AGRICULTURAL TRAININGS’ GUIDELINE

December 2017
“When planning for a year, plant corn. When planning for a decade, plant trees. When planning for life, train and educate people.”

Chinese Proverb

The guideline is designed to help guide its users - programme and project managers - in planning and conducting agricultural trainings. It explains basic steps, which should not be omitted when designing and delivering the trainings in order to assure a long-term impact and sustainability of the agricultural extension activities.
WHY TO USE THIS GUIDELINE?

Agricultural trainings, to the right people, at the right time and in the right way, will remain essential for improving farming methods and techniques, increasing production efficiency and income and enhancing livelihoods of the rural poor.

The cornerstone of providing quality agricultural trainings in PIN’s country programmes stays in the quality of design and delivery of direct trainings to farmers as well as in the good choice of farming practices that are to be presented.

Therefore, this guideline provides information necessary for:
- Good targeting of agricultural trainings
- Design and planning of the teams’ capacity
- Selection of the contents and messages to be provided
- Recording and sharing the technical knowledge among PIN country programmes

STAGES OF TRAININGS’ DEVELOPMENT

The development of an agricultural training program should respect the following stages and steps:

1. DESIGN: CONTENTS AND PLANNING
   - Recent agricultural practices
   - Target group
   - Detailed topics
   - Forms and methods
   - Requirements for trainers
   - Training plan
   Tool: Training contents table

2. CURRICULA DEVELOPMENT
   - Adjustment to context
   - Learning objectives
   - Training activities and tools
   - Reference materials
   Tool: Curricula

3. IMPLEMENTATION
   - Logistics
   - Training programme
   - Formulation of milestones
   - Follow-up and evaluation
   - Reporting
   Tool: Trainings

The modalities of the trainings can change based on available funding, topic, season, expertise, beneficiary group and type of intervention. For example, short-term trainings linked to emergency distributions are very feasible from a logistics point of view, but can introduce only a few basic topics (e.g. safety and handling). They are not feasible for introducing new techniques. Long-term trainings, on the other hand, are good for introducing more complex techniques or practices, but still need to be constantly adjusted according to the situation in the field and among farmers. The crucial point for improvement is designing the series of trainings based on one thematic area, which would step-by-step target particular knowledge and skills. This will enable smoother adoption and further use among farmers.
Successful training design depends on a number of factors and ideally involves a small planning team who has a good understanding of local conditions and targeted communities. In the design phase, the team builds on gaps identified by needs assessment among the farmer communities. Involvement and participation of the targeted beneficiaries from the very beginning is essential in order to prepare trainings that are relevant and useful for them.

The following questions can help us in this stage of training development:

- Have we identified recent agricultural practices (good and bad) typical for the community?
- Do we know for whom the training is designed (did we address the right target group) and what are their needs, motivation and expectations?
- Have we assessed the capacities of our country team and defined requirements for trainers –either local (PIN) experts, or, if needed, external trainers?
- Have we clearly defined the training objectives and based on that the topics of the training needed to reach the objectives?
- Did we choose suitable training methods, taking into account the character of training and background of participants (male farmers, women, illiterate, young population, level of experience and knowledge)?

The project manager, coordinator, technical officer and external or internal specialist/trainer are responsible for the training design.

Use the Training Contents Table template.
The main steps in the training design are as follows:

**STEP 1: DESCRIBE RECENT AGRICULTURAL PRACTICES**

The identification of recent agricultural practices can help us to more easily identify topics for trainings related to suggested agricultural activities. Knowing bad agricultural practices combined with needs identified by farmers will help us to define the main challenges in agricultural production, which are to be improved. Knowledge of good practices will help us to build the training design and time plan, fitting to the local conditions and situation of communities.

For example, farmers of one community in Zambia usually start with planting legumes on the onset of the rainy season at the beginning of November (which is a good practice). Let’s assume that they need to learn new soil improvement techniques in order to increase their yields. Then the training session will be planned for the time, when they usually start with land preparation so that they can immediately use the new knowledge and skill on their field.

