Food and Agriculture Organization of the United Nations

FAO GOVERNMENT COOPERATIVE PROGRAMME
Project: Assistance to the Development of Capacity and Support Services for Organic Agriculture in Serbia. GCP/SRB/001/HUN

# FARMER FIELD AND FARM BUSINESS SCHOOLS

*Manual for Preparation and Establishment of Farmer Field and Farm Business Schools*

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FAO Regional Office for Europe and Central Asia
Coordination Office in Serbia
Belgrade, 2014

# Contents

# Foreword

The publication “Manual for Preparation and Establishment of Farmer Field and Farm Business Schools” is intended to be used by the stakeholders in organic sector in Serbia. It has been developed within the framework of the UN FAO Project GCP/SRB/001/HUN: “Assistance to the Development of Capacity and Support Services for Organic Agriculture in Serbia“, implemented by FAO and financed by Hungarian Ministry of Agriculture. The project is implemented in coordination with the Ministries of Agriculture and the Ministry of Education of Serbia.

The project aims to improve capacity of farmers and other value chain stakeholders in organic market oriented value chains through participatory training in farmer field schools and farmer business schools. That is further supported by strengthening of Center for Organic Production in Selenca which has been empowered to provide training and facilitation of market linkages and business development. Project visibility and awareness about organic agriculture was enhanced by numerous activities and publicity work of National Association for Organic Agriculture Serbia Organica.

Broader base of competences for organic agriculture has been supported by upgrading secondary education curricula for organic agriculture and inclusive practical training of teachers and high school students. Overall institutional environment for inclusive organic value chain development will be strengthened by participatory formulation of National programme for capacity development and provision of support services for region-specific organic production development.

The materials produced within the framework of the project have been tested and validated during the workshop and training sessions.

“Manual for Preparation and Establishment of Farmer Field and Farm Business Schools” was prepared by Zhupan Martinovski.

We gratefully acknowledge contributions of all participants and principal authors, as well as all project team members: Aleksandar Mentov, National Project Manager; Olga Keselj and Bratislav Stamenkovic, National Consultants; Zhupan Martinovski and Vladislav Popov, International Consultants; Gyongy Kurthy, International Team Leader; as well as Nevena Aleksandrova and Stjepan Tanic from FAO Regional Office for Europe and Central Asia for their technical guidance and supervision of project implementation.

# 1. Understanding Farm Field School


Farmer Field Schools (FFS) are based on an innovative, participatory and interactive learning approach. It emerged as a way for small-scale farmers to investigate and learn how to acquire required skills for quality production technologies and marketing techniques. Although the programme and activities for each FFS are different, the common aim is towards the sustainability of the group and the implementation and dissemination of the lessons learned. The lessons learned will help the farmers to become better decision makers, and to better react to market requirements

This FFS manual has the purpose to help the farmers engaged in organic production and who are ready to cooperate in development of Farmer Field School through provision of information and promotion of Farmer Fields School methodology, establishment and functioning.

This Manual is a support tool for creating awareness of the FFS methodology and for developing a training programme to Business Development Service partners and selected extensionists within the project (through a Core Team of Trainers), who can then train farm leaders in the FFS methodology.

This manual describes the FFS methodology, introduces the guiding principles, and suggests how to organize the overall programme and farmer groups.

The FAO staff, BDS providers (Centres for Organic Production) and Leader Farmers, in coordination, shall contribute for the creation on additional training materials towards achieving sustainable production groups market oriented. These guidelines shall provide the new FFS facilitators (Lead Farmers) with a course of action and specific examples to assist them in creating activities to enhance participation, promote experimental approaches and facilitate learning of organic farming topics.

The topics could be adapted to the specific needs of each FFS, relying on existing knowledge, as well on available local and international experience.

The manuals and guidelines will facilitate the BDS providers and Lead Farmers in their activities in support of the Farm Field Schools established during and beyond the project duration.

