



An Indonesian training coordinator demonstrating techniques for catching insects during a lesson on IPM in Gambia. Photo: FAO/A. Proto

# Fundamental Elements of a Farmer Field School

Kevin Gallagher

In general, Farmer Field Schools (FFS) consist of groups of people with a common interest, who get together on a regular basis to study the “*how and why*” of a particular topic. The topics covered can vary considerably - from IPM, organic agriculture, animal husbandry, and soil husbandry, to income-generating activities such as handicrafts. FFS are comparable to programmes such as Study Circles, religious studies at a church, mosque or temple, or specialised study programmes for any skill. The FFS, however, are particularly adapted to field study, where specific hands-on management skills and conceptual understanding is required.

So what are the essential elements of a FFS? Below is a list of elements that commonly appear in successful FFS programmes:

## The group

A group of people with a common interest form the core of the FFS. The group may be mixed with men and women together, or separated, depending on culture and topic. The group could be an established one, such as a self-help, women’s, or youth group. Participatory technology groups, for example, sometimes undertake a season of study in FFSs before starting their research. The FFS tends to strengthen existing groups or may lead to the formation of new groups. Some FFS groups do not continue after the study period. The FFS is not developed with the intention of creating a long-term organisation - although it often becomes one.

## The field

FFSs are about practical, hands-on topics. Study Circles and other study methods do not take place in the field, as they are about more theoretical topics. In the FFS, the field is the teacher, and it provides most of the training materials like plants, pests and real problems. Any new “language” learned in the course of study can be applied directly to real objects, and local names can be used and agreed on. Farmers are usually much more

comfortable in field situations than in classrooms. In most cases, communities can provide a study site with a shaded area for follow-up discussions.

## The facilitator

Each FFS needs a technically competent facilitator to lead members through the hands-on exercises. There is no lecturing involved, so the facilitator can be an extension officer or a Farmer Field School graduate. Extension officers with different organisational backgrounds, for example government, NGOs and private companies, have all been involved in FFS. In most programmes, a key objective is to move towards farmer facilitators, because they are often better facilitators than outside extension staff - they know the community and its members, speak a similar language, are recognised by members as colleagues, and know the area well. From a financial perspective, farmer facilitators require less transport and other financial support than formal extensionists. They can also operate more independently (and therefore cheaply), outside formal hierarchical structures.

All facilitators need training. Extension facilitators need season-long training to (re)learn facilitation skills, learn to grow crops with their own hands, and develop management skills such as fund-raising and development of local programmes. Computer literacy is often included in the training of facilitators, especially for preparing local training materials, budgets and project proposals. Email is also becoming more widely available. Once the facilitators have completed their training and are leading the FFS process, it is easy to identify capable farmers who are interested in becoming facilitators. Farmer Field School graduates are usually given special farmer facilitator training (10-14 days) to improve technical, facilitation and organisational skills.

## A typical FFS session in the original Indonesian setting

- 8:00 Opening (often with prayer)  
Attendance call  
Day’s briefing of activities  
Stretching exercises
- 8:30 Go to the field in small teams  
Make observations that are noted by the facilitator and one other person in the group records. Facilitator points out interesting new developments
- 9:30 Return to shade. Begin making agro-ecosystem analysis (see box) drawing and discuss management decisions.
- 10:15 Each team presents results and the group arrives at a consensus on management needs for the coming week.
- 11:00 Short tea/coffee/water break
- 11:15 Energiser or group building exercise
- 11:30 Special study topic or second crop/livestock study. This could include nutrition, or chicken or parasites, or something else of special interest to group.
- 12:30 Closing (often with prayer).

## The curriculum

The FFS curriculum follows the natural cycle of its subject, be it crop, animal, soil, or handicrafts. For example, the cycle may be “seed to seed” or “egg to egg”. This approach allows all aspects of the subject to be covered, in parallel with what is happening in the FFS member’s field. For example, rice transplanting in the FFS takes place at the same time as farmers are transplanting their own crops - the lessons learned can be applied directly. One key factor in the success of the FFSs has been that there are

no lectures – all activities are based on experiential (learning-by-doing), participatory, hands-on work. This builds on adult learning theory and practice. Each activity has a procedure for action, observation, analysis and decision making. The emphasis is not only on “how” but also on “why”. Experience has shown that structured, hands-on activities provide a sound basis for continued innovation and local adaptation, after the FFS itself has been completed. It is also one of the main reasons that farmer facilitators can easily run FFSs - once they know how to facilitate an activity, the outcomes become obvious from the exercise itself.

