

3 Plan, prepare and implement PLAR-IRM



3.1 The PLAR-IRM team

Ideally, a team of two or three agents who have followed the PLAR-IRM training for trainers carries out the facilitation sessions. These facilitators can be extension or NGO agents, or scientists having a good knowledge of the field. The sessions take place once a week over about 30 weeks, which means that the facilitators have to be available at least one and a half days per week: half a day to prepare the session, half a day for the session itself and another half day to evaluate and record the results (Annex 2). In addition, the facilitator can be asked to assist farmers in recording information on the IRM fields (Annex 5).

The institutes and organizations interested in the PLAR-IRM approach should consider whether they can effectively implement such a time-consuming process. Several African research and development services do not have the necessary human and financial resources to carry out activities focusing on ‘learning.’ For this reason, the PLAR-IRM activities should begin on a small scale, i.e. as pilot activities. This will allow the team and the partner organizations to acquire the experience required and to gain confidence in the efficiency of the approach before extending the process on a larger scale. It is advisable to begin pilot activities with a small team. Given the exploratory nature of the team, it should be composed of scientists, development workers, extension agents or NGO personnel.

In any case, a long-term commitment of the team members is required; they should be willing to be involved in the field activities for at least a few years. This is not always easy because staff are often reassigned—this risks disturbing the continuity of the team. Scientists and extension agents who are already involved in numerous activities should not be selected as members of the PLAR-IRM team. What is needed is a PLAR-IRM team with experience in participatory research methods and skills for group-work and interaction with farmers, scientists and development workers. The PLAR-IRM requires regular critical review and adaptation of its approach, according to the area/site and time. The PLAR-IRM approach requires flexibility from the team members and their institutions; it requires good communication skills among team members and their institutional superiors, and it requires resources.

3.2 Site selection



The choice of the site is very important, because the site determines not only the results, but also the opportunities for the extension of these results to other inland valleys or areas. In Reference 1 of the Technical Manual, a set of selection criteria is presented. It is clear that the farmers' request for assistance is one of the major criteria for starting PLAR. Farmers can formulate this kind of request during the participatory diagnostic phase or during development-workers' interventions. However, the message should be clear from the beginning: as a principle, it is an assistance to train/educate the farmers so that, later, they will themselves take control over the PLAR. The request can also be the result of an open field day organized by an already running PLAR-IRM Center.

Before selecting the priority areas, the sites and the number of PLAR-IRM Centers to install, the research and development organizations should take into consideration all the agro-ecological areas and inland-valley rice production systems. Since PLAR-IRM requires a long-term commitment, the number of centers will necessarily be limited. However, in order to play a key role in farmer-to-farmer training, the PLAR-IRM Center should be committed to its role. That is to say: after 1 or 2 years, some of the PLAR-IRM farmers should become farmers-facilitators in the neighboring inland valleys. Therefore, the original site selection should also consider the distance to neighboring inland valleys. A center isolated from other inland valleys is not a good choice, as the extension of knowledge to the farmers of other inland valleys will be difficult.

The ultimate goal of PLAR is to become an approach used by all the extension services in all the regions where inland-valley rice production is important. To reach this target, a significant commitment is required from the research and development services involved in inland-valley rice systems. For this reason, the number and density of PLAR-IRM Centers that an extension service can manage should be considered and, furthermore, the number of centers able to support the extension of the objectives to other inland valleys through exchange and farmer-to-farmer learning should also be considered.

