## MODULE 11: A real story of PID

**Objective**
Give participants a real case example of how PID may look like in practice.

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

**Intended learning effects**
- There are three distinct roles which each have to contribute their specific knowledge and skills to the success of a PID process, i.e. villagers/farmers, scientists and extensionists.

**Procedure**
1. Tell participants that you are narrating a real story experienced by yourself, which should serve as a case to find out about the required roles and their contribution to the process. Ask participants to take notes during the narration, so that afterwards a discussion can be made on the roles. (Be aware that it is much better to use a story experienced by yourself, than using the one attached here!)
2. Narrate the story, visualise the three roles as far as possible on chart or whiteboard.
3. (For advanced facilitators: Use body-positioning as far as possible, which corresponds to the visualised figures, while talking for a particular role. Change position when changing roles).
4. Discussion: Ask participants’ comments on what each role contributed to the success of the innovation. Visualise the comments.
5. Distribute handouts «What is PID?» for later reading. If time allows show the handout as transparency and read it out.

**Time**
50 minutes

**Material**
Whiteboard, markers, handouts and possibly transparency of «What is PID?» (attached), possibly projector
(The story of Gom Bahadur Gaha with bamboo propagation in Nepal is attached as an example)
A real story of PID
Gom Bahadur Gaha wants to mass-propagate bamboo

Experienced in the mid-eighties by Ueli Scheuermeier in Nepal

1. Gom Bahadur Gaha is a poor farmer in the mid-hills of Nepal. He cultivates sloping fields on very unstable soil. Above his fields there is a major erosion gully, with a fan of erosion material at its bottom, which regularly pushes into the fields of Gom Bahadur.

2. He decided to attempt to reduce the erosion by planting bamboo in the gully. This was a variety of bamboo which grew in large clumps. He did this upon advice from his mother who had experience in planting bamboo. However, the traditional way of planting required a lot of work, and Gom Bahadur did not succeed in planting as many plants as he would have wished. He needed a lot more than he could propagate with the methods suggested to him by his mother.

3. This topic came to be discussed when he met Resam Danai. This is the local extensionist who was responsible for the area in which the village of Gom Bahadur was situated. Together they went to have a look at the gully and at the plants that had survived the planting.

4. Resam Danai realised that he did not have the information and knowledge to help Gom Bahadur in his attempt to mass-propagate this particular bamboo species. However, he knew that at the government station near the District headquarters there was a specialist who was exploring ways of propagating various plants, particularly fodder species. But he didn’t know whether there was any information available on bamboo there. Since Gom Bahadur was really interested about this, they together decided to go to the government farm and ask Kul Prasad Sharma about this bamboo.

5. Kul Prasad Sharma is the specialist on propagation of fodder species whom they went to visit. They explained the problem Gom Bahadur was facing, and asked whether Kul Prasad knew how to propagate this bamboo. Kul Prasad immediately told Gom Bahadur that there was a traditional method, but that he did not know the details of it.

6. Gom Bahadur then explained that he had tried the traditional method, and that it had been successful. However, he needed many plants, and the method was far too time-consuming with digging out of roots from established bamboo clumps.

7. Kul Prasad then said, that probably there were other more advanced methods of propagation, but those would probably involve tissue-culture and similar advanced techniques, and that was beyond what they could do at the station. Apart from that he didn’t know what could be done about this.

8. This is where Resam Danai suggested, that maybe there would be a way to improve the local techniques? He pointed out, that if a technique could be found which villagers could apply themselves, and which would reduce the amount of time required to produce one surviving plant in a gully, then this would have a big effect. There were many gullies and many farmers were facing similar problems like Gom Bahadur.

9. Kul Prasad agreed to help to try to find a way. He began by asking in detail how the local technique really works. Gom Bahadur explained it as best he knew. They actually went all three of them together into the gully where Gom Bahadur had planted his bamboo. Through careful asking about the details of what Gom Bahadur did, Kul Prasad realised there may be a chance to replicate what Gom Bahadur had done, except that this time the bamboo roots would be planted in a nursery bed, and the emerging young bamboo plants could then much easier be dug up and split again, etc until there were enough plants. He explained his idea to Gom Bahadur.

10. This is when Gom Bahadur remembered an important point his mother had told him: It is important to regularly water the newly planted bamboo-roots, and to cover them with leaves for additional protection against drying out.

11. So finally the three of them decided that Kul Prasad would try out this new technique in his nursery, and simultaneously Gom Bahadur Gaha would try it out at his home.

12. However, this required some amount of bamboo roots which would have to be dug out. Kul Prasad suggested that this might be most easily achieved, if an existing bamboo clump would be completely dug out. This of course involved a considerable effort, and it was Resam Danai who then suggested a few other farmers who might also be interested in this technique. Maybe Gom Bahadur could approach them, and together they could share the labour and costs of providing the required planting material for the experiment.

13. When Ueli Scheuermeier left the area, it was already clear, that the nursery-technique yielded satisfactory new plants within a usefully short period, and that chances were good, that these plants could be dug up, split, and replanted again into nursery-beds. At any rate Gom Bahadur Gaha was optimistic that this technique had good chances of becoming the new way of propagating this bamboo in the village.
Visualisation of the actors' contributions in the Gom Bahadur Gaha story
What is Participatory Innovation Development (PID)?

In PID the local knowledge of villagers is understood to be just as important as any scientifically generated knowledge. However, the two types of knowledge are very different. The challenge in PID is therefore to arrange for a creative interaction between the knowledge, the experiences and the information of villagers with that of scientifically trained researchers. The systemic – often unreflected – knowledge of villagers of their own, complex situation is to be combined with scientific analytical skills of scientists. The emphasis then is to conduct practical trials together in the villages.

The objective is to find new things that work (successful innovations). 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 having been brought into an area. Villagers constantly try out new combinations and see how they work out. The trick in PID is to arrange for an environment which supports this natural process. The interaction between villagers and scientists often needs facilitation, which is best done by experienced extensionists as they have the required communicative skills.

We therefore have a triangle: Villagers, researchers and advisors all cooperating in order to develop new things that really work in farmers conditions, whereby the role of the extensionist is mainly the facilitation of the process of PID.
NEW THINGS AND WAYs THAT WORK

Villagers

- Local situational knowledge
- Practical skills and experience

Extensionists

- Locally relevant scientific basics
- Facilitation skills
- Understanding of local situation

Researchers

- Scientific knowledge
- Analytical thinking
MODULE 12: The extension butterfly

Objective
Get an understanding of the role of PID in an agricultural/rural knowledge and information system.

Situation in which to use the module
This module is useful to explain how PID relates to other functions which have to be performed in an agricultural or rural knowledge and information (research - extension - farmer) system, in order to enable farmers to improve their situation.

It can be used early in the workshop, but is likely to be more easily understood after the work in the village, when trainees have a clearer grasp of PID.

Intended learning effects
- Participants understand:
  + the importance of PID in the generation and adaptation of innovations which work in villagers’ specific situation,
  + the usefulness of dissemination of complex new practices through farmer-to-farmer interaction,
  + that even the most appropriate new practices cannot be adopted if the necessary means of production are not accessible at affordable cost.

Procedure
1. Prepare cards with the elements of the butterfly.
2. Draw a butterfly outline on a flipchart.
3. Explain that the butterfly is a model of the functions which need to be performed (and not of the designation of the people who perform these functions).
4. Stick the two cards «research» and «people of 1000 villages» to their appropriate positions. Explain, that this is a sufficient system of, if the innovation is so simple, that farmers only have to adjust one thing in order to be successful. All that has to be done is to broadcast the innovation through mass media, and villagers can adopt them.
5. Stick the card «extension» in its position. Explain, that for most innovations it is not sufficient just to broadcast a solution over the radio. Because there are various things which have to be made to fit, villagers usually require some sort of advice and/or training in order adopt an innovation into their system of making a living. Therefore advisory services in the form of extension are required.
6. Add the card «villagers in selected pockets» and show the left wing of the butterfly (recognise the PID triangle). When it comes to finding solutions where many factors influence the success of an innovation, traditional research outputs are often not directly useful for villagers. They need to be tried out and adapted through collaboration between research, extension and villagers. As research cannot work directly in all villages and with all villagers, this interaction can only happen in selected villages with a limited number of people. Stick the respective cards on the centre space of the wing.
7. Stick the card «sources of inputs, markets, credit» on and show the right wing: Villagers cannot adopt new things that work unless they have access to the necessary means of production at affordable prices. It is a task of extension to support the access of villagers to inputs, markets etc. This however does not mean that extension engages directly in the sale of inputs or marketing of produce. Its role should be a connecting one.

