

Making field observations: The vegetative phase

This module is the continuation of Modules 11 and 14; it explores some particular aspects of observations to be made about one month after transplanting, during the vegetative phase.



Learning objectives

At the end of this module, farmers will:

- Have reviewed the importance of making regular field observations, analyzing the health of the crop and its environment, and how to take decisions for appropriate action.
- Be able to decide on the important observations to be made and on the ‘observation indicators’ specifically related to the vegetative phase, i.e. the indicators he/she will observe.
- Be able to record the information on his/her recording form.

- ❶ Review the recording form for the IRM field.
- ❷ Make field observations of the IRM fields in sub-groups.
- ❸ Summarize the observation in plenary session.
- ❹ Continue to fill in the recording form of the IRM field (page 5 of the form).



Procedure

1. Farmers and the PLAR-IRM team meet at the PLAR-IRM Center. The facilitator briefly reviews the previous module and invites farmers’ feedback. The facilitator asks if the farmers have put in place any new practice on their IRM fields.
2. One of the PLAR-IRM team members explains the learning objectives and procedures for the current module.
3. The facilitator invites the farmers to present the filled-in pages of the recording form for the IRM field, as explained in Modules 9, 11 and 14. The difficulties in filling the recording form are discussed—this concerns pages 1, 2, 3 and 4 of the form.
4. The facilitator explains the field-observation *procedure* in PLAR-IRM:
 - The farmers are divided into four sub-groups of four or five farmers.
 - A farmer-facilitator and a farmer-rapporteur are chosen for each sub-group.
 - Each farmer sub-group will visit four sites¹ at the vegetative phase—preferably two fields in ‘good’ (optimal) condition and two in ‘poor’ (less-than-optimal) condition.
 - The sub-groups make field observations; the farmers decide which indicators are important for them, i.e. the most obvious ones that allow them to judge the field conditions and plant health.

1. The observation sites have to be prepared in advance by the team of facilitators.

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- The sub-groups discuss and analyze what they observe: they must point to the links between the indicators (what is seen, i.e. effects) and the environmental factors or farmers' management practices (i.e. causes).
5. The farmer sub-groups and the facilitator depart to the field. In turn they all visit four observation sites.
 - The facilitator helps the farmer-facilitator if necessary.²
 - The farmer-rapporteur takes notes.
 6. Back at the PLAR Center, the farmers report and comment on their results:
 - The farmer-rapporteur of the first sub-group presents the results for the first observation site, 'Field 1.'
 - The facilitator synthesizes the results in the four-column table, in the row 'Field 1.'
 - Afterwards, farmer-rapporteurs of other sub-groups 'complete' the first sub-group's report by adding comments from their sub-groups that were not mentioned by the first sub-group, and the facilitator summarizes these in the table.






Field	Observation indicators	Analysis	Decisions to be made
Field 1			
Field 2			
Field 3			
Field 4			

- Then the farmer-rapporteur of the second sub-group presents the results of the second observation site, 'Field 2.'
 - The facilitator synthesizes the results in the row 'Field 2.'
 - Then, he/she invites the farmer-rapporteurs of the other sub-groups to complete the table.
 - And so on for Fields 3 and 4.
7. The facilitator then introduces the fifth page of the recording form for the IRM field; this is meant to train the farmers in recording the information from the field observations made during the vegetative phase.
 - The facilitator re-emphasizes the importance of recording the information and focuses on the fact that recording concerns the plot identified by the farmer where he/she intends to implement the practices learnt during the PLAR sessions. This means that recording concerns the IRM field, of which a sketch is made on the first page of the recording form.

2. In the beginning, it is very important that the facilitator makes sure that 'good' observations are made, in order to obtain accurate analyses and to make appropriate decisions.

- The facilitator explains the eight indicators:
 - Tillering (number of tillers per hill);
 - Plant density – degree of canopy closure;
 - Color of leaves;
 - Plant vigor;
 - Plant health;
 - Cleanliness of field, absence of weeds;
 - Water depth;
 - Absence of iron-toxicity symptoms;

☛ *for each of the indicators, the facilitator explains its importance.*
 - The facilitator explains that the farmers can judge the degree of their satisfaction with the condition of their IRM field by ticking a box under the face corresponding to their judgment. If for an indicator the farmer's plot
 - gives complete satisfaction, he/she ticks the box under 
 - gives moderate satisfaction, he/she ticks the box under 
 - gives no or only little satisfaction, he/she ticks the box under 
 - The farmers will then further analyze the indicators that give no or little satisfaction. They will explain the reasons for their judgment and give details of the factors causing signs of poor state of health of their fields and hence try to show the links between the indicators and the causes or factors leading to these signs or symptoms.
 - For these same indicators, the farmers are questioned about the decisions they will take to improve the field (by changing their management practices) and to prevent the phenomenon from re-occurring.
 - The facilitator invites each farmer to fill in page 5 of the recording form; the facilitator can help to fill in the form, if the farmer asks for help.
 - The facilitator also invites the farmers to record some information on the management practices in relation to the IRM field. This information should be recorded on page 6 of the recording form, in the last table.
8. Evaluation: the facilitator asks what the farmers appreciated (or did not appreciate), what they learnt, and what they intend to do with their newly obtained knowledge. The facilitator specifically asks which new ideas this module has generated and how farmers intend to put these into practise on their IRM fields.
9. The facilitator asks volunteer farmers to conclude. He/she then invites only those farmers who have volunteered to conduct experiments to the next session, while inviting all the farmers to the session for Module 20.

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Time required

- Three hours



Materials required

- Strong packing paper, markers, recording forms.
- Four observation sites are identified by the facilitators:
 - Two fields with good management practices;
 - Two fields where management practices are not accurately implemented.

Box 18

The session at Lokakpli demonstrated that some farmers need time to understand the objective of making observations. Each observation field had been marked with a white signboard and the farmers made observations.

Each sub-group subsequently presented the results of their observations during the plenary sessions. Farmers had almost no problem identifying diseases or insects. Iron toxicity was mentioned several times. Many problems seemed to be linked to poor leveling. The farmers brought back samples of plants in poor health, such as plants attacked by African rice gall midge. They did not seem to have problems estimating the importance of damage in fields. The farmers often mentally divide a field into four parts and estimate the damage in each part. During this evaluation, one farmer said that spreading and incorporating rice straw before the start of the growing season gave good results. Another farmer said that he appreciated the recording forms as they helped him to keep record of the observations made.