**TRAINING OF WOMEN**

Throughout the world, rural women provide vital contributions to agriculture and food security by producing their own crops/food for household consumption and providing the majority of agricultural labour in many areas\(^1\). PIN agriculture extension activities has been recently more and more focused on working with women groups, although still to quite a limited extent.

When preparing trainings for women, the following issues that influence their participation have to be considered:

→ **Time**: usually heavily structured between household, childcare, and agricultural duties that greatly limit their availability for additional activities. Therefore, it is important to schedule all trainings at times when most women are available.

→ **Reduced technical and numerical literacy or illiteracy**: educational materials and methods of training have to be adjusted and trainers experienced in training of illiterate people are needed. Women usually tend to receive less formal education than men.

→ **Cultural specifics**: religion, social structures and traditions shape cultural practices, which can also influence food habits, and, therefore, crops the communities grow. In some cultures, women hesitate to attend meetings together with men or are even forbidden to do it.

**It is important to ensure that women and men have equal access to trainings. Gender aspects must be taken into consideration when deciding the themes and setting the timing of trainings.**

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\(^1\) MEAS 2013, Working Guide for Working with Women’s groups in the Middle East and North Africa
PIN agricultural trainings are designed for farmers (either male farmers, or more and more often women farmers), or lead farmers and development workers, who are supposed to further train other farmers.

Proper selection of beneficiaries is a very important step in training design process and establishing the **beneficiary selection criteria** directly affects contents and methods of trainings and helps to prepare trainings feasible for specific groups of trainees.

**The effect of the training will depend on addressing the right group of people in the right way.** In order to prepare trainings tailor made for the specific groups of participants, the planning team should identify the following characteristics among the target beneficiaries:

→ Level and scale of knowledge of the topic and/or experience levels
→ Assets and production system
→ Socioeconomic and cultural background
→ Age, gender
→ Special needs
→ Motivation for learning
→ Language, literacy and numeracy skills
→ Learning styles and preferences

This information is essential to design a training that is relevant, to choose feasible training methods and also to determine whether or not potential trainees have enough in common to create one group.

**IMPORTANCE OF MOTIVATION**

We have to assume that different people will have different motivation and priorities for participation in trainings. The initial motivation of the participants is very important and should not be underestimated, otherwise the trainings will not be effective! The trainees should never be motivated or conditioned by material gain of the trainings (distribution of inputs, per diems), but by suitably chosen content based on their real needs.

Trainers should use a written questionnaire or orally communicated interview in order to verify the beneficiary selection and to find out information about motivation and expectations of the training participants at the beginning, or even during the training, and adjust the methods and contents accordingly.
Training topics and contents have to be defined based on a needs assessment of beneficiaries and on the local context, building on experience and knowledge of farmers, as well as on recent practices. The topics have to be specific, relevant, and useful for trainees. They should describe the main messages that will be included in the curricula (for example which practices will be trained, which skills improved).

It is important to consider that while the general topics can stay the same, contents can be different in each community.

For example, we define the topic “soil improvement techniques” with the contents focused on “animal manure”, “compost” and “green fertilization” practices in one community, while they already know the technique of “mulching”. On the other hand, the second community will be trained only in “mulching” and “composting” since they already practice the other techniques on their fields. In this situation, the topics will be defined as follows:

All the training topics have to be arranged in a logical order to help the participants find their way through the training and selected in such a way to achieve the training objectives.

Well-prepared content is the base for the curricula where the activities and methods are described in detail.

**COMMON MISTAKES:**

→ The contents are too broadly defined and the details and messages are adjusted by the trainers in the field during the trainings

→ Trainers tend to present their knowledge and favourite topics rather than presenting topics actually needed by the beneficiaries.