8. Stick the card «ensuring a broad impact» on. The tail of the butterfly moves between the farmers in selected pockets and the people in 1000 villages. For new techniques which must fit in a complex resource management system simple transfer of knowledge through extensionists is not enough. When an innovation requires the handling of many different factors for ensuring success, farmers need to be able to exchange and discuss information and experience with fellow farmers in order to adopt the innovation. Extension is there to organise and facilitate that kind of interaction.

9. Stick the «education/ professional training» card on. The head makes the butterfly move in the desired direction. Education and in-service training ensure that extensionists and researchers have the skills and knowledge required to perform their functions well.

10. Stick on the antennae. If policies, rules and regulations don’t allow farmers to utilise resources adequately, the impact of research and extension efforts is endangered. However there are rules and regulations which may not be favourable for farmers, but protect the interests of a wider public (e.g. forest protection laws), it becomes the task of research and extension to work with farmers to find solutions within the given legal frame.

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Time
30 minutes (including discussion)

Material
Poster with butterfly outline, cards with butterfly functions
The Extension Butterfly

Favourable policies

Research

Education, professional training

PARTICIPATORY INNOVATION DEVELOPMENT
Finding new things and ways that work

EXTENSION

LOGISTICAL BASE
Ensuring access to means of production and markets

Villagers in selected pockets

ENSURING A BROAD IMPACT

Inputs, markets and credit

Thousands of villages
MODULE 13: Juggling complex interactions

✓ Objective
Make participants aware that farmers take decisions within a complex system of interacting themes.

☛ Situation in which to use the module
The module fits usually best in the initial phases of the workshop.

烬 Intended learning effects
- Farmers work and decide in complex systems, with many interacting themes.
- What interests researchers almost always is only a small part of what a typical farmer needs to keep in mind.
- Taking into consideration the farmers’ knowledge about all these interactions is a condition to ensure the relevance of PID.

❑ Procedure
Option 1: Lecture
1. Develop theme beginning with transparency 1 and superlaying transparencies 2-4.
2. Finally terminate with transparency 6 as the «focus» of typical research agendas that the participants are concerned with.
3. Handout transparency 5 as document for participants.

Option 2: Group work
1. Begin with Transparency 6, then 1.
2. Leave transparency 1 on the screen and ask participants to group themselves in small groups of three or four, with the following task: What other aspects must a farmer keep in mind when innovating? 10 minutes
3. Plenary: Participants point out further aspects. List them on flipchart or blackboard.
4. Then present transparency 5 and check with the list. Write on transparency 5 the points mentioned by the participants but not found on transparency 5.
5. Photocopy this transparency as reminder-document for participants.

☺ Time
Lecture: 15 minutes
Group work: 30 minutes

✉ Material
Transparencies 1-6 (attached), projector, photocopies of transparency 5
TRANSPARENCY

operational

input-supply

quality requirements

market outlets

transport

land tenure

availability of labour

competition

information

?
power-issues and quarrels
risks for conflict
family connections
possibilities of cooperation
traditions
generational considerations

social

?
possible alternatives for livelihood, i.e. emigration, jobs, etc.

radio, satellite dishes

videos, films

personal communication

informative

possible off farm employment or income

alternatives
juggling complex interactions
# Module 14: The story of the farmer who wanted to build a bridge

**Objective**
Show participants that it is impossible to make blueprints for introducing PID for each and every situation. They must regard the workshop really as a workshop after which they can construct their own tailor-made approaches, as opposed to expecting instructions on what exactly they should do.

**Situation in which to use the module**
Preferably rather early in the workshop to enhance understanding of PID, or spontaneously whenever the problem arises that participants expect instructions and refuse to figure out themselves how they could integrate the learning of the workshop into their own work. It is also possible to apply the module during workshop II or III.

**Intended learning effects**
- This is a workshop and not an instruction training.
- In this workshop elements, basic principles and tools for concretely doing PID are presented. Cases illustrate possible ways of applying them to fit particular situations.
- Each participant must construct his or her own particular way of doing PID, in order to make it fit with his or her working situation.

**Procedure**
1. Narrate the story.
2. Clarify questions of participants.
3. Ask what they can learn from it concerning PID. Make examples of what it may mean for them.

**Time**
15 minutes

**Material**
Story (attached)
The story of the farmer who wanted to build a bridge

1. A farmer lived on the banks of a small river. Just across the river there was the road. Unfortunately he had to walk quite some distance up-river to reach a spot where the river could easily be crossed to reach the road.

2. So he had the idea to build a simple foot-bridge across the river. But he didn't feel he could design the bridge himself, as the river was too broad. So he went to a bridge-building engineer in town and asked for instructions how to build the bridge.

3. The engineer gave him a blueprint of the model of a simple bridge and a list of tools and building materials that were required to build the bridge. He also gave the farmer very clear instructions how to construct the bridge.

4. So the farmer went back, arranged for all the material exactly as on the list, and began to build the bridge exactly according to the blueprint and the instructions of the engineer. Finally it turned out to be a very sturdy and beautiful bridge.

5. However, the bridge only reached halfway across the river. And the farmer of course was not at all happy with it. So he angrily went back to the engineer in town and told him what a stupid model he had given him. The engineer also got angry, and told the farmer it was his own stupidity which caused the problem. So they split in anger.

6. The farmer then went to another engineer in the town and told her his problem. This engineer carefully listened to the farmer and realised what the farmer wanted to achieve. She then explained to the farmer some basic principles of bridge-building. She also showed him what types of materials could be used, depending on what was available in the village the farmer lived. But she pointed out that the farmer would have to calculate himself how many bricks and beams, planks and bolts and screws he needed, since this depended on how long the bridge had to be. She showed the farmer how to calculate this.

7. This engineer also pointed out some tools that the farmer could use for building the bridge. Most of these tools the farmer already knew from his other work. Only for some very special tools he had to learn from the engineer how to use them.

8. With this the farmer went back, and again tried to build a bridge. This time he succeeded. It was not as beautiful and nice as the first one, but it was much cheaper, and above all it actually reached the other bank of the river.

Interpretation:

- The farmer is a learner.
- The engineers are people who provide information and advice, and if required some training.
- The first engineer is a teacher who only instructs details of construction.
- The second engineer is a teacher, who facilitates the learning of the farmer, so that the farmer can solve the problem he is facing. This second engineer thinks, that she cannot instruct details of bridge building, because such details must always be changed to fit with the local situation of the learner. She will coach the learner how to make it fit. But for making it fit, the learner has to apply his own knowledge of the situation he works in. The new methodology (for instance PID) has to be rebuilt according to basic principles with elements and materials and tools that are provided in the workshop. The fitting as such must be done by the participant him – or herself.
- So participants should not expect blueprints for doing PID as from the first engineer.
- The participants should rather gather as many different materials and tools and interesting basic principles as possible, so that they can then rebuild their own specific type of PID, that fits their situation. Of course during the course of the workshop certain concrete cases are explained. Such cases are however only examples to show how to use the tools and elements of PID, they should not simply be copied for other situations.
MODULE 15: Using the right words

✓ **Objective**
Explore the appropriate expressions for Participatory Innovation Development in local languages.

☛ **Situation in which to use the module**
This module is useful wherever English is not the common language and particularly when the language used in the workshop differs from the mother tongue of the farmers. The module may be used as part of the modules to learn the basic concepts of PID or just before starting the work in the village.

‡ **Intended learning effects**
- Often, abstract concepts are discussed in the official language of the country. However, the language of the farmers is usually a different one. So, when explaining to farmers what PID is all about, it is important to be able to discuss the concepts with farmers in their own language, and we must be careful to use wording that villagers use in their everyday life. Abstract explanations will only confuse and bore farmers.

✠ **Procedure**
1. Ask participants to translate into everyday language the words «participation», «innovation» and «development».
2. Decide in the plenary what words will be used to convey the meaning of «PID» to farmers.

◇ **Time**
20 minutes

♫ **Material**
Flipchart or pinboard with cards, marker
MODULE 16: Explaining PID to others

✓ Objective
Increase the understanding of participants about PID, and simultaneously explore the most useful wording for explaining what PID is and why it is useful.

☛ Situation in which to use the module
After the modules on what PID is all about, and their discussion. This module can be used for participants to review their understanding of PID.

‡ Intended learning effects
- Only when we have to explain a concept to others, we may realise whether we have fully understood it.
- It is important to prepare presentations well and test them in a test-run with peers
- The right wording must be found to fit the language of the audience.
- People involved in PID have to give a reasoning why they themselves want to do or support PID.
- The reasons given have to be acceptable to the respective audience (see below).

☐ Procedure
Option 1:
1. Form groups who have the task to explain PID to a particular audience (villagers, fellow extensionists, directors and deans in educational faculties, or fellow researchers).
2. Explain group assignment.
3. Group work.
4. Presentations in plenary, other participants play the role of the intended audience of each group.
5. Feedback from the audience and discussion on the clarity of the explanation and the most useful words to be used.

