# **Training of Trainers in Implementing Farmer Field School in Integrated Crop Management**



## Rationale

Improving farmer productivity and livelihoods and ensuring food security hinge on the availability of well functioning rural infrastructures such as irrigation systems, farm to market roads and credit as well as effective promotion and delivery of suitable crop varieties with high market potential and best crop management and post-production practices.

The Department of Agriculture (DOA), through the Extension Division (ED), has a wide reaching network of extension staff tasked to promote and deliver innovations and educate farmers. Thus it is imperative to provide them with the right skills and competencies to train and effectively work with farmers.

The International Rice Research Institute (IRRI) collaborates with the Ministry of Agriculture, Livestock and Irrigation (MOALI) to train the extension staff and farmers. The training adopts a two-stage approach of educating the extension staff and farmers in one training event. The first stage is the Training of Trainers (TOT) where the extension staff learn about rice science, integrated crop management and training facilitation. The second stage is a parallel season long Farmer Field School (FFS) in one village (community immersion) so that the trainers can immediately practice the learning from each session of the TOT. In summer season 2019, IRRI has completed one batch of TOT on Implementing Farmer Field School in Integrated Crop Management in Tatkon township, Nay Pyi Taw. In monsoon season 2019, another batch of training is implemented in Yin Mar Pin township, Sagaing region.

The TOT-FFS is implemented under the Agriculture Development Support Project (ADSP) which is a joint collaboration of IRRI, MOALI and the World Bank. The project aims to increase crop yields and cropping intensity through the improvement of selected irrigations schemes in Bago East, Nay Pyi Taw, Mandalay and Sagaing regions and development and extension of improved technologies and agronomic practices that will contribute to the economic and financial viability of farming system in the service areas of the irrigation schemes.

## **Objective of the TOT**

To develop a core group of trainers from the DOA-ED who will lead in implementing the season long FFS in ICM in the four irrigation schemes covered by the ADSP.

## **Objective of the FFS**

To enable farmers to grow a healthy rice crop by acquiring knowledge and better understanding of ecology and integrated crop management

## **Training Principles**

The principles that guide the TOT and FFS learning process are:

- The field is the learning domain
- Experience forms the basis of learning
- Decision making guides the process
- Training lasts the entire growing season

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#### Methodologies

The TOT and FFS adopt a participatory approach, discovery-based, and experiential learning process. The training modules and meetings correspond with the critical stages of crop growth as shown below.. Activities in each session include field monitoring and observation, group dynamics, participatory discussions on best management practices at each crop stage and special topics on concepts and principles of crop management.



## II. Content

The season long "TOT on FFS on ICM" covers all aspects of rice production from variety and seed selection, land preparation, crop establishment, water, pest and fertilizer management, harvest and post-harvest management. Farm planning, budgeting and farm record keeping is integrated to educate the trainers and farmers about the business of rice production.

The training course is divided into eight major modules, corresponding to a one day session for the TOT and half day session for the FFS. Each module focuses on the best management practices during the critical growth stages of rice.

**Module 1 (Week 1- Pre-planting and planting stage)** covers farm planning and budgeting, variety and seed selection, nursery management and land preparation. The importance of farmer education and farmer field school is also discussed in this module.

Module 2 (Week 2 - Seedling stage) covers crop establishment, fertilizer, insect pest, weeds and water management.

Module 3 (Week 3 - Tillering stage) covers fertilizer, insect pest, weeds and water management. Agro-ecosystem analysis as a field monitoring tool is discussed.

Module 4 (Week 4 - Panicle initiation stage) covers fertilizer, pest and water management at this crop stage.

Module 5 (Week 5- Booting to Flowering stage) covers water and pest management.

Module 6 (Week 6- Grain filling stage) covers pest and water management.

Module 7 (Week 7-Pre-harvest to harvesting stage) covers harvesting and threshing.

Module 8 (Week 8 – Mature stage) covers post harvest management such as drying and storage.

Hands on and field exercises and participatory technology demonstration are conducted during the sessions to enhance the participants' understanding of natural resource management and the right integration of crop management technologies for higher yet sustainable rice production. Group dynamics, social and cultural topics are also included to enhance interpersonal relationships among the participants, and to improve their facilitation, communication and organization skills.