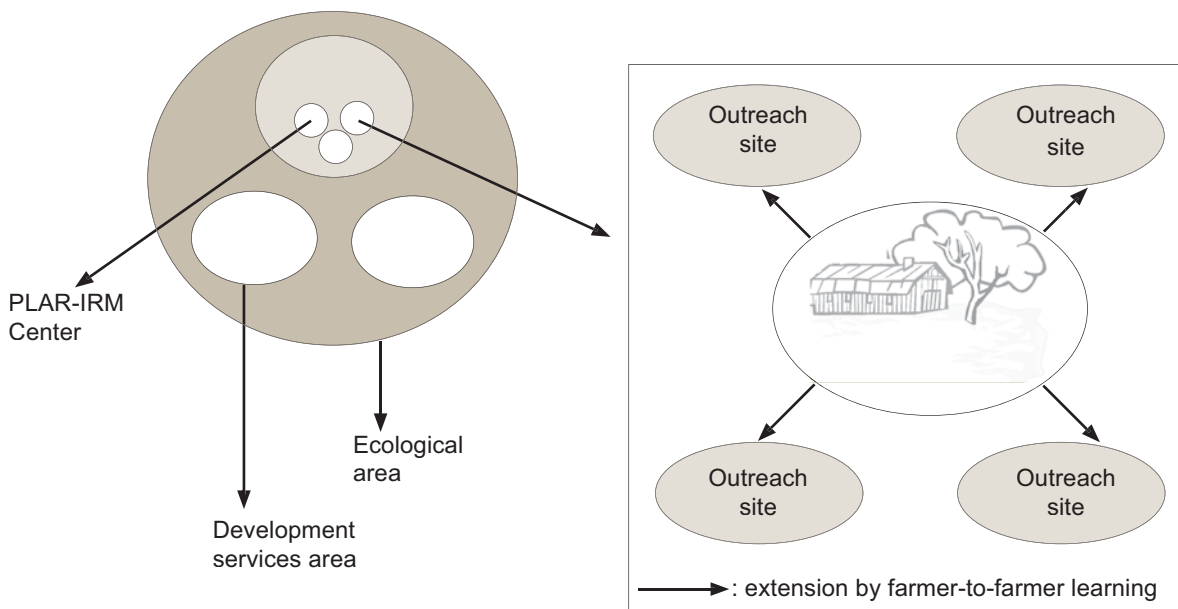
In order to make PLAR really function in the neighboring sites, the farmer-facilitators should be rewarded for the assistance they give. To make the system sustainable, the farmers receiving assistance should contribute for receiving training. At Bamoro and Lokakpli near Bouaké in Côte d'Ivoire, where the first PLAR-IRM Center was installed, a system of 'learning coupons' is being tested.

The farmers of the PLAR-IRM Center Bamoro–Lokakpli extended the PLAR-IRM results and tools to the farmers of neighboring inland valleys, through farmer-to-farmer learning. An outreach campaign was organized in the neighboring villages to inform people of the existence and skills of the PLAR-IRM Center. As a result, four requests for training were received. Now, there are four farmer-facilitators running PLAR-IRM sessions in the neighboring villages in response to their peers' demand. Professional facilitators, members of the PLAR-IRM team, assist these farmer-facilitators in the preparation of the training sessions and, if needed, give to-the-point explanations during the sessions. It is clear that not all the modules of the curriculum will be addressed in the outreach villages, especially in the first year.

Indeed, modules and tools are selected on the basis of the priority problems of major interest to the PLAR-IRM Center farmers combined with the demands formulated by the farmers of the outreach sites.

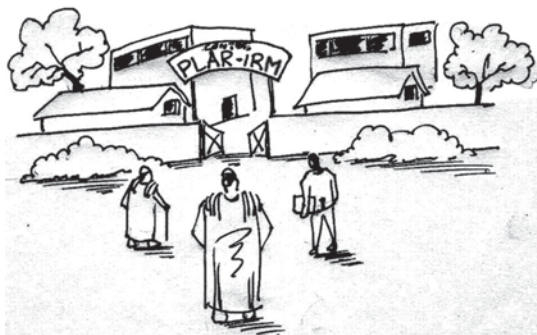
In partnership with WARDA, the Ivorian extension service ANADER sells tickets to farmer groups in the outreach sites at 2000 FCFA per ticket (about \$US 3) for one training session. At the time of the training session, the farmer group gives a ticket to the farmer-facilitator who claims the money from ANADER–WARDA. The first 30 training sessions are subsidized by WARDA, but each additional session is paid by the group at the full rate (100 FCFA per farmer per session for a group of 20 farmers). The system works successfully in the four outreach sites.

In principle, success is guaranteed if the PLAR-IRM Center is limited to a village. In a village, there is normally a certain social cohesion facilitating the organization of farmers around a PLAR-IRM Center, where farmers meet regularly and follow the sessions, where knowledge is exchanged and working in groups is encouraged. By the same logic, it is preferable to work with farmers who are already organized into farmer organizations and who have some experience of working together. Annex 3 presents a form to record basic information on the inland-valley site.



Local authorities and extension agents or NGOs who know the environment well can help to identify potential sites. The PLAR-IRM team will visit these sites to see the provisional choice first-hand. Afterwards, one or more meetings will be organized with the villagers in order to explain their interests and expectations to the PLAR-IRM team.

