with farmers, and does some monitoring. This means that research organisations too will have to help in financing at least some of the costs of the extensionist who is involved in the PID-experiments. Thereby they get some hold on the extensionist in order to make sure they get the information they need for making their scientific contribution to PID.

Pay the researchers?

The farmers have an interest in staying in contact with researchers, so they can be expected to provide at least food and lodging if required (for single researchers or small teams of up to three). The public has an interest in the PID taking place. However, research usually already has a public mandate and gets its budget through appropriate channels. The question to answer is: Which public bodies profit most from the PID being undertaken? Preferably these bodies should be approached for funding the researchers. Donors who finance PID in natural resource management must take care, that they do not bypass the service-client relationship between researchers and the appropriate local public bodies. This is important due to concerns of sustainability, of ownership, and of proper accountability.

Pay for trainings?

Allowances for trainings must be dealt with individually for each training. In case the presence of certain people is required so that other people can learn or practice, then it is o.k. to pay allowances.

2.4 Steps in PID

The initiation of PID activities typically comprises a sequence of steps, from launching PID to evaluation of results, as shown in the adjacent figure. Then on the one hand dissemination of the first results follows and on the other hand «sustaining PID»; which is about creating a situation in which experimentation continues, and PID is integrated into the working of respective research and extension organisations, and in which farmers are motivated to experiment on their own, etc. In the previous chapter different starting points and scopes for PID were presented. In the figure these are represented by the three dotted arrows leading to step 1. In practice the steps can take many different shapes.

The steps in detail

Step 1: Launching PID

- An individual farmer, a family or a village asks for collaboration, or PID field workers look for communities who are interested in collaboration for finding new things and ways that work, or PID field workers look for innovative farmers as a starting point. Of course, the details of the launching process varies depending on who the initiators of the PID are, and what relation between the initiators and the co-operating villagers already exists (see section 2.2 for different starting points of PID).
- The concept of PID is introduced to the community, villagers or farmers, and organisational matters are discussed and agreed.

- Information about the socio-cultural and agro-ecological situation of the respective farmers, families or community may be reviewed, or, if none exists, may be gathered (e.g. through PLA methods).
- Discussion on previous innovations

 technical, economic, social that appeared in an area, their origins, their spread etc. can be helpful to sensitise people for the meaning of innovation and related processes.

Step 2: Identification of experiments

- Farmers, researchers and extensionists jointly gather ideas on possible experiments.
- These ideas are screened systematically, critically reviewed, and the most promising ones selected for implementation.
- The documentation should begin already while identifying and planning the experiments and include the ideas as well as the whole experiment design and plans.

1 Launching PID 2 Identification of experiments 3 Design and planning of experiments 4 Implementation and documentation of experiments S Analysis and evaluation of results Dissemination of results

Step 3: Planning of experiments

- Then concrete experiments are designed. The experiment design includes the reasons for conducting an experiment, clear testing hypothesis or questions, data to be recorded, and criteria for evaluation of the experiment, and a lay-out. It may also include visits to other places where similar things are already implemented, or where otherwise relevant know-how can be gathered.
- Often it is necessary to gather available information regarding the planned innovation from various sources and integrate it into the experiment design.
- The experiments should be designed in a way that farmers can manage and evaluate themselves, with just support of PID field workers.
- Finally an activity plan including a time schedule, material required and responsibilities is drawn up, and the monitoring and documentation system designed.

Step 4: Implementation and documentation of experiments

- The experiments are started according to the plans made. It is important that plans are adjusted whenever thought necessary.
- This step includes capacity building for experimenters to implement and monitor experiments.

The procedure and the results of the experimentation phase must be recorded and documented.
 This includes all activities and observations and suggestions made during the monitoring of the experiments.

Step 5: Analysis and evaluation of results

Evaluations during and at the end of experimentation are the basis for deciding whether the results
are useful in the local situation and whether technical guidelines can be deduced for their broader
application.