Activities are sometimes season-long experiments - especially those related to soils or plant physiology (for example soil or variety trials, plant compensation trials). Other activities in the curriculum include 30-120 minutes for specific topics. Icebreakers, energisers, and team/organisation building exercises are also included in each session. The curriculum of many FFSs is combined with other topics. In Kenya, for example, the FFSs follow a one-year cycle including cash crops, food crops, chickens or goats and special topics on nutrition, HIV/AIDS, water sanitation and marketing. FFSs for literacy are also promoted where there is a need.

### The programme leader

Most FFS programmes exist within a larger programme, run by government or a civil society organisation. It is essential to have a good programme leader who can support the training of facilitators, get materials organised for the field, solve problems in participatory ways and nurture field staff facilitators. This person needs to keep a close watch on the FFSs for potential technical or human relations problems. They are also the person likely to be responsible for monitoring and evaluation. The programme leader must be a good leader and an empowering person. He or she is the key to successful programme development and needs support and training to develop the necessary skills.

### Financing

FFSs can be expensive or low-cost, depending on who implements them and how they are conducted. When carried out within a World Bank-type programme, they are usually expensive, due to high allowances, transportation costs and several layers of supervision (about US\$30-50 per farmer). Obviously, the greater the distance that facilitators need to travel to get to the field, the higher the cost of transport. Transport is one of the biggest costs in any extension programme. When the FFS is carried out by local organisations and farmer facilitators, initial start-up costs may be moderate, but the running costs will be much lower (about US\$1-20 per farmer). A trend in East Africa is to manage small commercial plots alongside the FFS study plots, so that the FFS can actually raise more funds than it uses for inputs and stationary (Okoth p. 27).

### Final word

Farmer Field Schools are not difficult or mysterious. However, they are meant to empower through education on skills and concepts (how's and why's) and therefore, require an empowering environment. The basis for a successful FFS starts with the programme's culture of operation - from a nurturing and empowering programme leader and good facilitators, to transparent budgets and open management. FFSs are not difficult to set up if there is a commitment to, and faith in farmers' and facilitators' ability to learn locally and apply learning to local problems themselves.

**Kevin Gallagher.** Food and Agriculture Organization of the United Nations (FAO). Viale delle Terme di Caracalla, 00100 Rome, Italy. Email: Kevin.Gallagher@fao.org.

For more information on Study Circles and “4-H” groups, please see the following websites: [www.studycircles.org](http://www.studycircles.org) and [www.fourhcouncil.edu](http://www.fourhcouncil.edu).

### AESA in a typical FFS for rice

The basic format of an IPM Farmer Field School consists of three activities: agro-ecosystem observation, analysis, and presentation of results; a “special topic”; and a “group dynamics” activity. The Agro-Ecosystem Analysis (AESA) is the FFS's core activity, and other activities are designed to support it.

The agro-ecosystem analysis process sharpens farmers skills in the areas of observation and decision-making, and helps develop their powers of critical thinking. The process begins with small group observation of the IPM and non-IPM plots. During the observation process participants collect field data such as the number of tillers per hill, the varieties of insects and their populations and samples of insects and plants. These data are collected from ten rice hills. The facilitator is present throughout the observation to help participants in their observations.

Following the field observation, the farmers return to the meeting place and, using crayons, draw what they have just observed in the fields on a large piece of newsprint or poster paper. The drawings include:

- a) pests and natural enemies observed in the fields (pests on one side, natural enemies on the other);
- b) the plant (or animal) indicating the size and stage of growth, along with other important growth features such as the number of stems/tillers, the colour of the plant and any visible damage;
- c) important features of the environment (the water level in the field, sunlight, shade trees, weeds, and inputs).

All members of the small groups are involved in the creation of the drawing and data analysis. While drawing, farmers discuss and analyse the data they have collected. Based on their analysis they determine a set of management decisions to be carried out in the field. A summary of these management decisions as agreed by the group is also included in the drawing.

One member of each small group then presents these findings and decisions to the larger group. After this brief presentation of results there is time for open questions and discussion. Good large group discussions often involve posing alternative scenarios, for example, questions such as “What would you do if...” This cycle of presentation, question, answer and discussion is repeated until all the small groups have presented their results. Agro-ecosystem drawings from previous weeks are kept on hand as a reference and as material for discussion later in the season.

The role of the facilitator is central to the AESA process. In the field, they will guide participants to see what they may not have seen before, such as tiny predators or changes in soil. To ensure a balanced and participatory discussion, a good facilitator understands that the more participants talk, the more they learn, and encourages discussion rather than lecturing. During presentations, the facilitator ensures that all participants have an opportunity to present during the season, and that the group covers all the important issues. The facilitator needs farming and technical skills and needs to know how to ask good questions, guide participants through exercises and ensure that sound management decisions are taken by the group by introducing new information when appropriate.