### Workshop I: Preparation for work in the village

**Workshop I – Preparation for work in the village**

aims at giving participants the opportunity to acquire a self-reflected understanding
- of what PID is and how it functions,
- to practice important skills for conducting PID,
- and finally to prepare for the start up of PID in an area.

### Overview of modules for Workshop I

To give a better overview on the modules of Workshop I (which is the workshop that provides the largest number of modules) we clustered them in themes in the table below. Hopefully, this will make it easier for you to select the modules you want to use in your PID workshop.

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<th>OBJECTIVE</th>
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<td>Introduce the main idea, that PID is about villagers doing experiments and introduce participants to each other.</td>
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**Interaction between different PID actors**

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<td>Show that PID requires the active interplay between scientific knowledge and villagers' knowledge.</td>
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<td>3) Combining different knowledge</td>
<td>Show the difference between farmers' knowledge and researchers' knowledge and how these two types of knowledge may interact.</td>
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<td>4) Johari's window</td>
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<td>5) Joining the nine points</td>
<td>Show that it is possible to break pre-conceived thinking patterns and thereby find new perspectives to interact creatively.</td>
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<td>6) Tower building</td>
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<td>Make participants reflect on the importance of incorporating both men and women into PID.</td>
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<td>Make participants realise that the emergence of PID as a concept and methodology is based on challenges that were faced in past efforts of research and extension.</td>
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<td>10) Changing explanations why farmers don’t adopt innovations</td>
<td>Show that researchers’ explanations for farmers’ rejection of innovations have continuously changed according to the historical approach of working with farmers.</td>
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<td><strong>29)</strong> The resource map</td>
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## MODULE 1: Introduction into workshop on PTD and personal introduction

**Objective**
Introduce the main idea, that PTD is about villagers doing experiments and introduce participants to each other.

**Situation in which to use the module**
At the very beginning.

**Intended learning effects**
- PTD takes villagers' ideas seriously.
- Villagers conduct experiments on their own and it is interesting to observe them.
- This is going to be a workshop based on practical experiences and examples, not a seminar with a lot of lecture.
- Basic information about fellow participants.

**Procedure**
1. Relate a true story of a villager (or a group of villagers) who has successfully and independently experimented with something new. «Independently» means that the villager tried this out originally with no researcher or extensionist being involved. Involvement of such outsiders may have come only later.
2. Ask participants to introduce themselves and the work they are presently involved in (name and place of origin, education, professional career, current position and tasks, on a card each). You may do your own personal introduction as an example and tell the story (Step 1) at the end of it.
3. Ask each participant to additionally tell about a villager whom he or she had encountered, and who had been experimenting on his/her own with something which was new.

**Time**
- 10 minutes for the story and explaining the task to the participants
- 5 minutes preparation by participants
- 3 minutes per participant for the personal presentation

**Material**
- Cards, markers, flipcharts, boards etc.
### Module 2: The tennis player

**Objective**
Show that PID requires the active interplay between scientific knowledge and villagers' knowledge.

**Situation in which to use the module**
At the beginning of a workshop when introducing what PID is all about.

**Intended learning effects**
- Villagers’ knowledge is just as important as scientific knowledge. It is no use always to instruct farmers what to do, without allowing them to contribute their own knowledge about their environment. On the other hand it is no use to put farmers knowledge above science. The point is, that both types of knowledge must play together to find new things that work. Farmers and technicians (or researchers) are equal partners, or else the game of PID cannot happen.
- The challenge is to make sure that both types of knowledge can interact.
- This kind of interplay between villagers’ knowledge and science may actually be quite some fun.

**Procedure**
1. Present the transparency through step-wise uncovering of the scenes from top to bottom.
2. During the talk point out the learning effects, that are described above.
3. In the last scene point out the importance of the spectators. People from the village or from other villages must be watching what is going on in the experiment, not just the farmers in the interest group. Also point out the role of the referee, i.e. the extensionist who facilitates creative interaction between researchers and villagers.

**Time**
10 minutes presentation

**Material**
Transparency «A whole new ball game?» (attached), projector
A whole new ball-game?

ITK - Indigenous Technical Knowledge

The scientist knows the solutions to the problems

Wrong! The farmer knows best: The big REVERSAL.

We therefore really need a carefully balanced view.

but why don't we just play the game and have a lot of FUN?

10.4.81
UScheuermeier
Participatory Technology Development, ILC.
MODULE 3: Combining different knowledge

✓ Objective
Show the difference between farmers’ and researchers’ knowledge and how these two types of knowledge may interact.