Step 6: Dissemination of results

- There are as many different possibilities of sharing the results of experiments with others, as there
 are dissemination methods.
- Dissemination based on farmer-to-farmer exchange are most promising, for example by means of
 establishing a PID network in the community or region, innovators as resource persons in training
 events, exchange visits, field days and agricultural fairs etc.
- Another possibility for the dissemination of the results is to elaborate technical booklets, audiovisuals, publish results in newsletters, etc.

Sustaining PID

Once an experiment cycle is completed, the challenge is to sustain PID. This means to anchor PID with all involved people and organisations, and integrate it into their way of working, so that PID activities continue and experimentation becomes a habit.

Among the factors which contribute to sustaining PID are:

- Farmers' capacity to carry out experiments on their own.
- The capacity and interest of researchers and extensionists to support farmers' experimentation during their regular work.
- Community organisations or networks of experimenters.
- Continuity of training and coaching for field workers.
- Evaluation and documentation of methods and processes of experimentation.

2.5 Some challenges in PID

This sections intends to discuss give you an idea about challenges that we consider to be stepping stones for the further improvement of PID. It mainly aims at stimulating reflections and discussions about PID and encourage your active involvement in its improvement.

Documentation

PID requires a simple, reliable and decentralised documentation system, which on the one hand is adapted to the needs and abilities of the farmers, and on the other hand achieves the precision and comparability of results required by the extension agencies and/or the involved scientists.

In this manual we propose a documentation system that consists of a series of forms which are progressively developed during the experimentation phase (from ideas to experiment design and reporting), and the regular distribution and exchange of these forms among the relevant institutions and persons.

Although the documentation system we describe in the manual has been continuously adapted and further developed according to the comments and experiences of its users, in practice there were difficulties – documentation was only sporadic or sometimes completely neglected. In many cases, people simply did not take notes, thus valuable information got lost. In many cases the experiments are not exactly carried out as planned in the design. That is fine, and adds to the learning that is taking place. But it makes it even more important to document what exactly is done in the experiment.

The involved farmers usually have no problems with badly documented experiments; they understand anyway whether the innovation works for them or not. However, a reliable documentation of PID experiments is the basis for their monitoring and evaluation, as well as for the exchange of experiences and the wider use of the experiment results. Thus it needs to be further explored how an usable and at the same time effective documentation system would need to look or how the motivation or discipline for documentation could be encouraged. Another way of documenting PID could be the use of videos or photographs (e.g. systematic photo monitoring).

Difficulties with the concept «experiment»

Some difficulties of farmers with the concept of an experiment were encountered often:

- Sometimes it proved to be a difficult task to build a clear hypothesis to be tested in experiments,
 i.e. that it is difficult to clearly define what questions the experiment should answer. And yet, once
 villagers have gone through a formulation process, usually they appreciate clear-cut hypotheses
 for the experiments that they are doing. The formulation of hypothesis is something that needs to
 be practiced intensively.
- Farmers often sometimes find it difficult to differentiate between a demonstration and a trial, or between doing something which is already known in the area, but maybe not commonly done, and something which is really new and not exactly known whether and how it works, because they themselves do not make this differentiation in their normal work.
- Sometimes farmers wanted to try out new things on a rather large scale, particularly if some free
 goodies were involved. They did not seem to appreciate the risk of this. They needed to be convinced that it makes more sense to try out new things on a small scale first, as they would probably do
 it if no outsiders were involved.

Networking and exchange of experience

In order to avoid that PID activities remain isolated pilot projects, regular sharing of experiences made by the various people involved and learning from each other must be ensured.

There are different ways of doing so. The sharing and spreading of experiences can take place through gatherings of people, e.g. peer exchange events, meetings of farmer associations, etc., through exchange of documents, e.g. newsletters, reports and other parts of the experiment documentation, etc. or through electronic means, e.g. on a website or an easily accessible database. Another way of spreading experiences is by means of the mass media (press, television, radio, etc.).