# 2. Historical Background

The FFS approach was developed by a FAO project in 1989 in South East Asia as a way for small-scale rice farmers to investigate, and learn, for themselves the skills required for, and benefits to be obtained from, adopting on practices in their paddy fields. The Government of Indonesia's response was to launch an emergency training project aimed at providing 120,000 farmers with field training in Integrated Pest Management (IPM), focused mainly on recording on reducing the application of the pesticides that were destroying the natural insect predators of the brown plant hopper.

It was based not on instructing farmers what to do but on empowering them through education to handle their own on-farm decisions, using experiential learning techniques developed for non-formal adult education purposes.

The FFS approach is replicated in variety setting in various FAO projects, but as well in cooperation between FAO/UNDP (Soil Fertility Management), IFAD/FAO poultry production, FAO/ILRI dairy production, etc. From agriculture the same approach is spread to

natural resource management (soil fertility, water conservation, etc.) and to Socio-cultural dimensions of community life (food security & nutrition, savings, health, literacy training, livelihoods, etc.). The FFS approach was already applied in Vojvodina within the framework of FAO project on combating Western Corn Rootworm.


# 3. The FFS as alternative source for providing extension services

The traditional way of transferring technologies to farmers by extension service providers has proved inadequate in complex situations when faster and bigger changes, during the growing and vegetation period, are required. In many cases, this approach of giving services "top-down" was complex and expensive for small farmers.

Furthermore, farmers in transition and developing countries are characterized by a lack of proper involvement in identifying problems, evaluating and implementing possible solutions.

There is also a trend of traditional extension service providers to become less financed by the governments and more commercial in regards to the services offered. This situation raises the need for alternative methods to help farmers in facing/adopting of new production technologies and to be capable to solve eventual problems in their production.


The FFS is an alternative approach that focus on strengthening farmer's and the rural communities' capacity in analysis of their production and in identifying their main constraints, as well as testing possible solutions by themselves. By adding their own knowledge to existing information, farmers eventually identify and adopt the most suitable practices and technologies to their farming system. In this view, they are in position to become more productive, profitable and responsive to changing conditions.

FFS is a capacity building method based on adult education principles using groups of farmers. The farmers learn through observation and experimentation in their own fields, allowing them to improve management skills and become knowledge experts on their own farms. Through using experiential and participatory learning techniques, the process of learning could solve the problem of lack of proper advice given by extension workers. Farmers are encouraged to handle their own on farm decisions in which they apply previous experiences and test new technologies. FFS is also known as "School without walls" for improving decision making capacity of farming communities and stimulating local innovation for sustainable agriculture. They make a choice in the production methods through discovery based approach.


A FFS is a dynamic process, not a goal. It aims to increase the capacity of farmers to test new technologies in their own fields and assess results and their relevance to particular circumstances. Farmers interact with researchers and extension workers on a demand driven basis, only asking for help where they are unable to solve a problem themselves. This dynamic process is practiced, controlled and owned by the farmers helping them to transform their

observations and to create a better understanding of their production system. FFS enables a group of farmers to test alternative solutions and take the risk of experimenting new technologies.

In summary, FFS is a forum where farmers and trainers debate observations, apply their previous experiences and present new information from outside the community. The results of the meetings are management decisions on what action to take. Thus FFS as an extension methodology is a dynamic process that is practiced and controlled by the farmers to transform their observations to create a more scientific understanding of the crop / livestock agro-ecosystem.

# 4. Characteristics of the Farmer Field School approach

### 4.1 Farmers as Experts

Farmers carry out for themselves the various activities related to the particular farming practice during which practice they want to study and learn about. This could be related to annual crops, or livestock/fodder production. The key thing is that farmers conduct their own field studies. Their training is based on comparison studies (of different treatments) and field studies that they, not the extension/research staff conduct. In so doing they become experts on the particular practice they are investigating.