Option 2:
Before starting with Step 1, present the attached transparencies and explain them. Then carry on with Step 1-5 as described above.

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Time
120 minutes

Material
Group assignments (attached), presentation material for the groups, possibly transparencies (attached) and projector
(The story of Gom Bahadur Gaha with bamboo propagation in Nepal is attached as an example)
WHEN EXPLAINING PID ...

... repeatedly explain that «we want to combine our skills and knowledge with your skills and knowledge. Hopefully we can then jointly find new useful things that work.
We want to do this because we want our work to be useful to you, or else there is no reason for our work».

Avoid talking of material inputs and money. When asked, explain that such things might be needed, but we are interested more in joint working. If they are only interested in getting material and money from us, then we are not interested to do PID with them.

Villagers must take matters into their own hands. They must want to involve us outsiders.
Use positive, creative words and language

<table>
<thead>
<tr>
<th>SAY</th>
<th>AVOID SAYING</th>
</tr>
</thead>
<tbody>
<tr>
<td>We want to discover opportunities for improving the situation</td>
<td>We have come to find solutions to your problems</td>
</tr>
<tr>
<td>We must understand the situation here, and nobody knows it better than you do</td>
<td>You must tell us the problem you have</td>
</tr>
<tr>
<td>What could be done? How can we join forces to discover what can be done?</td>
<td>How can we help you?</td>
</tr>
</tbody>
</table>

VILLAGERS  →  SITUATION  →  WE

«parents»  →  «child»  →  «doctor»  →  »patient«

villagers  →  problems

situation / opportunities  →  problem(s)

improve the situation  →  solve the problems
# EXPLAIN PID TO OTHERS

<table>
<thead>
<tr>
<th>Objective:</th>
<th>Practice for explaining PID to other people</th>
</tr>
</thead>
</table>
| Task:     | Your task is to explain what PID is and why it is a promising and useful thing to an audience of ..................................  

1. Discuss what points you have to raise, and how they could be explained best.  
2. Prepare a presentation of max. 8 minutes in the plenary. The other participants will listen to it from the point of view of your audience. 
   You can use all kinds of material and ideas to explain it.  
3. The others ask questions and tell you when they are convinced by your explanations. |
| Duration: | You have 30 minutes to prepare. |
Module 17: The radio and the telephone

Objective
Experience the importance of asking back in order to understand.

Situation in which to use the module
This module is fun. It is best applied early in a workshop as it helps to establish a good atmosphere. But of course it can also be applied by a group of two or three persons any time, in order to practice the art of asking back for better understanding.

Intended learning effects
- Being able only to listen to a message (one-way communication) often results in misunderstandings.
- Being able to ask back (two-way communication) leads to a more accurate understanding and grasp of a message.

Procedure
1. Divide participants into groups of two. One person will be the sender of a message, the second one the receiver.
2. Place the two partners in a way that they cannot see each other, but can hear each other easily (e.g. opposite sides of white boards or doors, or sitting on chairs with the backs towards each other, see photos).
3. Explain that the message is a drawing of an object, which the senders will explain and the receiver will redraw according to the explanations of the sender.
4. Explain the rules: In a first phase, only the senders are allowed to speak. They must not directly say what object the drawing shows, but try to explain in other words how to draw the object. The receivers must remain silent. The two persons must not see each other. This is like one-way communication through radio.
5. Distribute a drawing to each sender in a way that no receiver can see them.
6. Now the senders can start to send, i.e. explain what to draw without naming the object, so that the receiver can replicate the drawing. It is important that receivers make no sound!
7. After 5 minutes terminate the sending. Let the pairs compare the original with the replicated drawing. Collect the original drawings and mark the drawings of the receivers with a «R».
8. Explain the second phase: Senders and receivers remain in the same roles. Again the sender must not name the object. But this time the receiver may ask back to understand better what the sender is trying to convey. Discussion is allowed, but still the two are not allowed to see each other. This is like two-way communication through a telephone.
9. Again distribute the drawings to the senders (make sure nobody gets the same drawing as before), and let the conversation start.
10. After 5 minutes terminate and let the pairs compare the original and the telephone-drawings.
11. Gather again in the plenary. Collect the drawings and mark the second phase drawings of the receivers with a «T». Display the drawings with the original drawing at the top, followed by the respective «R»-drawings beneath, and the «T»-drawings again below, so that everybody can see the differences.

12. Discuss the experience.

🔍 **Time**

40 minutes

🗂️ **Material**

Divisions (white boards, doors, windows etc.), two blank sheets of paper, marker for each receiver drawings (approx. A4 size) of simple objects which are familiar to participants as for example a house, a car, a truck, an animal, a tree, a flower etc.

You need half as many drawings as the number of participants. Best to keep them in an envelope so that they cannot be seen by the participants in advance.
The Radio and the Telephone

Two examples - first is the assignment drawing, then the outcome from the radio transmission and at the bottom the outcome of the telephone conversation.
Experience and discussion on the module «The Radio and the Telephone» in Vietnam

- Lesson learned: hundred times listening is not equal to one time of seeing.
- Communication skill is important: knowing how to send information so that it is understandable for the receiver.
- It is a long way from knowing to actually doing things.
- It is important to have information exchange between receiver and sender: the sender should listen to the receiver as well.
- Be careful when receiving and sending information: the receiver should understand well information.
- Two-way communication is better than one-way communication: getting farmers involved in discussion.
- When sending information, the information should be clear and specific.
- Referring to Gom Bahadur: who is receiver, who is sender? ⇨ All the three people are receivers and senders!
- Therefore, coming to the village, we should be the senders as well as receivers, and know how to ask back. Sometimes, farmers explain and we don't understand, we should ask back or even better ask to go to the site for discussion. When we are the senders, we should create opportunity for farmers to ask back, or ask the farmers to go to the site.
- For the outsiders in the village it will be particularly important to be good receivers as in a telephone-interaction, and that therefore they will have to ask back as much as possible in order to get the picture the villages will try to make us understand. This metaphor proved to be a useful anchor in later stages of the workshop, whenever the lack of sufficient probing could be pointed out by referring to «the telephone». This was then immediately understood by participants. The module thus became a useful tool mainly for grasping the importance of persistent probing.
MODULE 18: Learning to listen through controlled dialogue

✓ Objective
Give participants an opportunity to practice the art of active listening and understanding by means of «feedback».

☛ Situation in which to use the module
This module is best suited after the module «the radio and the telephone».

‡ Intended learning effects
- There are three distinct roles which each have to contribute their specific knowledge and skills to the success of a PID process, i.e. villagers/farmers, scientists and extensionists.

☐ Procedure
1. Present the transparency «Controlled Dialogue», and distribute a handout of it.
2. Make groups of two persons. As an alternative, groups of three people have proved useful. Role C in this case observes, and intervenes if the discipline of listening and proper feedback is not kept.
3. Tip: While groups are practising, the facilitator must move around among the groups and intervene too, in order to clarify. He or she may play the role of one participant for a while, until the idea of the exercise is properly understood.
4. After the exercise ask and discuss following questions in plenary: What was difficult? What proved useful for dealing with the difficulty?

⊕ Time
30 minutes, plus 10 minutes plenary

※ Material
Transparency «Controlled Dialogue» (attached), photocopies of transparency as handouts to each participant.
Controlled Dialogue

Objective  Practice the art of active listening by means of «feedback»

Thesis 1  In arguments there is much more talking than listening. Dialogues deteriorate into double-sided monologues.

Thesis 2  In argument people primarily do not want to be right. They want to be understood.

Procedure:
1. Select an issue on which you heartily disagree.
2. Sit opposite each other.
3. A begins to explain her reasoning.
4. B repeats (=«feedbacks») what A has said so many times, until A confirms that she has been correctly understood by B.
5. Only now B is allowed to present his views, until A has repeated correctly.
6. ... and so on and so forth ...
**MODULE 19: Communicating and probing**

**Objective**  
Practice communication skills which are important when working with villagers, and make participants aware of some basic principles that should be considered when conducting PID.

**Situation in which to use the module**  
The module can be used as a presentation in a lecture or as a starter for role-playing in a workshop.

**Intended learning effects**  
- It depends on my communication skills how close my contact with farming families will be.
- Good communication is a skill and can/must be learned.
- Good communication requires training.
- The participants experience that they can modify their communicative behaviour.
- The participants experience that slight changes can have a negative or positive effect.

**Procedure**  
Option 1: Lecture and exercise  
1. Present transparency 1.
2. Present transparency 2-5, read the text and give additional examples related to the participants background and working situation.
3. Explain the exercise on transparency 6.
4. Participants reformulate the questions in small groups (2-3 persons).
5. Reformulated questions are presented in the plenary and discussed.