Such networking activities can take place at various levels, e.g. between neighbours, between various communities, on a regional or national level, or internationally. Generally, the more extensive it gets, the more resources it requires.

It is very important to clarify why exactly networking activities should be done, which options exist, and on which level(s) they shall take place. We observe that there are international networks of people exchanging ideas and experiences on PID (we are part of them). They are poorly funded and therefore only work on a shoestring. Proactive networking would be required, but that costs. However, we believe the biggest worth of networking and sharing is at the national level, within the same language, where practitioners can exchange experiences and procedures directly relevant to their respective systems. This should become an objective in future efforts. No doubt this would require experienced people who do the task of proactive networking. We believe hiring such people would be highly economical because of enhanced institutional learning and consequently impact of PID.

Whatever option and level of networking is chosen, it is crucial to explore how such a network can be managed and what skills and resources are necessary. Someone must be assigned the task to actively search for, compile and edit the information on PID experiences supplied by those involved in the activities. Often this also means to "kick the shins" of experienced people, so that they write up (or otherwise document) their experiences and make them available.

Initiating PID with less resources

The three workshops described in this guide constitute a massive investment of time and resources for introducing PID in a place. It will not be possible to apply or replicate such an effort for each new area. The invested resources can only be justified if the efforts provide a basis for introducing PID later on in other districts or even provinces with much less resources. The inclusion of participants from other areas in the introduction provides a basis for this.

The launching and implementation of PID activities in further places has to be designed based on the learnings of the first effort, but with adaptations to the respective frame conditions and only with the available resources.

- Probably there will be fewer staff from outside and the local extensionists will have a more leading role.
- The launching of PID will go on over a longer time period, and will be more of an iterative process.
- PID experiments can also be initiated with some interested villagers, without necessarily involving the whole village in the process.
- PID can be initiated by means of peer visits of farmers and field staff to places where PID already
 is done.
- An experienced PID practitioner and teacher can initiate PID with new staff and in new places
 through training & coaching efforts, which combine training sessions and facilitated meetings for
 sharing experiences among learners with individual on-the-job application of what they are learning. The combination is achieved through repeated switching between tutored sharing events and
 mentored application on-the-job.

Financing PID

Currently a shift from public financing of agricultural services to more user financing is underway. However, innovation development is still often considered a task to be publicly funded, though often these funds are insufficient. Therefore the ideal would be a financing system combining user funds and public funds from different levels.

With regard to PID, villagers ideally pay involved extensionists and maybe even researchers to do PID together with them. Experimenting farmers may be expected to pay for the services, if PID provides tangible and immediate benefits to them. However, we of course hope that many villagers will be benefit,

not only the experimenters. In such cases the experimenters would not be willing to make sufficient financial contributions because the results inevitably will not only benefit those who paid, but many others too. Useful new things bring ahead a whole village or area and thus PID may be a public interest at the village or District levels, and arrangements for at least partial payment with fiscal resources of those levels would have to be sought.

However, in an environment where public extension services are traditionally free of charge for its users, it will be difficult to convince farmers about the advantages of contributing financially. On the other hand, if farmers contribute to the costs of an extensionist - which does not necessarily mean a monetary contribution, but can be free food and lodging, farm products, a share in the marketed produce - they can demand good quality work from them.

Researchers too have an interest in ensuring that the local extensionist frequently visits the PID experiments, maintains contact with the farmers and does monitoring. Therefore the involved research institution should contribute to the costs of the extensionist as well. However, if there is a working system of mutual cooperation between extension and research without budgetary transfer, it might be unwise to jeopardize the system by introducing cooperation against payment.

Donors who finance PID must be careful not to bypass the service-client relationship between extension or research institutions and the appropriate public bodies (farmer groups, villages, Districts, etc.) in order to take into account concerns of sustainability and ownership of PID efforts and of a proper accountability.

To our knowledge none of these concerns are yet taken care of in funding PID, but will doubtlessly be very important when attempting to embed PID in local systems of administration, government or in the civil society.