3.3 Farmer selection



To be efficient, the number of participants should not exceed 30. Bigger groups are difficult to manage and with smaller groups discussions and knowledge exchange tend to be limited. The preliminary meetings in the village and the first module can be followed by all interested farmers. In principle, adherence to the group takes place during the first session on a voluntary basis. If women produce rice, they should be encouraged to participate in the PLAR-IRM Center. The selection should *never* be done by the field agent, nor the local village chiefs. The PLAR-IRM candidates should:

- Be rice producers in the selected inland valley.
- Be interested in learning new rice management techniques and practices.
- Commit themselves to participate regularly in the PLAR-IRM sessions during the 30 weeks.
- Accept to share their acquired knowledge with peer-farmers from their own and other villages.

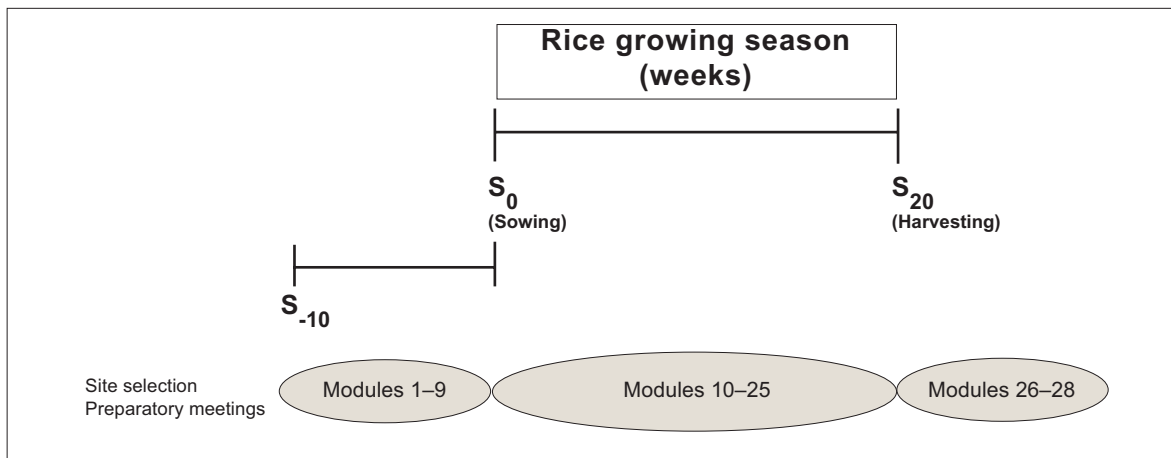
It is important to know the socio-economic characteristics of the participating farmers to compare them with those of non-participating farmers. This information can be used in a database to analyze the impact of PLAR-IRM. Annex 4 presents a form for recording basic socio-economic information about the farmers participating in PLAR-IRM and of a sample of farmers who are not participating.

3.4 Planning of sessions

It is important that the PLAR-IRM sessions match the local rice cropping calendar. In practice, it is necessary to start the modules two months before the beginning of the campaign, when the farmers begin to clear the land. Therefore, with a frequency of one or two sessions a week, Module 9, addressing farmers' planning of the campaign, will coincide with the beginning of the campaign.

The correct implementation of the PLAR-IRM curriculum requires good planning, especially in the initial phase. It is far easier to carry out modules when they coincide with the implementation of the corresponding activity in the farmers' cropping calendar. Practising of the acquired knowledge, especially at the IRM-field level, is then possible. It is important that the PLAR-IRM team starts its activities on time. The planning of the activities should take into account the rice cropping calendar that does not normally cover more than 20 weeks.

In practice, Modules 1 to 9 address items related to the preparation for the campaign and, for this reason, they have to take place before rice seeding. If, for instance, in a particular PLAR-IRM site, farmers normally start seeding in early August, it is useful to start the PLAR-IRM sessions 10 weeks earlier, i.e. at the end of May. If this is not possible, increasing the number of sessions per week, two



instead of one for instance, may be tried. Modules 10 to 25 are related to the agricultural campaign and should take place during the rice cropping (cycle) calendar. Modules 26, 27 and 28 can be carried out well after harvest. Module 27 needs data from the IRM field and to collect, treat and organize them takes time.