→ Topics are relevant technically, but the capacity of beneficiaries is not sufficient to internalise the practices or techniques or to apply them

→ Contents of the trainings stay the same in different environments or target groups and they are not adjusted based on previous experience and knowledge

→ Time and resources are wasted focusing on a topic that has little relevance for the trainees (e.g. trainees are already familiar with the topic)
STEP 4: PROPOSE TRAINING FORMS AND METHODS

“We learn to do something by doing it. There is no other way.” – John Holt

The aim of agricultural trainings is to teach farmers new practices that first have to be accepted and then used by them. The traditional top-down methods of learning do not show to be effective in any kind of agricultural trainings since farmers tend not to learn and change behaviour by passive listening, but as a consequence of experience. They expect what they are learning to be immediately useful and if educating them is to be effective, it must provide assistance in solving problems.

Therefore, the trainings need to be practical and participative, following the basic principles of adult learning. The trainer has to consider many issues important for selection of appropriate training methods and attitudes. These can include: the type of practice that is to be trained, gender of participants (for example women tend to receive less formal education then their male counterparts), numeracy skills; different attitude, methods and tools will also have to be applied to literate and illiterate trainees etc.

In this phase of training preparation, the trainer proposes training methods including basic settings, periodicity and timing of training sessions and target groups. The detailed description of training activities’ methods and tools are then to be described in the Training curricula.

Remember: Good agricultural training usually includes field demonstration. What farmers read or hear may raise interest. What they see and practice convinces them.

Dialogue and practice are important for learning
A trainer tells a group of farmers how to thin their crops in order to improve yields. He then goes away, thinking that the farmers have learned the new skill. A few weeks later, he returns to find that none of the farmers have thinned their crops and that they have only a very vague idea of what he told them. The trainer should not be surprised. Farmers do not learn very much from a straightforward talk and most of what they do hear they soon forget. But, if they are given the chance to ask questions, to put the new information into their own words and to discuss it with the extension agent, much more will be learned and remembered. Furthermore, when a new practical skill is being taught, the farmers must have a chance to practise it. The trainer can then correct any initial mistakes, and the farmer will gain the confidence to use the new skill.

APPLY ADULT LEARNING PRINCIPLES!

1. **Internal motivation:** adults need to be interested and ready and learn voluntarily. How to do it? Teach them what they can apply tomorrow; use practical examples from real life situations that are relevant for them.

2. **Safe environment:** learning can cause stress and insecurity for adults. How to create a relaxing atmosphere? Respect them, accept everyone’s opinion and feelings, meet their needs, mistakes allowed (as a natural part of learning process), convenient facilities and services.

3. **Active participation and engagement:** try to involve as many senses as possible. Use visual aids, bring samples, let the trainees discuss and explain, let them try practically. Accept and use different learning styles of the individual learners.

4. **Start with previous knowledge:** sharing of previous experience and knowledge links the learning with the life of trainees, raises their curiosity, interest and motivation as well as shows the trainer how much they already know about the topic and what gaps the trainer should address.

5. **Application, application, application:** at the end of each session trainees should get a chance to practically apply what they have learned to strengthen the impact of the training. A good trainer cannot underestimate this and must allocate sufficient time for it.
STEP 5: DESCRIBE PROFILE OF A TRAINER

When selecting the trainer/s, it has to be ensured that they possess hands-on technical know-how in the field of the particular agriculture technique as well as practical skills to teach farmers. It means that the trainer:

→ has sufficient knowledge on the topic and skills needed for the training
→ is able to prepare adequate training structure and contents
→ is able to develop/prepare curricula and appropriate and interesting training materials
→ will set up an effective learning environment and make proper logistical arrangements.

Moreover, understanding local culture, group dynamics, social power relations, gender roles, communication patterns and human motivations (often referred to as ‘soft’ or ‘process’ skills) should be essential for any trainer who works with “ordinary” farmers and direct beneficiaries, not omitting the need to know the local language or to have experience with training illiterate people or women. The trainer must also have credibility with the trainees. For farmers this means that the trainers should be familiar with the responsibilities and constraints involved in fieldwork.