Gender and PID

Participatory approaches like PID offer a great potential to include a gender perspective in development programmes and extension work. However, using a participatory approach does not guarantee the participation of both men and women. In land use management programmes, there is often a strong focus on male farmers, although women are also involved in its activities and make experiments as well. But if PID fieldworkers and farmers are sensitised and consequently take gender issues into account, then PID experimentation might lead to a broader satisfaction of the practical and maybe even the strategic gender needs of both men and women.

There is no specific concept for incorporating a gender perspective into PID, but it might be worth to reflect in a more specific way on this subject (e.g. elaborating ideas on how to incorporate a gender approach according to the specific situation, people, environment, working sector, country, ethnic group, etc.) and to exchange the experiences that will be made.

One of the most important impediments to a gender balanced Innovation development is a set of obvious and hidden assumptions about gender, which guide the behaviour of many PID fieldworkers, researchers and policy makers. These assumptions help to maintain distorted gender relations. On the other hand, there is a tremendous potential to build on the inherent strengths in individual men and women, households, communities and organisations, as each of them has the capacity to overcome prejudices and barriers. These strengths can be activated through social organisation, interaction within and between groups and organisations, mobilising and sharing knowledge and information. Especially the process of mobilising knowledge gives women more self-confidence, control and respect in the domain of decision making and therefore improves the quality of the decisions.

We believe a lot still needs to be done in order to fully exploit the potential of gender sensitivity in PID, always with the ultimate objective of finding new things and ways that work. Making conscious use of gender dynamics may well unleash the potential for a lot of new things and ways that work.

3 Learning PID

3.1 Introduction

Learning by doing

PID cannot be learnt in class rooms and short courses; it must be learnt by doing. Learning to do PID has been compared to learning how to ride a bicycle: I can learn everything about the bicycle and how it works, and I can learn about the physics of staying upright on two wheels. But when I actually try it out for the first time, I will fall. I have to practice riding a bicycle. The same applies to PID. However, when learning to do PID I can learn a lot faster and better when some experienced person can observe how I am doing it and give me some tips.

A PID training based on this manual gives participants a bicycle. They then know quite well how it works and what to do with it. But they still haven't done much riding with it. As a matter of fact, the experiences in the villages during the training are only the first attempt at putting this "PID bicycle" upright on the village road of development and putting a leg over to the other side. But the feet are still on the ground! The real learning starts only when the first experiments are actually being implemented by the farmers and the first real problems start to happen. There will be crashes. There have to be crashes!

The learning process can be accompanied by a mentor, who gives comments and tips and encouragement, but does not instruct and direct. Each PID practitioner has to find his or her own way of «riding the bicycle», but the mentor can speed up and enhance the learning process substantially.

Three learning workshops as a starting point

We have made good experiences with a sequence of three consecutive workshops, which provide on the one hand basic know-how on PID, and, at the same time, launch concrete and real PID activities in villages. During the workshops the participants practically go through steps 1 to 3 outlined in section 2.3 (launching PID, identification and planning of experiments). Step 4 (implementation and documentation of experiments) is planned in detail, followed by an outlook on steps 5 and 6 (analysis and dissemination of results).

Workshop I - Preparation for work in the village

In **workshop I**, participants acquire a self-reflected understanding of what PID is and how it functions. They practice some important skills for conducting PID, and finally prepare the launching of PID in an location.

Workshop II - Initiating PID in a village

In **Workshop II**, participants enter into intensive interactions with interested villagers for exploring new ideas for experimentation undertaken by the villagers. Villagers together with trainees gather ideas for experiments, prioritise them and finally select some for implementation. The experiments selected for implementation are developed into clear-cut activity plans to be implemented by the villagers.

Workshop III - Continuation of PID activities

In **Workshop III**, participants explore and practice the necessary means for the documentation and monitoring of PID. They furthermore think about the possibilities for the diffusion of PID experiment results, and explore the general organisational requirements for sustaining PID and for the follow up activities of PID.