Option 2: Practice and role play  
1. Present transparency 1 and discuss in plenary.
2. In plenary decide on a typical field situation that participants frequently find themselves in.
3. Divide participants in groups of three (extensionist/researcher, farmer, observer).
4. In a role play let them practice communicating in the field situation with the handed out questions (transparency 2-5).
5. Repeat the role play for each type of question.
6. Exchange insights in the plenary. Document these insights on a blank transparency for all to see. Photocopy this transparency and distribute as result of the exercise.

Alternatively divide participants into four groups. Each group prepares a role play in which they present a meeting between farming families and researchers using the dialogue forms of «probing, balanced question, key word probe and useful question». Present the dialogues in plenary.

You can also combine the exercise of option 1 with the role plays of option 2.

**Time**  
30 minutes, plus 10 minutes plenary

**Material**  
Transparency «Controlled Dialogue» (attached), photocopies of transparency as handouts to each participant.
Communication Skills

Spend sufficient time with farmer colleagues!

Ask questions
- Why, what, how, when?
- some say – others say, what is your opinion?

Try to understand
- tell the farmer what you understood from what s/he was saying
- summarize
- remain silent and let the farmer tell you more

Collegiate attitude leads to
- mutual respect
- genuine empathy
- understanding

Listen
- show signs of interest
- nod
- pay full attention

Body language
- close the distance
- do something together
- stand side by side and look in the same direction
Useful Questions and Probing Techniques

The six little helpers


Some open questions to stimulate farmers’ reflection

- What do you think about this?
- Can you tell more about this?
- What would be an example of that?
- What makes you see it this way?
- Why do you think this is important?
- What other ideas do you have about this?
- How do you feel about this?
- How would you describe this?
- What may be the reasons for that?
- How do you think this affected the performance of the crop?
- When did you observe this for the first time?
- How do you think other farmers would feel about this?
Questions to get the farmers opinion about an applied technology:

- What do you think of the trial?
- Are there any treatments which you think are especially interesting? Why?
- Why do you think this difference (among treatments) has occurred?
- What do you think of the appearance of the plant?
- How do you think this practice compares with that?
- Have you noticed any difference in the management or labour (weeding / irrigation / fumigation etc.) requirements?
- Why do you think this (referring to an observation made by the farmer) is important?
- What sort of yields do you think we are going to obtain?
- Do you think there are any problems here we should look into?
- Do you see any advantages or disadvantages to this (referring to an observation made by the farmer)?
- How do you think this compares with your current practice?
- What do you think of the time at which weeding (or any other operation) was done?
- If we plan this trial again next season, would you like to do anything differently? Would you like to suggest any changes?
Probing

- Restate what the farmer has just said (the mirror technique): «So it resists the drought...»

- Repeat a remark that has just been made in the form of a question, By doing this, you invite the farmer to expand on this particular theme: «It resists the drought?»

- Go back to and repeat a comment made earlier. This can help to steer the farmer's flow of comments in a direction you think important.

- Ask the farmer to clarify: «Could you tell me a bit more about this?»

- Summarize in your own words what you understand the farmer to have said, and ask: «Do I understand correctly?»

- Be prepared to admit uncertainty with the statement «I am not sure I understand correctly; you seem to be saying the following...» and repeat the farmer's statement.

- Remain silent (the five second pause), keeping eye contact. This encourages the speaker to keep talking.
Balanced questions

- I've had several interesting discussions with local farmers about this planting system. Some say the plants are too close, others say they could be planted even closer. What do you think?
- I've heard a number of interesting opinions from farmers around here about this variety. Some say they like a bushy plant, others say the bushy plant is a problem. I'd like to understand this better. What's your opinion?
- Do you think this might require more or less labour / capital / fertilizer / irrigation than what you presently use, or the same amount?
- How would you market this, or would you use the products mainly for home consumption?
- Would you recommend that we continue to test this, or had we better look for a different alternative?
## Key word probe

<table>
<thead>
<tr>
<th>Farmers‘ Comments</th>
<th>Key Word Probe</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is difficult to weed.</td>
<td>In what way is it difficult?</td>
</tr>
<tr>
<td>The sprawling plant is an advantage.</td>
<td>What makes it an advantage?</td>
</tr>
<tr>
<td>The flavour is better.</td>
<td>What is about the flavour?</td>
</tr>
<tr>
<td>This is easier to grow.</td>
<td>How can you tell it is easier?</td>
</tr>
<tr>
<td>The variety is too tall.</td>
<td>How does its being too tall make a difference? What is «too tall»? What would be tall enough?</td>
</tr>
</tbody>
</table>
Exercise: Open Questions

What do you think about these questions? Discuss and improve.

(1) Is it true that the new tomato variety has a better market because the fruits are bigger?
(2) Wouldn’t you prefer to grow the new tomato variety?
(3) Is the new treatment against early blight not very effective?
(4) Does the zero grazing not improve the health conditions of your cows?
(5) Shouldn’t you raise your tomato seedlings in a nursery?
(6) I suppose that this maize variety is good because it matures fast?
(7) Don’t you think that this sorghum variety is too short?
(8) The price for this cabbage is good because it has the right size, isn’t it?
(9) Don’t you think that it pays better to grow bananas as compared to coffee?
(10) I suppose your crossbred cow produces more milk than the Zebu?
(11) Which of the treatments in the On-Farm-Trial did you like best?
(12) Don’t you think you should apply fertiliser to your maize?
(13) Does the weeding of the new tomato variety not require less labour?
(14) Is the spraying of the new cotton variety not much easier?
MODULE 20: Breaking the inferiority/superiority pattern

✓ Objective
Discover ways of acting and behaviour or questions suitable for encouraging villagers to come forward with own ideas.

☛ Situation in which to use the module
This module is best used when you already gave some inputs on the interplay between the different PID actors, or when you feel that participants themselves come up with the subject.

‡ Intended learning effects
- There are ways to encourage people to feel that their ideas and opinions are equally important than those of anybody else.

☐ Procedure
1. In plenary ask participants to recount in an anecdotal way how they have already come across inferiority behaviour.
2. Ask participants to form two groups.
3. In each group, they have the task to reflect on how villagers behave when displaying inferiority complex and on how you can encourage them to abandon inferiority-behaviour and voice own ideas.
4. Join the two groups. One group (A) plays the role of villagers with inferiority behaviour. The members of the other group (B) attempt to encourage them with suitable ways and means.
5. Get out of roles. Group A tells group B how they felt, and which attempts were most exciting and suitable to encourage them to think creatively and voice own ideas.
7. Feedback as in 5.
8. Write down on a transparency, poster or board the three most promising actions, behaviours or questions which can break the pattern..

пуск Time
90 minutes

ceptor Material
Blank transparency and projector, or poster, board, pens, markers etc.
## MODULE 21: Purposes of experimentation (exploration - adaptation - verification - demonstration)

### Objective
Clarify the difference between various types of experiments, and a demonstration and an experiment.

### Situation in which to use the module
This module is best suited sometime early in a workshop, when participants are still exploring what kinds of trials PID is dealing with.

### Intended learning effects
- There are different types of trials which have different overall purposes.
- There is a clear difference between demonstration and experiment. This is important when planning an experiment. In an experiment we want to find out about something we do not yet know for sure, whereas with a demonstration we already know for sure what is supposed to happen and we want to demonstrate this effect to other farmers. Planning for a demonstration is different than planning for an experiment. Planning for an adaptation / verification experiment is different than planning for an exploratory experiment.

### Procedure
1. Present four examples of real experimentation efforts that have happened - as a narration or on a transparency. You may use the attached examples or write your own ones.
2. Ask participants to discuss the differences of the purpose of these examples, and the consequences for planning and conducting them. This can be done in plenary or in groups.
3. Clarify and define in plenary what the consensus is among the participants on the differences between these types of efforts.

### Time
At least 30 minutes in plenary. If group work and plenary, up to 90 minutes.

### Material
Group work material, examples (attached)
Exploration – Adaptation – Verification – Demonstration

Examples of experiments as a basis for discussing the differences

**Fodder-tree cuttings in Nepal:**

One farmer who was something like a local specialist in nursery techniques was trying out a new way of propagating a particular type of fodder tree. The traditional way was to cut large branches of at least 15cm diameter and plant it in holes before the beginning of the rains. However this farmers’ idea was to cut thinner branches of only 1 or 2 years age several months earlier, put them in a hole full of leaves, and keep the leaves moist and the branches in the shade. He hoped the branches would develop roots, so that he could then plant them at the beginning of the rains at much closer spaces than in the traditional way, and thereby make a green fence. The technicians didn’t know if this would work, and nobody in the fodder research station had yet heard of any such experiment. But they were interested in this experiment of the farmer. They suggested however, that he should use sand instead of leaves.