☛ Situation in which to use the module
The module is best used after participants have already realised the importance of working together with farmers, but are still wondering how a researcher can still be a scientist when doing so.

✿ Intended learning effects
- Scientific knowledge and farmers knowledge are two different kinds of knowledge: it is not helpful to ask who knows more.
- The knowledge and experience of a researcher is documented and retrievable, and usually universally applicable. Farmers’ experience and knowledge is not retrievable except through dialogue, and usually highly specific to locality or situation.
- For truly interesting and relevant PID, farmers and researchers must interact in a dialogue, resulting in trial hypotheses based on both types of knowledge.
- The challenge for researchers is to learn how to enter into a dialogue with farmers and their type of knowledge. The best way to do that is to think in terms of «colleagues», when interacting with farmers.

☐ Procedure
Option 1: Lecture:
Present transparencies one after another. Give comments, ask for comments from audience, etc. (Note: We are dealing here with a farmer who already works with the researcher and accepts him as a colleague, and vice versa).

Option 2: Group work:
1. Present first transparency. Make clear that the farmer and the scientist already work together as colleagues, contributing their specific type of knowledge.
2. Make groups. Distribute second transparency with blank speech. Each group to write up a collegial dialogue between the two on what to try out together.
3. Presentation in plenary and discussion (3rd transparency can be then added to give a further example.
4. Discuss, collect and visualise (for instance flipchart) insights gained by participants.

😊 Time
Lecture: 20 minutes
Group work: 40 minutes

 назначен
Lecture: Transparencies (attached), projector
Group work: plus flipchart or blackboard
Roles in on-farm research

Farmer

Researcher

Extensionist

Avocado in farmers field
Avocados might grow well here

Where could avocados fit into my farm?

This is interesting for farmers around here. I will organize excursions, so other farmers can come and have a look. I'll make sure that we aim for solutions which can be adopted by many farmers.
contributes his/her
- knowledge about all the interactions in
  the locally prevailing system
- his/her pragmatic experience of
  experimenting

contributes her/his
- knowledge about
  other systems
- knowledge about
  other options
- her/his scientific
  experience of
  experimenting

contributes his/her
- knowledge of the
  various types of far-
  mers in the area, and
  what they are looking
  for
- skills of communi-
  cation and facilitation
Roles in on-farm research

**Researcher**
- contributes her/his knowledge about other systems
- knowledge about other options
- her/his scientific experience of experimenting

**Farmer**
- knowledge about all the interactions in the locally prevailing system
- his/her pragmatic experience of experimenting

This is interesting for farmers around here. I will organize excursions, so other farmers can come and have a look. I'll make sure that we aim for solutions which can be adopted by many farmers.

**Extensionist**
- knowledge of the various types of farmers in the area, and what they are looking for
- skills of communication and facilitation
Roles in on-farm research

Farmer

What goes through their minds while interacting?

Researcher

Extensionist

Avocado in farmers field
## MODULE 4: Johari’s window

### Objective

Make participants aware that all actors in PID lack certain knowledge, and that they benefit from combining their different types of knowledge as colleagues.

### Situation in which to use the module

The module can best be used as a first exercise right after or right before presenting and discussing «Colleagues combine their knowledge».

### Intended learning effects

- Farmers and «technical experts» both know certain things and don’t know other things.

### Procedure

1. Introduce Johari’s window and clarify the contents of each of the four segments.
2. Draw an empty window and ask participants to brainstorm and fill it by identifying knowledge which fits into the appropriate segments.
3. After the window is filled, ask the participants what it tells us about how we could co-operate with farmers.

### Time

45 minutes

### Material

- Flipchart or newsprint, markers
<table>
<thead>
<tr>
<th>What we know and what they know</th>
<th>What they know and what we do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>What we know and they do not know</td>
<td>What we don’t know and they do not know</td>
</tr>
</tbody>
</table>
## MODULE 5: Joining the nine points

### Objective
Show that it is possible to break pre-conceived thinking patterns and thereby find new perspectives to interact creatively.

### Situation in which to use the module
This module is best used when you have already talked about the interplay between different actors in PID and want to give a short input on the role of creativity in interaction.

### Intended learning effects
- Sometimes the impossible is possible, the unthinkable is thinkable.
- To be innovative, one must learn to think and look beyond one’s boundaries of thought.

### Procedure

**Option 1:**
1. Draw nine points on a blank transparency or flipchart as shown on the following page.
2. Ask participants to individually try on an own piece of paper to join all nine points with four straight lines, without taking the pen off the paper.
3. After a short while, the trainer shows the solution by drawing the four lines on the transparency as shown on the following page.
4. Trainer gives a short theoretical input on how creativity is often based on thinking the unthinkable, or clearing ourselves from our own biases.