### 4.2 The Field is the Learning Place

All learning is based in the field. The maize field, grape pools, or grazing area is where farmers learn. Working in small subgroups they collect data in the field, analyse the data, make action decisions based on they analyses of the data, and present their decisions to the other farmers in the field school for discussion, questioning and refinement.

### 4.3 Extension Workers as Facilitators Not Teachers

The role of the extension worker is very much that of a facilitator rather than a conventional teacher. Once the farmers know what it is they have to do, and what it is that they can observe in the field, the extension worker takes a back seat role, only offering help and guidance when asked to do so.

Presentations during group meetings are the work of the farmers not the extension worker, with the members of each working group assuming responsibility for presenting their findings in turn to their fellow farmers. The extension worker may take part in the subsequent discussion sessions but as a contributor, rather than leaders, in arriving at an agreed consensus on what action needs to be taken at that time.

### 4.4 Scientists/Subject Matter Specialists Work With Rather than Lecture Farmers

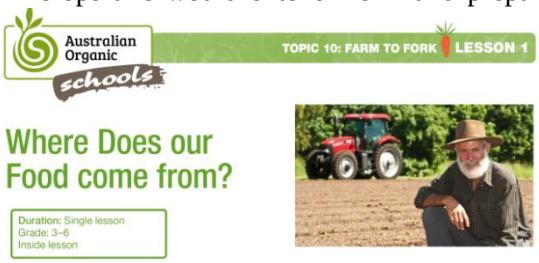
The role of scientists and subject matter specialists is to provide backstopping support to the members of the FFS and in so doing to learn to work in a consultative capacity with farmers. Instead of lecturing farmers their role is that of colleagues and advisers who can be consulted for advice on solving specific problems, and who can serve as a source of new ideas and/or information on locally unknown technologies.

### 4.5 The Curriculum is integrated

The curriculum is integrated. Crop husbandry, animal husbandry, horticulture, land husbandry are considered together with ecology, economics, sociology and education to form a holistic approach. Problems confronted in the field are the integrating principle.

### 4.6 Training Follows the Seasonal Cycle

Training is related to the seasonal cycle of the practice being investigated. For annual crops this would extend from land preparation to harvesting. For fodder production would include the dry season to evaluate the quantity and quality at a time of year when livestock feeds are commonly in short supply. For tree production, and conservation measures such as hedgerows and grass strips, training would need to continue over several years for farmers to see for themselves the full range of costs and benefits.




### 4.7 Regular Group Meetings

Farmers meet at agreed regular intervals. For annual crops such meetings may be every 1 or 2 weeks during the cropping season. For other farm/forestry management practices the time between each meeting would depend on what specific activities need to be done, or be related to critical periods of the year when there are key issues to observe and discuss in the field.

### 4.8 Learning Materials are Learner Generated

Farmers generate their own learning materials, from drawings of what they observe, to the field trials themselves. These materials are always consistent with local conditions, are less expensive to develop, are controlled by the learners and can thus be discussed by the learners with others. Learners know the meaning of the materials because they have created the materials.

Even illiterate farmers can prepare and fuse simple diagrams to illustrate the points they want to make.

### 4.9 Group Dynamics/Team Building

Training includes communication skills building, problem solving, leadership and discussion methods. Farmers require these skills. Successful activities at the community level require that farmers can apply effective leadership skills and have the ability to communicate their findings to others.

Farmer Field Schools are conducted for the purpose of creating a learning environment in which farmers can master and apply specific land management skills. The emphasis is on empowering farmers to implement their own decisions in their own fields.