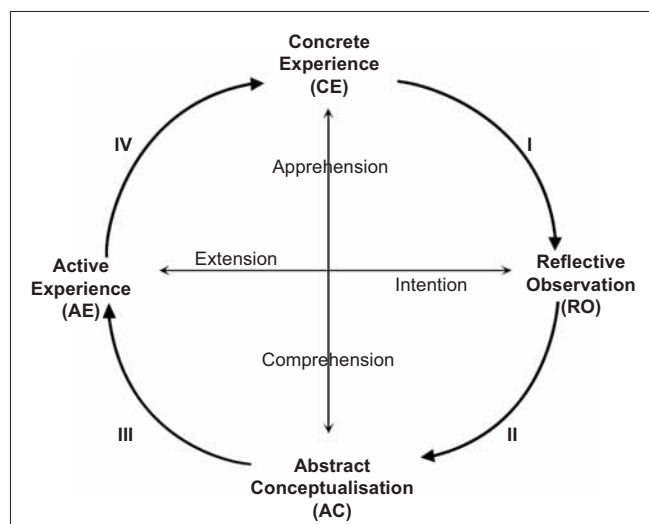
The planning illustrated in the figure (above) could help, but each team has to adapt it to its own local conditions. In addition, this planning should be flexible, as it should be possible to adjust it if necessary according to what happens during the campaign.

Notes on learning dimensions

Four major learning styles can be distinguished: concrete experience, abstract conceptualization, active experimentation, and reflective observation. When someone observes, listens or gets some significant information, (s)he has a ‘concrete experience,’ called ‘apprehension.’ Apprehension involves one’s subjective sense of what is important and how one thinks and feels about something—thus, one’s attitude. To a large extent, attitude influences one’s behavior. ‘Behaviorists’ suppose that learning starts with the experience of particular needs, therefore need is seen as an incentive or stimulus for learning. One responds to that need by behaving in different ways. Any behavior that more or less fulfills that need reinforces that particular behavior. Reinforcement will probably lead to the repetition of that successful behavior: concrete experience takes place. It will be clear that one’s individual needs strongly influence one’s attitude and behavior and thus the way to acquire concrete experience.

The ‘abstract conceptualization’ dimension of Kolb’s² learning process involves understanding or ‘comprehending,’ and is based on one’s ability to analyze a situation and relies on interpretation and cognition (leading to knowledge). Comprehending relates to the theory of ‘cognitivism’ that, as opposed to behaviorism, sees learning not as a change in behavior, but as improving particular mental processes, like observation, memory, or fact-linking. Abstract conceptualization happens in the mind. When using maps and models, structure is given to the contents and abstract conceptualization takes place.

Apprehending and comprehending are two poles of the learning process and knowledge results from the alternation between these two poles: (1) exploring situations and perceiving meaning (concrete experience) and (2) designing or modifying personal representations (constructs) for these situations (abstract conceptualization). The vertical line in Kolb’s model of the learning process shows that learning can be seen as a flow between concrete experience in existing situations (apprehension) and abstract conceptualization (comprehension) of these experiences (see Diagram).



The other two dimensions of Kolb’s model of the learning process deal with intention and concrete action. ‘Active experimentation’ happens when personal constructs previously developed through abstract conceptualization are put into practise and then used to change a situation. As such, one’s understanding of a situation is tested and extended through active experimentation. At the other pole of the horizontal line, ‘reflective observation’ appears as the fourth dimension of learning. Reflective observation takes place when one does not take action, but prefers to take time for verifying whether the beliefs, values and newly perceived wisdom (concrete experience) are accurate and will hold true. During reflective observation, the concrete experience is compared to alternative views and earlier experimentation, thanks to an increased perceptiveness. Reflective observation may be transformed into active experimentation after consultation and thinking, and when one feels comfortable extending intentions and thus transforming ideas into concrete action.

Kolb has integrated the four learning dimensions into a cyclic learning process. Learning alternates between apprehending and comprehending a new situation (the vertical line) and transforming the new perceptions into reflection about the insights or actively experimenting with the new elements (the horizontal line). The cyclic learning process thus integrates activities people carry out when they learn. With concrete experiences of real problem situations, the active learner reflects on the value of his/her ideas by comparing them with other ways of looking at the problem (see segment I of the cycle). With the broader picture in mind, the active learner then conceptualizes the ideas and formulates theories and models of understanding (see segment II of the cycle). Subsequently, the models are tested (see segment III of the cycle) resulting in concrete experience (see segment IV of the cycle). Although each individual has a specific way of learning, it is possible to monitor people’s learning process by distinguishing the four segments of the cycle. Some people will have a distinct ability to learn by experimenting, while others will gain better insights by conceptualization. Kolb distinguishes four learning styles, corresponding to the four segments of his model (see segments I, II, III and IV of the cycle).

² Kolb, D.A., 1984. *Experiential Learning: Experiences as a Source of Learning and Development*. Prentice-Hall, Englewood Cliffs, USA.