**Option 2:**
You can also do the same exercise in the middle of the room or outside and mark the nine points with stones, pieces of paper, holes in the sand etc., and ask participants to walk the four lines.

### Time
10 minutes

### Material
- **Option 1:** Blank transparency and projector, or flipchart, or poster, paper and pens
- **Option 2:** Stones, or paper etc.
Join the nine points

The solution
MODULE 6: Tower building

✓ Objective
Practice the art of working together with the farmers.

☛ Situation in which to use the module
This module can be used at the beginning of the interaction between farmers, researchers and extensionists.

饧 Intended learning effects
- In real life, farmers often operate with constraints, and extensionists can only assist through talking.
- Things can go wrong when we only want to instruct farmers or give prescriptions.
- It is important that outsiders and farmers together clearly define their common goal.

□ Procedure
1. Ask two participants to form a pair to play the role of extension worker and farmer. The other participants are observers.
2. Tell them that the «farmer» has to build a tower with blocks of wood, blindfolded and with his/her non-working hand. The «extensionist» will not be allowed to assist in any way except through speech and that the observers must stay silent.
3. Explain that the average achievement is to build towers of a certain number of blocks (in previous groups it was 8). Let each pair decide now how many they would want to achieve. Then blindfold the «farmer».
4. Let them do the exercise with a time limit of 5-10 minutes.
5. Ask «farmer» and «extensionist» to reflect on their experience.
6. Ask the observers to give their comments.
7. If you want, you can do a second round with the same pair, based on the first experience. They still have to follow the original rules. This could enhance the learning effect because they are more careful in arranging for each others’ strengths to become complementary.
8. You could have a video camera operating during negotiations and the actual building, right until the «farmer» is able to have a look at his/her tower after having taken off the blindfold. Let the pair watch the video, after observers have given their comments.

☺ Time
20-30 minutes, with second round and/or video 40-50 minutes

✂ Material
Cloth or scarf to blindfold the «farmer», around 10 blocks of wood or something similar
### MODULE 7: Broken square game

**Objective**

Make participants aware of the need of working together and contributing resources.

**Situation in which to use the module**

This module is best used when you talk about the contributions of the different PID actors at the beginning of the workshop.

**Intended learning effects**

- Sometimes giving away and contributing resources which can be better utilized elsewhere helps to reach the objectives.
- It is useful to look beyond your immediate task.
- You should actively interest yourself in what others are trying to achieve.
- Sometimes there is a need to break own fixed patterns in order to solve a problem.
- Staff members have been conditioned to think and act according to instructions coming down the line, and retain any resources they might have for their own programs. However, interactions with other agencies working possibly with the same villagers is a must if PID is to be useful.

**Procedure**

1. Prepare material: Per group member one envelope with some pieces that are unevenly allocated, for example: 7 in one envelope, 2 in another envelope etc.
2. Ask participants to form groups of 4 people. Some participants can be observers.
3. Explain objectives of the game: Each member of the group must have an equally sized square in front of him/her, after a previously defined set time.
4. Explain the rules of the game:
   - Absolute silence
   - You may give away pieces (as many and as often as you wish) to other members of the group
   - You may not ask for pieces or take away pieces from somebody
   - You may not interfere into another members’ design
5. Distribute the envelopes and fix a deadline with the group.
6. The game begins. Time runs, open envelopes. Absolute silence. Observers can make notes or even a video.
7. Discuss the experience and the learning effect in plenary. Watch the video if it was made.
8. If you want, you can do a second round with the same groups to enhance the learning effect.

**Time**

20 minutes, with second round and/or video 30-40 minutes

**Material**

Puzzle pieces for squares (see attached examples), envelopes
**MODULE 8: Participation of men and women in PID**

✓ **Objective**

Make participants reflect on the importance of involving both men and women into PID.

☛ **Situation in which to use the module**

This module is best used after having introduced and practised the Idea and Experiment Sheets. Be aware that you might be dealing with very personal aspects of the participants, which could be delicate for some of them, or they might not be/feel able to speak openly in front of others. There may have to be done adaptations in order to fit the culture of the participants. Testing appropriate wording, graphs and settings beforehand with trusted knowledgeable persons is strongly advised.

🎉 **Intended learning effects**

- There is a fundamental difference between «sex» and «gender».
- Usually, our thinking, perceiving and acting is influenced by prevailing gender roles and stereotypes.
- Men and women might have different interests in PID according to their gender roles and responsibilities.
- PID is more effective and sustainable if the participation of women and men is linked to their particular tasks and responsibilities in work and decision making.