**Short duration Maize in the hills of Nepal:**

A short duration variety of Maize was successfully grown on a small field in the District. It gave a satisfactory crop, and was harvested before the main season rice crop had to be planted. The farmers who had seen it were interested in this new variety. So the District staff decided to grow it in small plots in 10 different locations at different altitudes. This would mean that the sowing of this variety would be at slightly different times and the water availability was also of course not the same in all the plots in all the different locations. Farmers were found who would try this out, and the trial conducted together with them.

**Sunflowers in Kyrgyzstan:**

A Kyrgyz farmer wanted to grow a crop of sunflowers, and the technicians of the extension service thought this was a good idea. During discussions we found out, that this used to be a crop in previous times, but that since several years nobody was growing it any more due to problems with the transition from collectivised farming to private farms. The technicians knew that sunflower grows well in the area if properly managed, and so did the farmer. They wanted to show other farmers, that this could be a profitable crop in the new situation that they are in.

**Tomato disease control in Pakistan:**

In Northern Pakistan many farmers regularly suffered heavy yield losses in tomato due to a fungal disease. They treated their fields only once symptoms were clearly visible. The extensionists knew that with earlier treatment the disease would be well controlled. So they decided to set up plots where farmers could compare the outcomes of the treatment timing recommended by the extensionists with the treatment timing usually applied by the farmers.
MODULE 22: Overview of steps in designing a PID experiment and the resulting documentation

✓ Objective
Give participants an overview of the steps which result in a well designed PID experiment.

☛ Situation in which to use the module
This module is useful after the participants have gained a first understanding about what PID is.

🌟 Intended learning effects
- In order to obtain feasible PID experiments, it is good to collect first a lot of ideas, then to detail these into ideas sheets, screen and prioritise them. The top priority ideas then are then developed into experiment sheets with activity plans and a recording book.
- There will be a documentation system. Idea and experiment sheets as well as activity plan and recording book are part of this system.

☐ Procedure
1. Draw the different steps (as shown in the drawing) on a white board or chart as you go on explaining. You may also prepare the drawings in advance and uncover them one by one. Or you show idea and experiment sheets, activity plan and recording book format on transparency while explaining the steps.
2. Explain that:
   - As a first step you will walk together with a group of villagers around in the area which is assigned to your group (e.g. a particular forest area, a specific crop or just the whole village area). Discuss with farmers what they do in that area and ideas for new things they have.
   - The next step is to make idea sheets in which the ideas gathered and discussed are formulated more precisely.
   - Then the ideas sheets are screened and the most promising and interesting ones selected.
   - The selected idea sheets are then developed into experiment sheets, and subsequently activity plans and a format for a recording book are worked out.
   - There are two phases: A first one where we explore and open up (until step 2), and a second one where we narrow down again, define and plan.

😊 Time
20 minutes

믹 Material
White board or flipchart, markers
Many ideas

Enriching the forest for the next generations

Economic value

Finding out what is appropriate clearing dimension

Why do we want to investigate this?

Many ideas

Experiment Sheets

Topic:
Planting timber trees (dau do, sao xanh) in allocated natural forest

What do we want to investigate?

Find out which one is stronger, the young seedlings picked from the forest or the ones germinated in the nursery

Find out what is appropriate clearing dimension

Why do we want to investigate this?

Economic value

Persons involved in developing the idea:

Dau Ng, Thi Chan, Thi Hoch, Thi Grang, Cau, Toan, Phuong, Tui, Sen

Experiment Sheets

Topic:
Planting timber trees (dau do, sao xanh) in allocated natural forest

What do we want to investigate?

Find out which one is stronger, the young seedlings picked from the forest or the ones germinated in the nursery

Find out what is appropriate clearing dimension

Why do we want to investigate this?

Economic value

Persons involved in developing the idea:

Dau Ng, Thi Chan, Thi Hoch, Thi Grang, Cau, Toan, Phuong, Tui, Sen

Recording Book

Experiment x

Action Plan

<table>
<thead>
<tr>
<th>Activity Conducted</th>
<th>HHs</th>
<th>Time</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Design an experiment for future trials</td>
<td>06.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sample harvest HHs</td>
<td>07.00</td>
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<td></td>
</tr>
<tr>
<td>3. Field visit HHs 07.00</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Seed, training on IPM method</td>
<td>PO</td>
<td>03.00</td>
<td></td>
</tr>
<tr>
<td>5. Soil prepare for transplanting HHs</td>
<td>FT</td>
<td>05.00</td>
<td>Green manuals, fertilizer, field and practice fields</td>
</tr>
<tr>
<td>6. Transplanting HHs</td>
<td>PO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Soil prepare for sowing HHs</td>
<td>FT</td>
<td>04.00</td>
<td>Green manuals, fertilizer, 1st add fertilizer, group leaders, discuss and agree</td>
</tr>
<tr>
<td>8. Transplanting HHs</td>
<td>PO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Field visit HHs</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10. Soil prepare for transplanting HHs</td>
<td>FT</td>
<td>05.00</td>
<td>Green manuals, fertilizer, 2nd add fertilizer, group leaders, discuss and agree</td>
</tr>
<tr>
<td>11. Field visit HHs</td>
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<tr>
<td>12. Sample harvest HHs</td>
<td>07.00</td>
<td></td>
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<tr>
<td>13. Termination evaluation and plan</td>
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</tr>
</tbody>
</table>

In the background:

Village walk

Idea Sheets

Topic:
Planting timber trees (dau do, sao xanh) in allocated natural forest

What do we want to investigate?

Find out which one is stronger, the young seedlings picked from the forest or the ones germinated in the nursery

Find out what is appropriate clearing dimension

Why do we want to investigate this?

Economic value

Persons involved in developing the idea:

Dau Ng, Thi Chan, Thi Hoch, Thi Grang, Cau, Toan, Phuong, Tui, Sen
MODULE 23: Introduction of Idea Sheet, Experiment Sheet, Activity Plan and Recording Book

✓ Objective
Show examples of the required documents and discuss them.

☚ Situation in which to use the module
This module is best used just before the practice modules.

☀ Intended learning effects
- Getting a grasp of the meaning of the questions in the idea and experiment sheets, and an understanding about what sort of answers are demanded by the questions.
- It is important to note down ideas and plans in a standard form, so that later on they can be compared, analysed and documented properly.
- Taking note in standard formats allows to cope with the sometimes chaotic process of having ideas and exploring their usefulness.

☐ Procedure
1. Hang up an empty idea sheet on a flipchart. Read the questions out and check whether they are understood.
2. Choose a suitable topic. This may be done by you in advance or in discussion with the participants in the plenary. Introduce two criteria for ideas for experiments:
   • It must be something new.
   • It must be specific.
3. Write the topic in the respective position on the idea sheet.
4. Ask participants to propose formulations for the first question. Let someone write these on cards (one suggestion per card). Discuss which one is the most appropriate one. Adjust the formulation if none of the proposals is good enough. Highlight the chosen formulation in some way.
5. Do the same for the second question of the idea sheet.
6. Hang up an experiment sheet on a flip chart. Read out the questions and check whether they are understood.
7. Explain that during the selection and screening process there may be need to rearrange the topics. Sometimes it may be better to join two idea sheets into one experiment, or one idea sheet actually contains more than one experiment.
8. Then formulate an experiment sheet for the topic chosen above, following the same procedure (as given in point 4 and 5 above). Explain that the design of the experiment may best be presented with drawings.
9. Point out that in this form an Experiment Sheet is ready for scrutiny and assessment by farmers on whether they want to begin to conduct this experiment, or whether they want only to be involved in other ways, or whether they want to keep it for later implementation.
10. Explain that once villagers have decided to conduct the experiment prepared on the Experiment Sheet, then an Activity Plan will have to be developed and decided upon by all who will be directly involved. Present the Activity Plan and explain it briefly. Note that depending on the experiment the Activity Plan may need to include more than the twelve months included in the attached template.

11. Hang up the attached example of the Recording Book and explain that it serves to document observations and comments, decided further actions and the names of the persons that are responsible for them (monitoring). Explain that the Recording Book should always stay together with the Experiment Sheet and Activity Plan. The Recording Book template may need to be adapted to suit the type of experiments you are dealing with and the information required to evaluate the experiment.

**Time**

40 minutes

**Material**

Idea Sheet, Experiment Sheet, Activity Plan and example for Recording Book on flipchart, forms for Idea Sheet, Experiment Sheet and Activity Plan (attached), Example «Recording Book» (attached), cards and markers
IDEA SHEET

Topic

What do we want to investigate?

Why do we want to investigate this?

Persons involved in developing the idea (name, address, function)

Date and place
EXPERIMENT SHEET

Topic

What do we want to investigate?

Why exactly do we want to investigate this? What is the underlying problem or opportunity? What would be the benefit if the experiment is successful?

What exactly do we want to find out? What are the questions which the experiment should answer?
In order to find out what we want, how should the experiment be designed?