# 5. Objectives of the FFS

***"FFS is not about technology but about people development and initiating group actions. It brings farmers together for them to assess their problems and seek ways of addressing them."***

Specific FFS objectives include:

- empowering farmers with knowledge and skills to make them experts in their own fields;
- sharpening the farmers' ability to make critical and informed decisions so that they can make their farming profitable and sustainable;
- sensitising farmers to new ways of thinking and problem solving;
- helping farmers learn how to organize themselves and their communities;
- enhancing the relationships between farmers, extensionists and researchers, so they work together to test, assess and adapt a variety of options within the specific local conditions;


# 6. FFS Principles

The four major principles within the FFS process are:

a) Grow a healthy enterprise;
b) Observe fields/cattle regularly;
c) Conserve natural enemies of crop pests;
d) Farmers understand ecology and become experts in their own field;


***Every FFS is guided by the following principles:***

## 6.1 LEARNING BY DOING

Adults do not change their behaviour and practices just because someone tells them what to do. They learn better through experience than from passive listening at lectures or demonstrations. Discovery-based learning enables the farmers:

to develop a feeling of ownership, and

- to gain the confidence that they are able to reproduce the activities and results on their own farm.

## 6.2 FARMER-LED LEARNING ACTIVITIES

Farmers together with the Lead Farmer, not the BDS provider, decide:

- what is relevant to them and what they want the FFS to address;
- if the information is relevant and tailored to their actual needs;
- the facilitator simply guides the farmers through their learning process by creating participatory exercises to provide farmers with new experiences.

## 6.3 LEARNING FROM MISTAKES

Every change in the production and marketing techniques, as well in behaviour of the FFS members, requires time and patience. Learning is an evolutionary process characterized by free and open communication, confrontation, acceptance, respect and the right to make

mistakes. The right to make mistakes is the key as people more often learned from mistakes than from successes. Each person's experience of reality is unique.

## 6.4 LEARN HOW TO LEARN

Farmers are learning the necessary skills:

- to improve their ability to observe and analyse their own problems;
- to make conscious decisions;
- learn how they can educate and develop themselves further;

**Why not teaching, but learning**

- Adults learn by hands on experience, things related to day to day life
- Adults should be encouraged to discover for themselves
- Retention rate in adults is as below
  - 20% when they hear
  - 40% when they see
  - 80% when they discover
- Child education is like filling an empty cup with tea while adult education is like stirring to blend the ingredients
- Experience has it that
  - When you hear you forget

## 6.5 PROBLEM-POSING/PROBLEM-SOLVING

Problems are presented as challenges, not constraints. Farmer groups learn different analytical methods to help them gain the ability to identify and solve any problem they may encounter in the field.

## 6.6 THE FARMER'S FIELD IS THE LEARNING GROUND

The field (crop production system) is the main learning tool. All activities are organized around it. Farmers learn directly from what they observe, collect and experience in their fields instead of text books, pictures or other extension materials.

Farmers also produce their own learning materials (drawings, etc.) based on what they observe. The advantages of these home-made materials are:

- they are consistent with local conditions;
- inexpensive to develop;
  owned by the farmers.

## 6.7 LEAD FARMERS ARE FACILITATORS, NOT TEACHERS

The project will train the selected Lead Farmers to take the role of facilitators at FFS. Their role is to guide the learning process and not to teach. The facilitator contributes to the discussions and aims to reach consensus on what actions need to be taken.

Extension specialists and Researchers are invited to provide technical and methodological backstopping support to an FFS and also learn to work in a participatory and consultative way with farmers.

## 6.8 UNITY IS STRENGTH

Empowerment through collective action is essential. Farmers united in a group have more power than individuals. Also, when recognized as an active member within a group, the social role of individuals within a community is enhanced.

The combination of two or more minds is often more successful than one mind on its own.

The FFS expresses this as 1 + 1 = 3, i.e. one mind + one mind creates a new, third mind.

### 6.9 EVERY FFS IS UNIQUE

Learning topics within the FFS should be chosen by the community. Training activities must be based on existing gaps in the community's knowledge and skills and should also take into consideration its level of understanding.

Every group is different and has its own needs and realities. As participants develop their own content, each FFS develop itself in unique organization.

### 6.10 SYSTEMATIC TRAINING PROCESS

All FFS follow the same systematic training process. The key steps are:

- observation;
- group discussion;
- analysis;
- decision making, and
- action planning.