The trainer should also possess the social skills needed to be successful. These include e.g. warm and open personality, ability to bring the group together, enthusiasm for the subject area, openness to listen and learn, ability to communicate in an interesting way, creativity in inventing interactive elements and practical exercises, etc.

Plan your team skills or hire a consultant!

It is important to assess the capacity and expertise of your team during the training preparation phase. Consider hiring an external trainer/expert if necessary.

PIN technical field staff and agronomists or hired experts must not only be experts in the particular field of agricultural techniques, but they also have to possess sufficient extension capacities. The technical content presented to farmers is important; however, without adequate skill in planning an educational program or workshop and delivering the content efficiently and effectively to farmers, the technical expertise of the field agent may be lost.

Inviting a role model to the training can be very valuable tool to improve effectiveness of the training. Role models are farmers who already use a certain practice we plan to disseminate and who can tell their success story to the participants.
STEP 6: PREPARE A TRAINING PLAN

Good planning of agricultural trainings is essential for its implementation and long-term impact. When the topics and contents are defined, the detailed time plan of the trainings should be prepared respecting the following:

→ **agricultural seasonal cycle**: training should fit to the season and production cycle of crop/animal and be ideally planned in such a way that farmers can immediately practice the gained knowledge or skills on their fields (trainers have to be familiar with crops and cropping cycles, seasonal labour requirements, and typical tasks of agricultural employees in the area).

→ **recent/common practices**: if some particular technique is practiced at a particular time of the year/month, it is important to follow the timing with the trainings.

The time needed for trainings and its appropriate timing is related to a particular agricultural practice, which is introduced. For example for annual crops, trainings would extend from land preparation to harvesting. For fodder production, it would include the dry season to evaluate the quantity and quality at a time of year when livestock feeds are commonly in short supply. For tree production, agroforestry practices or conservation measures such as hedgerows and grass strips, no tillage etc. trainings would need to continue over several years for farmers to see for themselves the full range of costs and benefits.

Include the trainings’ plan into your project workplan!

Have a look at examples of training contents
DEVELOPMENT OF TRAINING CURRICULA

PIN agricultural trainings aim to have **standardized curricula developed for each training topic**, which can be adapted for a different target audience or for a different context. The trainers can have the previously prepared curricula on hand or they can prepare their own training curricula for each of the trainings.

Selected trainer, technical officer and/or education/agriculture extension advisor is responsible for the formulation of the curricula.

Use the curricula template.

The main steps in curricula preparation are as follows:

**STEP 1: DEFINE LEARNING OBJECTIVES**

It has to be **clearly defined** what should be achieved with the training. Which kind of agricultural knowledge, skills and awareness do we want to develop among the participants? It will help us to ensure that both the trainer and the trainees understand and agree on the intended outcomes of the training.

Setting training objectives provides a sound basis for:

- Organizing both trainers and trainees’ efforts and activities for accomplishing training outcomes
- Selecting training materials and methods
- Evaluating the success of the training

During the training, and especially at the end of the course, the **trainer should check whether the objectives have been met**. To assess the participant’s opinion a simple evaluation or feedback method can be used. It can be either a **questionnaire**, which participants can fill in anonymously e.g. by validating the quality of certain aspects; or **brainstorming on lessons learned** (open discussion with suggestions for improvement, etc.). Simple evaluation methods can be found [here](#). For assessing the progress in learning **pre-testing** and **post-testing** can be used.
STEP 2: DESCRIBE LOCATION, MATERIALS, TOOLS AND DETAILED SCHEDULE

Curricula should include suggested location for the training depending on the type of training activity (classroom, demo plot, field, etc.), duration of training and detailed schedule for each training activity.

The trainer (or anyone responsible for curricula preparation) also suggests what items are needed for the training implementation. These can include tools and materials needed for practical demonstrations (spades, seeds, hoes, etc.) as well as aids needed for in-class trainings (boards, markers, posters, etc.). All this information is essential for timely and good training implementation.