At the end of the three workshops, usually a debriefing is given to relevant authorities and institutions (and other stakeholders) about the whole PID effort, its results, and the support and decisions required for following up the initiated activities. The debriefing aims at fostering ownership with, and support of relevant stakeholders, and at allowing them to learn as much as possible from these ongoing efforts. It must be made clear that the whole effort has only been the launching of a program which is to be continued. The requirements for the continuation of the initiated PID activities must be understood by the concerned authorities, so that they can take the required decisions and actions. The debriefing is best presented by the workshop participants⁴.

After the workshop series implementation of the planned experiments commences. The experiment documents generated during workshop II become part of the documentation. During the implementation mentors may support the PTD field workers.

This manual provides a range of modules for each of these three workshops.

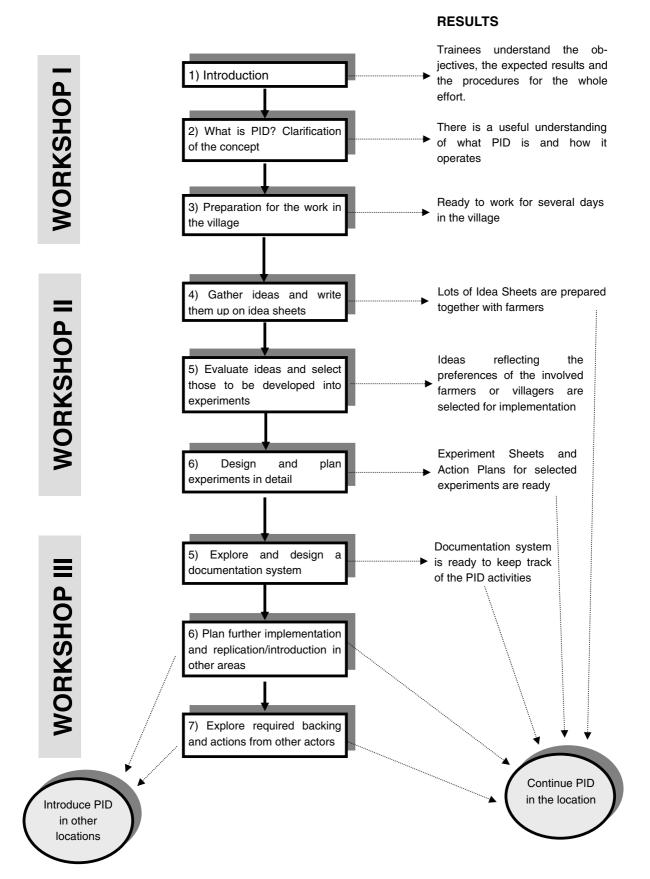
Overview of workshops

	Workshop I	Workshop II	Workshop III
Where does it take place?	In a place that provides the necessary facilities for conducting a learning workshop	In the selected village(s) where PID shall be initiated	In the same or a similar place as Workshop I
Who takes part?	 Trainees (extensionists, researchers, key farmers etc) Trainer(s) 	researchers, key farmers	 Trainees (extensionists, researchers, key farmers etc) Trainer(s)
How much time does it take?	2-3 days	3-4 days	2-3 days
How many possible modules does this manual provide?	34	9	13

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⁴ During Module 12 in Workshop III, participants prepare a presentation for the debriefing with the concerned authorities.

What happens in the workshops?



3.2 Preparation for workshops

Before starting with the PID workshops, some preparatory work has to be done and decisions be taken. In this section, we will give some tips for these preparations.

How to use the module pages?

Workshop No.

In this box you

will find pictures, drawings, cuttings of attachments, etc. This might

help you to find

rapidly.

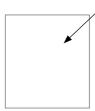
the module more

Name of the workshop in which to use the module

The number of the module does not indicate that there is a predetermined sequence in the application of the workshop modules! They serve as order and reference system.