The FFS experience has shown that the best results are achieved with weekly meetings. Longer gaps can slow down the learning process. The length of the FFS cycle depends on the focal activity. Crop based FFS usually base their length on the cycle of production: from production planning, land preparation to harvesting and post-harvest activities.

FFS increasingly include marketing and processing activities which may lengthen the FFS learning cycle.

# 7. Farmer Field School core activities

There are five core activities that are repeated in each session to provide the framework for each FFS:

1. Agro-ecosystem analysis (AESA)
2. Field comparative experiments (PTD)
3. Facilitation of special topics – Topic of the day
4. Participatory monitoring and evaluation (PM&E)
5. Group dynamic exercises

### 7.1 Agro-Ecosystem Analysis (AESA)

AESA as a group management decision is the cornerstone of the FFS approach and is based on the ecosystem concept, in which each element in the field has its own, unique role. It is established by observation of the interaction between a crop/livestock and other biotic and abiotic factors co-existing in the field. It involves:

i. Through regular **field observation** of a crop system, AESA exercises help establish the interaction between crops as well as other living and non-living factors.
ii. **Data collection** of key factors observed is helping the process of decision making to be put in right way.
iii. **The analysis** is performed in sub-groups of four to five members in order to enhance participatory learning.
iv. Each sub-group presents **their observations and recommendations** in plenary sessions for collective decision making on management actions.

AESA exercises improve decision-making skills by:

- enhancing observational skills;
- developing record keeping skills by drawing simple forms;
- generating discussions and sharing of farmer-to-farmer experience;
- developing presentation skills to promote communal decisions;

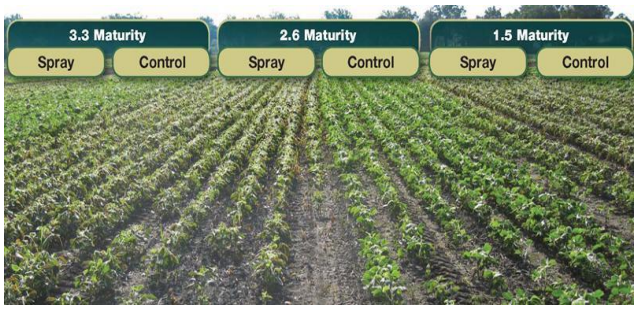
**Why AESA is applicable at the FFS?**

**Because**

- Improving decision-making skills of the farmers, through a field situation analysis by observing, drawing and discussing;
- Improving decision-making skills of the farmers by presenting small group decisions for critique in the large group;

## 7.2 Field Comparative Experiments

**What is Field Comparative experiments i.e. PTD?**




Field comparative experimentation, also known as participatory technology development (PTD), is a process of collective and collaborative inquiry (collective investigation process) with the purpose of initiating community action on solving local problems. At the FFS with PTD, the farmers will be empowered with analytical skills in order to become experts and to design simple and practical experiments to test and select the best solution to their problems through:

- Investigating into cause - effect relationship of problems in farming practices;
- Their stimulation to design a set of actions;
- Learning from other farmers response at each stage of intervention;
- Drawing lessons for future field school programs implementation strategies.

In addition, the participants develop analytical skills and attitudes in working within participatory framework in planning, organizing and evaluating development activities.

PTD enables all relevant stakeholders to do researches (not only researchers). Researching can be seen:

- primarily, as a learning strategy for empowering participants, and
- secondarily, for producing research results in conventional sense.

Simple experiments are carried out:

- to enhance farmers' observational and analytical skills;
- to investigate the cause and effect of major production problems.

Experiments also encourage the validation and adoption of new technologies or practices. In this case, the experiments compare farmer practices with a set of available solutions presented either by the facilitator, researchers or other farmers. By analysing the results and developing recording skills, farmers are able to decide which solution (technology or practice) is best suited to their situation.