The detailed programme of the training must be prepared separately and presented to participants during the training implementation phase.

STEP 3: DESCRIBE THE TRAINING ACTIVITIES

The purpose of the curricula is to provide detailed guidance on training activities for trainers and trainees. Therefore, it should provide specific and easy to understand information and step-by-step instructions on how the training activity will be conducted.

Avoid too much theory on the topic, the curricula must be practical, describing the methods! Further theoretical information on the topic can be included in recommended reference materials or training handouts given to the participants.

Note: The curricula for the trainings of lead/model farmers should also include a part on facilitation skills. Lead farmers can acquire new knowledge and skills thanks to trainings, but if they do not know how to present them to other farmers, the impact of the trainings can be considerably diminished.

STEP 4: CHECK THE LEARNING PROGRESS

At the end of each session, the trainer should check what the participants learned. The method is up to the trainer, but it is advisable to do it in a participative way as suggested in the curricula template. To be able to evaluate the progress of the participants, pre-testing should be done at the beginning of the training and the same questions used after the training (post-testing).

STEP 5: ADD REFERENCE MATERIALS

These contain any resources supporting the training content, including literature relevant to the topic that are found useful by the trainer including citations, web links and guidelines.
IMPLEMENTATION OF TRAINING

The successful implementation and delivery of the training requires a well-prepared training programme, training materials and training site. Assessment of the training process is important for measuring the quality of training sessions, while follow-up helps the implementation team to understand usefulness of the learning activities.

Logisticians, programme/project managers, field officers and/or trainers are responsible for the implementation phase of training.

STEP 1: PREPARE TRAINING PROGRAMME

As a basis for training logistics a detailed schedule of the training should be prepared, taking into account:

- Topics and activities
- Optimal number of training days
- Spread over the weeks (for longer term trainings)
- Best days of the week
- Best time of the day
- Length of each session with breaks, etc.

When scheduling the training sessions, consider especially needs and availability of farmers, which will depend on their workload and duties. For example, women farmers will probably be available at different times than men due to their daily duties including child care, household activities, etc.

The programme should be presented at the beginning of the training session and can be adapted according to the situation or feedback of participants during the sessions.

Example of the planning sheet for a training programme
STEP 2: PREPARE TRAINING SITE, MATERIALS AND AIDS

The person responsible for training should think in advance what is needed for the training (aids and tools, materials, invitations, etc.) and inform people responsible for the logistics in order to prepare everything on time.

Since the agricultural trainings are supposed to be mostly practical, the sites for practical demonstrations (e.g. field or demoplot) have to be selected or established prior to the trainings and easily accessible for the participants. Any specific requirements from the trainers (for example, participants can be asked to bring soil samples from their fields) have to be announced in advance, too.

Training materials such as handouts, presentations, etc., have to be prepared, printed and distributed to participants at the beginning of the training.

The person responsible for the training logistics has also think about how the participants will be invited to the trainings and in which way the will receive all the relevant organizational information about trainings.

Example of the checklist for training logistics.

STEP 3: FORMULATE THE MILESTONES

During the training implementation we can come across many challenges that can change the course of the training.

For example, as we conduct the training we will learn more about the participants and their needs. This information may require adjustments in the course design. We may decide to change time allocation for a particular topic or change the type of activity associated with a particular topic.

When designing the series of training sessions, meeting a milestone can be the fulfillment of particular preconditions necessary for the continuation of the training for the participants or continuation of training as such. If such milestones are not met, it can substantially change the course of planned training activities (e.g. rescheduling of the trainings to another season/year, cancelling training activity or change in methodology may be needed).

For example, farmers are trained in soil improvement techniques. The trainings include several sessions such as land preparation, intercropping, organic fertilization, etc. The intercropping session (multiple cropping of grains and legumes) is planned to start together with sawing, but it was found out, that the farmers had already planted all their crops. Therefore, this training activity cannot be implemented during this season and has to be rescheduled to another season or dropped out from the project workplan. The milestone (precondition) for training of this practice is, that farmers have their fields prepared, but have not sown the crops yet.