What do we need to know to be able to tell whether the experiment was successful? What will we measure (quantitative data)? What will we discuss and judge (qualitative data)?

Where can we get additional information regarding this experiment?

Activity plan: see separate sheet

Persons involved in developing the experiment sheet (name, address, function):

Date and place:
ACTIVITY PLAN

<table>
<thead>
<tr>
<th>Activity</th>
<th>Month</th>
<th>Material required</th>
<th>Persons involved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1   2   3   4   5   6   7   8   9   10  11  12</td>
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</tbody>
</table>

Topic:
**RECORDING BOOK**

*Title of experiment:* ________________________________

*Responsible persons:* ________________________________

*Place:* ____________________________________________

*Data to be collected and frequency:* ____________________

<table>
<thead>
<tr>
<th>Date</th>
<th>Observations and comments</th>
<th>Decisions on further actions</th>
<th>Persons and signatures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
MODULE 24: Merry-go-round

✓ Objective
Collect first ideas for potential PID experiments based on the experience of the participants

☛ Situation in which to use the module
The merry-go-round is useful to brainstorm for ideas which then can be used for practising the development of idea sheets and experiment sheets. Of course the merry-go-round can be adapted for many other brainstorming and idea gathering purposes

❖ Intended learning effects
- Directing the minds of the participants for the first time in the workshop towards the village where the real work is going to take place and towards potential real PID experiments.
- Discover a useful tool for brainstorming
- When several brains simultaneously think about the same question, then a surprising amount of ideas are generated.

☐ Procedure
1. Divide participants in groups of 6-8 persons. Every group sits around one table or in a circle.
2. Every person gets a card.
3. Explain the objective of the exercise and the issue with which the brainstorming will deal with (e.g. «How can villagers improve their livelihood from natural forests and agroforestry in coffee gardens?», «How can villagers protect the coral reef and at the same time earn money?», or whatever may be an adequate issue in your situation). Usually the issue will be the topic of your whole PID effort. Explain that for the brainstorming participants should think about this topic and the village where they are going to work.
4. Explain the rule: Silence! Don’t talk to each other!
5. Show the transparency with the steps (attached) and read them out one by one and ask the groups to carry out every step immediately.
6. Let participants stick the card with the best ideas on a board.
7. Discuss the ideas. Explain that ideas of this type may come out of first discussions with villagers. Subsequently the ideas need to be developed more exactly into idea sheets, and finally into experiment sheets with activity plans.

❖ Time
20 minutes

✉ Material
List of steps on transparency or on paper (attached), 2 cards + pen for each person, some markers
Steps for a Merry-Go-Round of Ideas for Experiment

1. Write your name on the top of your card
2. Write 1-3 ideas for experiments on a card
3. Pass the card on to the person to your left
4. Read the ideas on the card you received
5. Add one new idea
6. Repeat steps 4-5 until your original card is again with you
7. Read the ideas on the card and mark the best one with a x
8. Pass the card on to the left
9. Read the ideas on the card you received and mark the best one with an x (no matter whether there is already an x or not)
10. Repeat steps 9 and 10 until your original card is again with you
11. Write the idea with the highest number of x with large letters on a card
MODULE 25 a: Practice the formulation of Idea Sheets

☑ Objective
Make participants capable of writing up useful Idea Sheets for later processing into Experiment Sheets.

☛ Situation in which to use the module
This module is best presented after module 23 «Introduction of Idea Sheet, Experiment Sheet, Activity Plan and Recording Book». The module «Merry-go-round» may be brought in between to generate ideas for the practice.

◼ Intended learning effects
- It is important to formulate ideas for PID experiments precisely.
- The questions of the idea sheet force one to think carefully about the idea.
- The reasons for conducting an experiment should be stated clearly. The reasons should be stated by farmers. If the reasons of the technicians differ from those of farmers, this should be written accordingly in the Idea Sheet.
- The most important formulation is the one about the question to be answered by the experiment. What is exactly it that we want to find out with this experiment? Once this is clear, then the rest becomes rather easy.

☐ Procedure
1. Refer to the presentation of the Idea Sheet done in Module 23.
2. Explain the group assignment.
3. Explain the following four important criteria of a good Idea Sheet for PID:
   - Is the idea specific about what exactly could be done, and not just a general statement?
   - Is the idea new to farmers and researchers?
   - Are the reasons for this experiment clear? Are they the reasons of the farmers?
   - Is the language simple and clear enough for the farmers to understand?
4. For practice split up in groups of 4-5 persons and distribute the group assignment.
5. Let each group present its Idea Sheet, discuss in the plenary, and amend each sheet accordingly. Improve on formulations. Watch out: Participants often have trouble formulating the experiment question. Usually they come with formulations which would be more suitable for demonstrations. The point has to be made very clearly, that in PID we are dealing with finding out about things we do not yet know if and how they really work. So what exactly is it that we want to find out? Later, when discussing with farmers in the villages, the participants will have to ask that question from farmers: What is it that you want to find out about with this idea for an experiment?
6. Optional (depends on time availability and how well the exercise went so far): Have a second round of group work and develop another idea from the «merry-go-round» into an Idea Sheet, and exchange again.

ismatic  Time
3 ½ hours

<& Material
Empty Idea Sheets (see attachments of Module 23), group assignment (attached) on transparency or flipchart and on paper, example «Idea and Experiment Sheet» (attached)
# Practice with Idea Sheet

<table>
<thead>
<tr>
<th>Objective</th>
<th>To learn to develop and formulate an idea into an Idea Sheet</th>
</tr>
</thead>
</table>
| Procedure | **Option 1**  
1. Each person collects his/her cards on the board from the «merry-go-round»  
2. Choose one of the ideas on the cards  
3. Formulate an Idea Sheet for it on a chart  
4. Present in the plenary  

**Option 2**  
1. Each persons tells the group one experiment that he or she has been involved in, or that she would like to conduct.  
2. The group picks two experiments for further work, one that has already been undertaken and one which could be done in future.  
Then steps 3 and 4 follow as in option 1, first for one of the chosen experiments and then in a second round for the second chosen experiment. |
| Time | 20 minutes for the formulation of the Idea Sheet  
2 minutes for presentation in the plenary |
Idea Sheet and Experiment Sheet based on the real story of PID from Nepal presented in module 11

IDEA SHEET

Topic
Planting bamboo and erosion control  
How to propagate bamboo  
Mass propagation of bamboo in the village  

not specific enough  
not specific enough  
specific enough, selected as adequate

What do we want to investigate?
Whether bamboo can be propagated in sufficient quantity in the village.

Why do we want to investigate this?
In order to be able to plant more bamboo in gullies to reduce erosion.

EXPERIMENT SHEET

Topic
Mass propagation of bamboo in the village

What do we want to investigate?
Whether bamboo propagation in sufficient quantity can be done in the village

Why exactly do we want to investigate this? What is the underlying problem or opportunity? What could be the benefit if the experiment is successful?
Soil erosion in gullies is a common problem in the community. Bamboo can stabilise the gullies. However, the traditional method of bamboo propagation is extremely laborious and thus not enough planting material can be produced. Bamboo planting material is also not available in the market. Local mass propagation of bamboo will enable farmers to plant bamboo on a large scale with reasonable effort.

What exactly do we want to find out? What are the questions which the experiment should answer?
Whether there are techniques of bamboo propagation which can be done in the village and which are not as labourious as the traditional method of digging out roots under existing bamboo clumps. For example can it be done in nurseries in the village? Will it be possible with this propagation technique to produce sufficient bamboo plants at reasonable cost?

What will be the design of the experiment?
Dig out roots of existing Bamboo. Plant them in nursery beds. Dig roots out at different growth stages and replant them to see how developed the plants need to be for successful propagation.

What do we need to know to be able to tell whether the experiment was successful? What will we measure (quantitative data)? What will we discuss and judge (qualitative data)?
Survival rate after propagation and transplanting for each growth stage.  
Investment (cash and labour) to produce a given quantity (in comparison with the traditional method).  
Is the ratio of surviving plants to invested effort acceptable?

Where can we get additional information regarding this experiment?
From neighbourhood and villages with similar conditions.
MODULE 25 b: Practice the formulation of Experiment Sheets

✓ Objective
Make participants capable of writing up useful Experiment Sheets for PID experiments by and with villagers.

☛ Situation in which to use the module
This module usually follows module 25 a «Practice the formulation of Idea Sheets».

澥 Intended learning effects
- The Experiment Sheets are a further development of the Idea Sheets, where the details of implementation and monitoring of experiments are developed and written down, based on the discussions with the implementing villagers.
- There is a logical connection between the different parts of the Experiment Sheet. Checking this logical connection can sometimes lead to changes to the original intention of the idea. This is okay as it improves the relevance of the experiment to be conducted. It also improves the understanding between outsiders and villagers on the objectives and utility of conducting a particular experiment.
- The experiments are the farmers’ experiments, not those of the outsiders. Therefore the purpose and the expected results must be those of the farmers and not those of researchers or extensionists. If the outsiders expect other results than the farmers, they may be added, but the ones of the farmers are more important.

