# Farmer Field School for Sustainable Agricultural Development: A Myanmar Experience

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### **Introduction and objectives**

For the vast majority of people in Myanmar, agriculture is a primary source of livelihood. However, low production, specifically in Kachin State in northern Myanmar, has caused farm communities to subsist below the poverty line. Consequently, farmers supplement their income by taking up casual work in privately owned logging companies, jade mines, or gold extracting plants. Apart from the appalling working conditions, the migratory nature of this kind of work increases the risk of contracting AIDS.

The Metta Development Foundation is engaged in facilitating an ecological approach to crop production aimed at strengthening skills in better crop management. The results of a pilot program implemented in 2000 show farmers to be highly receptive of the improved farming methods, and the potential for markedly increased production. Metta is working in partnership with local and church groups under the common platform of Farmer Field Schools, and the support and encouragement of the government. The primary objective of this paper is to share the Myanmar experience of how FFS is addressing the issue of food security for rural communities. Primary focus will be on agriculture as the catalyst for community development as well as an effective way of broader natural resource management.

## Methodologies

Situational baseline analysis and participatory planning: The program primarily starts by disseminating the objectives of FFS to the community. The community then identifies a potential group of 20-25 farmers to work intensively in an FFS. This group, in a participatory manner, analyzes the primary situation of the community and identifies the major problems that contribute to low production of rice and other crops. Based on a cause and effect analysis, the group sets up goals with measurable indicators, and defines appropriate activities to be adopted towards achieving these goals. Finally, an action plan is prepared with a given set of responsibilities for each participant of the program.

Establishing a strong process for learning: Three elements such as training, organizing and experimentation are introduced in a FFS to create an effective environment for learning. Training plays a crucial role in providing farmers with the ecological principles of crop management. Based on these principles they set up experimentation and generate knowledge on agro-ecology, soil fertility management, water management, pest management, and other related farming issues. Field specific appropriate technologies are also developed and decisions made to manage the crops more effectively and efficiently. A facilitator skilled in adult education facilitates the entire process and helps the farmers implement planned activities in a FFS framework during the planning period.

Integrated approach towards broader natural resource management: Given that rice is the major crop of the community, greater emphasis is given towards the improvement of rice production, while veg-

etable and fruit cultivation is promoted on a marginal scale to generate cash incomes for the family. Small-scale fish production is also introduced to strengthen the protein requirement at the household level. To protect soil erosion, permanent agriculture is promoted using technologies appropriate for sloping lands. The activities are carried out in an integrated fashion to maximize the use of natural resources. Organic farming is also promoted for a healthy environment.

Participatory monitoring and evaluation: To assess progress and identify successes as well as challenges, each FFS organizes monitoring and evaluation sessions. This activity is done on a regular basis at the end of each cropping season with farmers evaluating themselves using the sets of indicators agreed upon mutually at the planning stage. This self-criticism allows them to identify key factors for success and failure, which provides the basis for reviewing the previous plan and developing new action plans for the coming period. This continuous process of participatory monitoring and evaluation enhances the farmers' planning skills.

Field days and cross visits: While the FFS works with a limited number of farmers, its experimentation field however, serves as a demonstration center for the entire community. Community farmers regularly visit the FFS field and discuss their problems with the FFS farmers. This sharing process is strengthened by organizing regular field days and cross visits among farmers from different FFS communities at different suitable stages of crop growth. This provides an opportunity for FFS farmers to explain their learning and share new knowledge needed to improve crop management.

Action research: To strengthen the experimentation process and to develop appropriate technologies for improving rice, vegetables, fruits and sloping agriculture, the program has established an action research center engaged in researching a wide range of technologies. Appropriate technologies once identified, are demonstrated at the center, and then promoted and shared at the FFS sites, subject to choice and interest of the audience. In addition, the center produces quality seeds and seedlings of rice and other crops, and distributes to FFS farmers.

Internalizing the approach for greater sustainability and use of Farmer Trainer: The project usually supports an FFS for a two-year period, later to be taken over by the community. Intensive support is provided in the first year. During this time suitable farmer leaders are identified. In the following six months they are provided special skill-building training, specifically leadership development, FFS management and other technical issues to become farmer trainers and co-facilitators. They are then designated to take over as full-fledged facilitators.

#### **Results**

Since March 2000, the project has implemented 30 FFS in different parts of Kachin State. Plans are underway to implement a further 50 FFS in the coming year. Although it is too early to assess the success of the program, it is apparent from field visits and discussions with FFS farmers that significant progress is being made on different aspects of rice production. Field studies indicate major improvement in paddy field management skills, more evident in the selection and production of quality seeds and seedlings, uprooting seedlings from the seedbeds, transplanting methods of rice, water management practices, and compost and other manure preparation. The physical outlook of this year's rice fields promises an impressive, better yield than in previous years.

#### **REFERENCES:**

Project documents, Field visits, Trip reports