Formulation of milestones, training contents and planning have to be complementary. Do not forget to amend your project workplan accordingly!
STEP 4: EVALUATE THE QUALITY OF THE TRAININGS

The implementation team should consider the basic evaluation methods of the trainings to assess their quality during implementation. This will allow for gaining a valuable feedback and recommendations for improvement of future trainings.

The following forms of evaluation are suggested for PIN agriculture teams to be used when assessing the training process:

<table>
<thead>
<tr>
<th>What is measured</th>
<th>Pre-testing and post-testing</th>
<th>Participants check-in</th>
<th>Post-training participants feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in participants knowledge, skills, attitude</td>
<td>satisfaction of participants with progress of the training</td>
<td>satisfaction of participants with the training and collects suggestions for improvement</td>
<td></td>
</tr>
<tr>
<td>Before and after the training (the same questions used to assess how progress of learning)</td>
<td>During the training</td>
<td>after the training session (daily or at the end of training course)</td>
<td></td>
</tr>
<tr>
<td>Use interview or questionnaire, keep questions brief, no more than 10 or 12</td>
<td>Ask 4 or 5 questions on how things are going</td>
<td>Use questionnaires, interviews or brainstorming sessions focusing on various aspects of training</td>
<td></td>
</tr>
</tbody>
</table>

**Examples of simple evaluation methods**

A specific form of training evaluation can be Supervision/observation of trainings, which applies especially to models when lead farmers or development workers are trained first (e.g. Syria, Ethiopia) and then train other farmers. The programme manager should identify staff (field officers, extension workers) who should randomly supervise at least a smaller part of the trainings that are delivered to farmers by lead/model farmers and provide them with constructive feedback and recommendations on enhancing the training quality.

There is a wide set of evaluation forms covering almost every aspect of the training. The teams need to decide on which ones are relevant and effective for their course since overdoing it becomes a time-consuming activity and tires participants. At the end of each session evaluation can be informal, verbal; at the end of each day it can be done in a more structured way with participants breaking into small groups, developing 4 – 5 key learning or feedback points; at the end of the course it needs to take a far more structured approach and time to achieve its aim.
STEP 5: PLAN AND MAINTAIN FOLLOW-UP ACTIVITIES

Although the follow-up activities are conducted after the training, the trainer should **develop an action plan for follow-up before the training**. It should include a simple checklist of expected after-training/demonstration activities, which are expected to be done by farmers and the frequency of follow-up visits by the PIN field team. **The follow-up plan has to be announced to the participants before the end of the training.** The farmers should also be informed about the possibility of who they can contact in case they need any consultation.

The exact method and frequency of follow-up activities is up to the PIN agriculture team and depends on the topic trained, but it is a fundamental part of the training management cycle. The follow-up activities can include farm visits or workshops organized some time after the training in order to assess the progress of using new knowledge and skills in farmers’ fields and to identify potential constraints.

The **follow-up sheets** can be used as one of the tools how to measure the use of new knowledge and skills of trained farmers.

*Incorporate the follow-up into the project monitoring plan!*

*See examples of follow-up sheets*

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STEP 6: REPORT YOUR FINDINGS

The results of trainings’ assessment and follow-up monitoring should be recorded and summarized in a **report, including main recommendations, good practices and lessons learned**. This step is important for learning and further improvement of our training programmes as well as for retaining the expertise and replication of effective approaches.

*See examples of reports*
**Training contents table**

Tool for the design stage of training development, which describes recent agricultural practices, beneficiary selection criteria, defines training contents, methods and requirements for trainers.

**Click here to download**
Training Curriculum
For the purpose of the Project
["Title of the project"]

[Name of the training]
Topics Covered:
[FIRST TOPIC]
[SECOND TOPIC]
[THIRD TOPIC]

General learning objective:
By the end of the training the participants will be familiar with the topic of [ ] in order for them to [ ].