☐ Procedure
1. Refer to the Experiment Sheet presented in Module 23.
2. For practice split up in groups (best use the same groups as for the Idea Sheet practice) and distribute the group assignment. Take the Idea Sheets prepared in the previous exercise and develop them into experiment sheets.
3. Let each group present its Experiment Sheet, discuss in the plenary and amend each sheet accordingly. Watch out for the logical connections.
4. Optional: Have a second round of group work and develop an other Experiment Sheet. Exchange again.

☺ Time
3 ½ hours

✂ Material
Experiment Sheets (see attachments of Module 23), group assignment (attached) on transparency or flipchart and on paper, example of Idea Sheet and Experiment Sheet (attached with Module 25a)
# Practice with Experiment Sheet

<table>
<thead>
<tr>
<th><strong>Objective</strong></th>
<th>To learn to develop and formulate an experiment Sheet from an Idea Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Make an Experiment Sheet out of the Idea Sheet from the previous exercise (on flipcharts)</td>
</tr>
<tr>
<td></td>
<td>If necessary, revise wording of the first 2 questions of the Idea Sheet</td>
</tr>
<tr>
<td></td>
<td>2. Present in plenary</td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td>40 minutes for preparing the Experiment Sheet</td>
</tr>
<tr>
<td></td>
<td>3 minutes for presentation in the plenary</td>
</tr>
</tbody>
</table>
**MODULE 25 c: Practice the development of Activity Plans**

**Objective**
Make participants capable of writing up useful Activity Plans for experiments.

**Situation in which to use the module**
This module may follow module 25 b. Alternatively the development of Activity Plans can be introduced during the work in the village once real experiment sheets have been developed.

**Intended learning effects**
- In the Activity Plan, the activities necessary for conducting a specific experiment are determined in a detailed way. This includes the determination of the activities necessary for implementing the experiment and their sequence, its time scheduling, the identification of required materials and the allocation of tasks to the persons involved.

**Procedure**
1. Refer to the introduction of the Activity Plan in Module 23.
2. Split up in groups (best use the same groups as for the Idea Sheet and Experiment Sheet practice) and distribute the group assignment. Elaborate activity plans for the experiment sheets developed in the previous exercise.
3. Let each group present its Activity Plan, discuss in the plenary and amend plans accordingly.
4. Optional: Have a second round of practice.

**Time**
2-3 hours

**Material**
Empty Activity Plans (see attachments of Module 23), group assignment (attached) on transparency or flipchart and on paper.
# Practice development of Activity Plans

<table>
<thead>
<tr>
<th><strong>Objective</strong></th>
<th>To learn to develop and formulate an Activity Plan that corresponds to an Experiment Sheet</th>
</tr>
</thead>
</table>
| **Procedure**  | 1. Prepare an Activity Plan that corresponds to an Experiment Sheet from the previous exercise (on flipcharts)  
2. Present in plenary |
| **Time**       | 40 minutes for preparing the Activity Plan  
5 minutes for presentation in the plenary |
MODULE 25 d: Practice the use of Recording Books

✓ Objective
Make participants capable of designing useful Recording Books for monitoring experiments.

☛ Situation in which to use the module
This module is may follow module 25 c. Alternatively Recording Books can be introduced during the work in the village complementing the development of the Activity Plans.

unnable Learning effects
- For each experiment a Recording Book must be maintained.
- The Recording Book is crucial a tool for regular monitoring of experiments. All observations, comments, suggestions and decisions will be documented in it.
- Without a properly maintained recording book it will often be impossible to evaluate the results of the experiment.

☐ Procedure
1. Refer to the example of the Recording Book attached to Module 23. Present it on transparency or copy it on a poster. The Recording Book format may need to be adapted to suit the type of experiments you are dealing with and the information required to evaluate the experiment.
2. Design a Recording Book for one of the experiments developed in the previous exercises either in plenary or as a group work including some sample entries.
3. Discuss in plenary.
4. Explain that the Recording Book
   - must always stay together with the respective Idea Sheet, Experiment Sheet and Activity Plan
   - serves to document all observations made during the experiment and comments and suggestions of farmers and visiting outsiders
   - and is thus absolutely necessary as a basis for evaluation of the experiment and for drawing conclusions on the results
   - serves as a tool for regular monitoring
   - makes sure that farmers and visiting outsiders can always look up what has been discussed and decided in the course of the experiment

😊 Time
1 hour

ゞ Material
Example for Recording Book (see attachments of Module 23).
Optional: group assignment on transparency or flipchart and on paper
MODULE 26: Sequence of work in the village

✓ Objective
Give participants an understanding of the steps of work which will happen in the village.

☛ Situation in which to use the module
This module is introduced before beginning the preparations for the days in the village. The attached graph serves as an overview, and helps to make participants remember where in the process they are at any point in time, and what the next results will have to be, throughout the work in the village.

𝔷 Intended learning effects
- The work in the village consists of phases where villagers and outsiders work together, and phases in which only the outsiders are involved.
- The process is iterative, beginning on the first day with collecting as many different ideas as possible from villagers. In the ensuing days the promising ideas are screened and further developed, until some of them are formulated as experiments on Experiment Sheets with their respective Activity Plans.

☐ Procedure
The steps and results of the overview graph are best written on cards, and the lines drawn on the background paper. After presentation the cards are glued and the poster is hung up in the workshop room. This allows for immediate reference whenever a question arises.
1. Write the steps and results on cards. Make modifications according to your needs.
2. Stick cards on one by one, draw the necessary lines on the background paper and explain the steps.
3. Explain that the graph will be taken to the village so that it can be used for reference when desired.
4. Discuss the arrangements for the village which have already been made and which possibly still have to be made.
5. Glue the cards and hang the graph up in the workshop room.

🥵 Time
30 minutes

♫ Material
Flipcharts, written cards, graph (attached)
Sequence of work in the village

ONLY PID TEAM FROM OUTSIDE

WITH VILLAGERS

Workshop I

Workshop II

Day 1

Day 2

Day 3

Day 4

 Soon after

**Prepare for introductory meeting in the village**

Result 1

Villagers know what to expect and how the outsiders will work with them

Introductory meeting in the village

Result 2

Many ideas for possible experiments

Walk around in the area. Discuss problems and opportunities

Result 3

Many Idea Sheets

Further development of ideas with villagers

Result 4

Approx. 8-10 realistic and promising ideas for experiments

Screening and selection of ideas

Result 5

Approx. 8-10 Experiment Sheets

Work out details of most promising experiments

Prepare presentation and selection of experiments for immediate implementation

Result 6

Approx. 4-5 experiments for immediate implementation

Meeting with all interested villagers. Information and selection of experiments to be implemented immediately.

Review and planning meeting

Final result

Approx. 4-5 experiments planned in detail with Activity Plan and Recording Book

Initiate experiments, establish documentation system

Review and planning meeting
MODULE 27: Preparing the introductory meeting in the village

✓ Objective
To be well prepared for the first meeting with the villagers in order to ensure that villagers are well informed about what is going on, in order to create a good atmosphere and to avoid as far as possible misunderstandings and wrong expectations.

☛ Situation in which to use the module
This module is implemented in the workshop place and not yet in the village. It is usually one of the last things done before going into the village.

 MDMA Intended learning effects
- The introductory meeting and the first interactions with villagers are an extremely crucial point in the process of introducing PID in an area. Whatever is explained there and happens immediately afterwards is going to influence the way that villagers will co-operate in the future. That is why this preparation is so important.
- If PID is well explained to villagers, then usually things run smoothly. If, however, misunderstandings and unrealistic expectations remain, then it may take a long time to overcome them, because of a lack of confidence between villagers and outsiders.
- It is important to be well prepared. It is useful to even practice the detailed wording to be used in the first encounter with the villagers!
- It has to be clear to villagers what the objectives are, and how these objectives will be reached. This must be conveyed in simple words in the local language.
- It is important not to raise wrong expectations, so that frustrations among villagers are kept to the minimum.
- Be prepared to answer difficult questions.

☐ Procedure
1. You may form the groups for the work in the village already now. Try to make balanced group divisions (representation of institutions, specific knowledge etc.).
2. Refer to module 26. Explain that this module refers to the very first step in that process.
3. Present a proposition for an agenda for the introductory meeting in the village. Discuss it in the plenary and amend it. Alternatively compile the agenda by asking the participants for their suggestions and writing these on a flipchart or transparency.
4. Determine who among the participants will be best suited to guide the whole meeting. This participant will prepare the greetings and introduction etc.
5. Allocate some points in the agenda to each group. The groups prepare the presentation of these points in the village (including visualising materials in writing or with drawings, depending on the villagers). They will also present them in the meeting.
6. Let each group present the draft of what they will say and show during the meeting. The others give feedback for improvement.