☐ **Procedure**

1. Write and draw on a flipchart: MAN —————————————————— WOMAN

2. Tell participants to each make a point on the line according to the question «What are you?» without further commenting. When everybody put the point, ask them what came to their mind when they thought about where to put the point. The idea is that they realise themselves that there is a difference between sex and gender, and that it is easy to determine one's sex, but that there is certain uneasiness with regard to gender.

3. Hang up images of a man and a woman as shown in the attached example and explain the term «sex».

4. Ask participants to brainstorm on what comes to their mind when thinking about the questions: How are women? How are men? What do women do? What do men do? Write the answers on cards and stick them on the respective image (see example). Note that these associations are very close to stereotypes. However, our thinking, perceiving and acting is influenced by gender stereotypes.

5. Then explain and discuss the term «gender». Emphasise that, what participants just did, was exactly what «gender» is all about: the assignment of specific roles and attributes to the two sexes, or: the construction of gender identities.

6. Form two groups according to sex (i.e. group of men, group of women). Explain the attached group assignments.
7. Group work (30 minutes).
8. Each group presents the results of the group work in the plenary.
9. Compare the results, stressing similarities and differences. Then ask the group of the respective opposite sex to comment on the results of the others (i.e. the group of women comment the results of the group of men, and vice versa). Ask the group about their experiences while trying to enter the opposite sex’ ideas.
10. Discuss in plenary the following questions: While designing PID experiments, when is it important to keep in mind the issue of the participation of both men and women? Why? Write down all mentioned points on flipchart or transparency.

Timer
90 minutes

Material
Example of presentation (attached), group assignments (attached), poster, markers, presentation material for groups, possibly blank transparency and projector
Notes for the trainers:

SEX

is the total of physical, biological and anatomical characteristics that we are born with. They are natural and somehow unchangeable. Humans distinguish two fundamental sexes: femenine and masculine. Based on this distinction, gender identity is constructed.

GENDER

is the total of characteristics that are psychologically, socially and culturally assigned to men and women. They have to be learnt by each individual.

These assignments are determined by the social, cultural and economic organisation of a society and by the respective prevailing religious and legal concepts. They can vary considerably from one society to another, even within a society there can be differences depending e.g. whether the person is married or unmarried, belongs to a wealthy or a poor family, is young or old, lives in an urban or rural area, is member of a particular ethnic or religious group, etc.
Group assignment 1:

**GROUP OF MEN**

<table>
<thead>
<tr>
<th>Objective:</th>
<th>Reflect about the topics which might be most interesting for women to do PID experimentation.</th>
</tr>
</thead>
</table>
| Task: | Your task is to prepare a presentation in plenary on the following questions:  
- What do you think are the 5 principal daily tasks and responsibilities of the female farmers in the area that you will be working in? List them!  
- If you look at the list of tasks and responsibilities of the female farmers, what do you think would be the topics of the PID experiments the women would want to make? Identify 5 ideas for experiments within the scope of female activities! |
| Duration: | You have 30 minutes to discuss and prepare the presentation, and 5 minutes to present it in plenary. |

Group assignment 2:

**GROUP OF WOMEN**

<table>
<thead>
<tr>
<th>Objective:</th>
<th>Reflect about the topics which might be most interesting for men to do PID experimentation.</th>
</tr>
</thead>
</table>
| Task: | Your task is to prepare a presentation in plenary on the following questions:  
- What do you think are the 5 principal daily tasks and responsibilities of the male farmers in the area that you will be working in? List them!  
- If you look at the list of tasks and responsibilities of the male farmers, what do you think would be the topics of the PID experiments the men would want to make? Identify 5 ideas for experiments in the scope of the male activities! |
| Duration: | You have 30 minutes to discuss and prepare the presentation, and 5 minutes to present it in plenary. |
MODULE 9: History of research and extension 1960s to present

✓ Objective
Make participants realise that the emergence of PID as a concept and methodology is based on challenges that were faced in past efforts of research and extension.

☛ Situation in which to use the module
Can be used in initial stages as a means to show how developments and concepts known to the participants relate to the newest attempts of participation in research.

(Expected) Intended learning effects

- Participation is not a new effort in research. Participation as a concept slowly emerged from challenges faced by each generation of researchers.
- What is being discussed today has a basis in the past. The searching process for improving the relevance of research will continue, and future approaches will probably be different from today’s, though based on today’s experiences.
- There is a general tendency towards increased interaction on an equal footing between researchers, farmers and extensionists.