✓ Objective

These notes tell you in a summarized way what the module is for. This might help you to make a selection of the modules that are adequate to your specific workshop situation and participants.



Situation in which to use the module

MODULE No. Name of the module

Here we tell you WHEN you should apply the module, more or less at which moment of the workshop. These indications shall help you to plan the sequence of the modules that you want to use in the workshops.

In this paragraph we treat the questions: What should the participants get out of this module? What should they learn and understand? This is what you, as the trainer, should always keep in mind during the whole module session.

Procedure

Here you get to know the different steps to apply the module. They are presented to you in a chronologically numbered sequence.

🖰 Time

This paragraph gives you an approximate idea how much time is needed for the whole module.

≫ Material

Here we tell you about the material you need for the module. Generally there are: the attachments (see below), flipcharts, overhead projector, paper, posters, white boards, markers, pens, scissors, etc. If you do not have the required material at your disposal, try to think of other ways to apply the module with whatever materials are available.

Attached material:

Examples

Examples are always in grey boxes or on grey pages. They serve to illustrate described procedures.

If it is part of the procedure to read or tell a specific example to the participants, you find it in a grey balloon.

Photos

The photos serve to illustrate described procedures or results.



Forms, handouts, and (papercopies of) transparencies

They are labelled "Handout", "Transparency", and/or "Form", and with the number of the module and the workshop (e.g.: 3II) in a small triangle at the top of the page.

Numbered transparencies are to be put on top of each other for presentation.

Templates

In some modules, you have to build a graph with cards, or you have to draw a cardstory etc. These templates shall give you an example of how the final result might look like when it is ready.

Assignments

Assignments are instructions for example for group works that have to be done during a module. You find them in tables.

Developing a training plan

- Be sure that you precisely understand the needs and wishes of the owners of the efforts regarding the issue to be tackled and the expected outcome.
- Determine the thematic frame on which the PID activities will concentrate. You may focus on
 questions which concern a broad range of farmers or on questions which directly concern a limited
 number of farmers or particular interest groups depending on the context and the needs of the
 owner. Participatory analytical tools like PRA may be used to determine the frame.
- Study the training modules and select the ones to be used. You may adjust the selection in the course of the workshops if necessary.
- Develop the structure, sequence and timing of the workshops.

Selecting farmers

The question of which villagers should take part in the PID and conduct the experiments raises often discussions. Do the participating farmers need to represent all groups or can we work just with those who are interested? How to ensure that also experiments are chosen which are relevant for women or the poorest group of people?

We have made good experiences with only interested villagers taking part in the actual implementation of experiments, while in the identification of ideas and the selection of experiments to be implemented more or less the whole village was involved.

During the preparation process those key villagers who should participate already in workshop I will have to be determined. This selection should be left to the community.

Farmers participating in the activities during workshop II in the village and in the implementation of the experiments should not be selected beforehand. Experience has shown that pre-selection often results in at least some of them not being really interested.

It is therefore advised to inform the village that

- ... whoever is interested is invited to take up contact with the outsiders coming to the village, take part in the activities in the village and later in the experimentation,
- ... that the program is looking for villagers who really want to try out new things, and are willing to put substantial efforts of their own.
- .. that this program wants to initiate PID, and does not offer any money, inputs or credit.

This information may already help in making sure that in the village the program is not hampered by frustrated farmers.

Villagers who are known to have already tried out new things on their own may be particularly useful for PID. Such local innovators often have very good ideas about what to try out. Care must be taken to identify both male innovators and female innovators. Sometimes even children and youths can be seen to innovate. Such villagers are very good partners for discussing future experiments. They may also know of other farmers who may be interested to experiment.

Special attention is needed to ensuring that both, women and men, can participate in the activities in the village and that the different interests are considered when taking decisions, e.g. selection of experiments. Similarly, better-off and poorer villagers may have different priorities and interests, and attention is needed to ensure that the priorities and interests of the different socio-economic layers are adequately reflected in the choices and decisions made.