7. Each group then finalises its contribution for the meeting.

8. If there is time and need the final version may be presented in the plenary for practice.

9. Optional: In case it is expected that villagers ask questions which may be rather difficult to answer, make a brainstorm in the plenary to collect such questions which may come up. One group then will develop good answers to these questions so that you are well prepared.

⏰ Time

3 hours (group work and presentation)

🔍 Material

Examples of proposed agendas (attached)
Agenda for introductory meeting in the village from Vietnam

1. Greetings

2. Introduction of all outsiders (names and why they are here)

3. Explain PID (objective, theme, why doing this together with villagers, who can participate, expected results, clarification of follow-up, make expectations realistic)

4. Explain commitment of outsiders (e.g. support for experiments; clarify also money issues)

5. Explain the program of the days we stay in village and discuss the timings

6. Discuss who wants to be involved in what stage (e.g. walk around, development of ideas and experiments, prioritisation and selection meeting)
Some tips for discussing crucial points at the introductory meeting

During the explanation on what PID is, farmers must get a feeling that they have a decisive role to play. Without their contribution of their own understanding of their situation, the objective will not be reached. Formulations of the objective may be something like....«Together with you we want to find out new things that really work. We want to learn how to work together with you. Please help us in figuring out the most useful experiments which will make sure, that you can further develop your farms with your own means».

The explanation why the outsiders want to do PID must be such, that it is acceptable to farmers. Telling farmers that we want to help them is not acceptable. They must get a feeling that we too have a personal stake in doing PTD together with them ... Something like: «We need to work with you so that we become more useful as advisors or SMS or researchers. We need to improve our own way of working. We want to work with anybody who really wants to co-operate with us in order to find out new things that you can continue on your own».

It has to be clear to farmers, that this effort which is going to happen in their village now is just the first step. From then on, PTD will run as a continuous program as long as villagers show are interested. The identified first experiments will immediately afterwards be taken up and implemented.

Explain the commitments of the outsiders clearly. It is important to clarify money use issues right from the beginning. The outsiders are interested in working together with the villagers in order to find new things, which they themselves can implement. Therefore such innovations needs to work without the need for money, beyond what villagers can arrange themselves. Whatever we find out together must also be applicable to your neighbours and to farmers in other villages, who may not have access to outsiders money. For more suggestions on the use of money in PID see chapter 2.3.

On the other hand, be sure to offer support for obtaining materials which otherwise the farmers cannot find. However, be careful that this material will later on be probably available. An example: If farmers want to try out new varieties of a crop, we can help them to get seed. As soon as new varieties turn out to be successful, then seed procurement initiatives, or even own seed-production in the village has to be thought of. If on the other hand an expensive chemical is required for conducting the experiment, then we may refuse to provide this chemical, because the success of such a technology may not be replicable.

If farmers ask why to go out into the fields, can we not discuss things here inside, explain that we need to see the situation with our own eyes in order to be able to understand it correctly.

Farmers may want large experiment plots. Make them aware that we do not know, whether a new thing is really going to be a success. Can the farmer bear the risk of failure? A further thought: Instead of one farmer doing a big trial, it is better if 5 farmers try out something new on a small scale. Then they can meet during and after the trial and compare their results and experiences. This spreads the risks, and gives all the farmers more information on the details for making sure of the success of a new technology.

If some farmers are not interested or have more important things to do, they may ask whether they can leave. Of course they can leave! We are not going to be upset with farmers who decide, that this is nothing for them! But make sure that your reply does not contradict any agreements between villagers and the local authorities.
MODULE 28: Demarcation of the PID theme (the «influence egg»)

✓ Objective
Clarity the thematic boundaries for the PID effort in the village.

☛ Situation in which to use the module
This module may be part of the preparations for the work in the village. Alternatively it may be used before introducing Idea and Experiment Sheets in order to practice with realistic topics.

❯ Intended learning effects
- All livelihood systems are complex, many different things interact. However, it has to be clear to villagers which aspects of their livelihood system the outsiders are prepared to discuss with them, or else confusions and frustrations may result.
- One must concentrate on discussing those things in the village on which villagers have some influence. For designing PID experiments it is counterproductive to debate with villagers about things, which they cannot change on their own.

☐ Procedure
1. Present a suggestion of the topic to be dealt with by the current PID effort in one sentence on whiteboard or transparency or flipchart (Examples: «How can villagers improve their livelihood from natural forest and agroforestry in coffee gardens?» or «How can we protect the coral reef and thereby earn money?»).
2. Debate this topic in the plenary, until there is a rough consensus. Make sure the topic is finally formulated in words, that are entirely understandable to villagers.
3. Present the metaphor of the egg, and show how it explains the spheres of influence that villagers control, and those aspects which are outside the immediate control by villagers (the shell).
4. Discuss the topic again in view of the spheres of influence. Test the common understanding by discussing concrete examples of issues that might be raised by villagers.

😊 Time
30 minutes minimum, depending on complexity of the envisaged topic and the number and diversity of participants who have to reach a consensus.

≮ Material
Explanation on «The Egg» as a metaphor for spheres of influence (attached), flipchart, blank transparency or whiteboard
The Influence Egg
A metaphor for explaining the spheres of influence...

Explanations:

The yolk is the innermost part of the egg. It stands for all those things that the individual household can decide to do, without having to check with anybody else. PID concentrates on such things.

The egg-white surrounds the yolk. It stands for all those things, which an individual household must discuss with other people living in the same area in order to reach a decision about what to do. The egg-white therefore represents all those things that a village community can decide to do. A further level is, where the village can discuss things with neighbouring villages, so that a mutually acceptable agreement on what should be done is reached. If such a decision can be implemented without the involvement of any external authorities, then the issue also belong into this sphere. PID can also deal with such issues.

The egg-shell is the hard structure around all these soft spheres of influence. It supports and protects the soft interior. The egg-shell stands for the legal and administrative framework, which allows villagers to decide and act on their own. Any thing which is beyond the direct influence of villagers is part of the shell. PID does not deal with things which are beyond the decision making competence of villagers.

(A further development of the metaphor could be: The shell protects the strengthening of the chick, until it is strong enough to break the shell. This means, villagers better focus first on the capacities and possibilities they have within their own control, before thinking of discussing how to change the legal and administrative framework. Many rules and regulations are not intended to harass villagers, but protect the interests of the wider society as in case of forest protection laws).
MODULE 29: The resource map

✓ Objective
Introduce the resource map as a tool to identify important resources and problem spots of a village area together with the villagers.

☛ Situation in which to use the module
For any PID effort it is useful for the outsiders to have an understanding of the village geography. If no resource map exists already it is useful to prepare one in the initial stages of the work in the village, e.g. in the initial meeting. This module introduces what a resource map is, and shows to participants how it can be developed in the village.

☒ Intended learning effects
- When first contacting farmers in a village about a new theme, it can be useful to make a map of the village area and enter all the important resources and problem spots which have an influence on the theme. Different land uses and types, sources of local materials, places for particular activities are typically part of a resource use map.
- Developing a map together with farmers can be helpful to get an overview of the situation in the village. It helps in improving the communication with farmers, because they can point out things to explain better.
- The map may be helpful in finding the spots in the village area, where problems and possibilities for the new theme can be seen and discussed.

❑ Procedure
1. Explain the importance of a resource map, as described above
2. Show an example of a resource map (e.g. the one attached here)
3. Explain that a resource map can be drawn up based on an existing map of the village with only physical information on it (i.e. roads, houses, fields, rivers and streams etc.) or just based on discussion with villagers.

توقعات التعلم
- عند الاتصال الأولي بالزراعة في القرية حول الموضوع الجديد، يمكن أن يكون من المفيد رسم خريطة للقرية وتسجيل جميع الموارد والمناطق المهمة التي تؤثر على الموضوع. أنواع مختلفة من التربة والأنواع، منابع مواد المحلية، أماكن النشاطات الخاصة عادةً ما تكون جزءًا من خريطة استخدام الموارد.
- رسم خريطة مع الزراعة يمكن أن يكون مفيدًا للحصول على نظرة عامة على الوضع في المجتمع. إنه يساعد في تحسين التواصل مع الزراعة، حيث يمكنهم مبديك الأشياء للإيضاح.
- الخريطة قد تكون مفيدة للعثور على المناطق في أقاليم القرية، حيث يمكن رؤية المشاكل والفرص للموضوع الجديد.

❑ Time
20 minutes

☒ Material
Example of a resource map.
Optional: Physical maps of the village area(s)
Resource map of Vau Village in Northern Vietnam