☐ Procedure
1. Present Transparency 1 to 3 (some indications: Glasses designate the researcher, a cap designates an extensionist, RPF stands for «resource poor farmer»)
2. During the presentation you might discuss with the participants their historical experience, and whether they can relate to the various eras.
3. Distribute photocopies of the handout which shows the overview of all transparencies.

.datetime
20-40 minutes (depending on how much participants want to talk at this initial stage of a workshop)

← Material
3 transparencies (attached), 1 handout (attached), projector
The tale of interaction between farmers, researchers and extensionists

1950s
"We must teach farmers the right technology"

RPF:
Technology often not useful for their situation

1960s

1970s
"We must ease the constraints, so farmers can adopt" (ie. credit for implements and inputs)

1980s
resource rich farmers profit

RPF:
Often uneconomical in their situation

copyright 1998 SDC, CH-3007 Berne
early 1980s  "We must understand the conditions of farmers and design technologies which fit"

figure out solutions  ←  study the system

RPF: Involved as source of information about their conditions

late 1980s  early 1990s  "Farmers indicate what they need, and evaluate the possible solutions"

figure out viable solutions  ←  RPF: participate in planning and evaluation of research programs

copyright 1998 SDC, CH-3007 Berne
late 1990s

"Farmers, researchers and extensionists must all contribute their specific knowledge and skills, and experiment jointly"
The tale of interaction between farmers, researchers and extensionists:

**1950s**

"We must teach farmers the right technology"  
RPF: Technology often not useful for their situation.

**1970s**

"We must ease the constraints, so farmers can adopt" (i.e. credit for implements and inputs)  
RPF: Often uneconomical in their situation.

**early 1980s**

"We must understand the conditions of farmers and design technologies which fit"

figure out solutions  
study the system

RPF: Involved as source of information about their conditions.

**late 1980s**

"Farmers indicate what they need, and evaluate the possible solutions"

figure out viable solutions  
participate in planning and evaluation of research programs

**late 1990s**

"Farmers, researchers and extensionists must all contribute their specific knowledge and skills, and experiment jointly."
## MODULE 10: Changing explanations why farmers don’t adopt innovations

**Objective**
Show that researchers’ explanations for farmers’ rejection of innovations have continuously changed with the respective approach to working with farmers.

**Situation in which to use the module**
The module can be used either as a presentation during a lecture or as a starting point for further discussions. The module is closely related to Module 11 «History of research and extension 1960s to present».

**Intended learning effects**
- The explanations for non-adoption have changed over the last forty years
- The procedure towards a solution is always chosen in accordance with the current and accepted explanation
- Explanations and procedures for solutions will probably also change in the future

**Procedure**
*Option 1: Lecture*
Uncover the listed periods on the transparency one by one and give additional comments.

*Option 2: Lecture with dialogue*
1. Uncover each period and the explanation on the transparency and invite the audience to mention possible procedures.
2. Ask the audience what the current mainstream (or locally accepted) explanations are.
3. List the mentioned explanations.
   Let the audience find suitable procedures for each explanation.

**Time**
Lecture: 10 minutes
Lecture with dialogue: 40 minutes

**Material**
Transparency (attached), projector, flipchart or board, markers
## Changing explanations why farmers don’t adopt innovations

<table>
<thead>
<tr>
<th>Period</th>
<th>Explanation</th>
<th>Procedure proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950s</td>
<td>Farmers don’t know</td>
<td>Agricultural extension teaches farmers the right technology</td>
</tr>
<tr>
<td>1960s</td>
<td>Farmers do not have the necessary means</td>
<td>Agricultural extension facilitates access to credit, implements and inputs</td>
</tr>
<tr>
<td>1970s</td>
<td>Farmers do not have the necessary means</td>
<td></td>
</tr>
<tr>
<td>1980s</td>
<td>Farmers do not have the necessary means</td>
<td></td>
</tr>
<tr>
<td>Early 1980s</td>
<td>The proposed technologies do not fit the conditions of the farmers</td>
<td>Researchers study the conditions of farmers and generate fitting technology</td>
</tr>
<tr>
<td>Late 1980s</td>
<td>The proposed technologies do not match with resource-poor farmers’ goals</td>
<td>Farmers participate in planning and evaluation</td>
</tr>
<tr>
<td>Late 1990s</td>
<td>Researchers alone cannot grasp the complexity and the dynamics of local situations</td>
<td>Researchers join forces with farmers to explore and design viable innovations</td>
</tr>
</tbody>
</table>