Each experiment should include a cost–benefit analysis using the data recorded during AESA exercises, as farmers often do not know whether they operate at a profit or loss. Farmers can better understand the difference between production and productivity, if the costs per unit produced are calculated. In this way the farmers will be able to determine the efficiency of

their own production.

Besides recording and analysing the financial costs and benefits of the options tested in the experiment, other indicators to validate the results of the experiment should be identified by FFS participants (e.g. labour needs, length and speed of growth, accessibility). Precise record keeping of indicators is required to monitor and evaluate the performance of a treatment or technology.

## 7.3 Facilitation of special topics – Topic of the day


Though adults learn best through a „learning by doing" approach, where new knowledge is acquired from experience, basic technical information is usually needed before any activity can be implemented.

Certain activities are also too risky to apply without proper expertise or information. The special topic or „topic of the day" is used to introduce technical information. The objectives of special topics are to:

- provide an opportunity for the facilitator, researcher or specialist to give theoretical inputs needed for a general understanding of the subject before any activities can be carried out;
- enhance the farmers' technical knowledge and present the farmers with information they need at the time they need it;
- ensure a demand-driven learning process;
- level knowledge among the participants;

Thirty minutes to 1.5 hours of each FFS session should be reserved to discuss a specific topic relevant to Farmers' needs.

If the facilitator lacks the specific expertise, it can be invited external scientists, specialists or other farmers to lead the discussion. The role of the facilitator is to target a specific topic at the most relevant time for FFS participants.

It can be used two participatory approaches to facilitate the "special topics":

i. Focus group discussions where sub-groups of FFS participants are asked to answer questions followed by a plenary discussion;

ii. Participatory learning exercises (which can include simple demonstrations) to introduce technical topics and lead the group in discussing their experiences

## 7.4 Participatory monitoring and evaluation (PM&E)

The PM&E plan is an extension of the participatory plan developed in the initial FFS stages. To implement the FFS approach, both the participants and facilitator need to be able to continuously assess whether they are making any positive changes and actually achieving the goals they set.

Monitoring and evaluation (M&E) methods have been developed to help FFS participants (facilitators and participants, as well BDS providers) in actively observation and analysis of situations and performances. The M&E methods should help them understand what they are observing. Given the participatory nature of FFS, M&E should also embrace the established participatory principles.

This Field Guide provides PM&E guidelines to:

- monitor and evaluate the FFS performance and assess whether it is achieving its specific objectives;

- monitor and evaluate specific FFS sessions for self-evaluation purposes;
- monitor and evaluate a field comparative experiment;

## 7.5 Group Dynamic Exercises

FFS and FBS are organized participatory groups of farmers. These groups as every group tend to be powerful rather than weak, to be active rather than passive, to be fluid rather than static, and to catalyse rather than reify. The term group dynamics is used for the ways (processes) groups and individuals act and react to changing circumstances.

In this view having in mind that FFS/FBS are tool for participatory education of the adult farmers, the group dynamic exercises are used to create a pleasant learning environment, facilitate learning and create space to reflect and share. They also enhance capacity building in communication skills, problem solving and leadership skills.

# 8. Understanding Farm Business School

Today there is a need for shift of the traditional focus on improving productivity towards ***farming as a business proposition.*** It is required building farmers' capacity as entrepreneurs and managers, in order to be enabled this shift. The question is how to be built the capacity of the farmers today? It can be realized through:

- Obtaining new knowledge for the market, knowing its rules, as well the ways of cooperation existing on the close or far potential market, etc.;
- The farmer must change his attitudes like working as small size producer and production for own consumption, way of planning his production, playing small role at the market, practicing of new production and post-harvest operations, looking himself as part of whole food supply chain with relevant contribution, etc.;
- Enhancing his skills and tools to commercialize his farming practices like organized procurement of inputs, building better negotiation position at providing financial resources and marketing of his products, building strong links with other chain players like providers and buyers, techniques of market follow-up and analytical skills for adequate market behaviour, proper grading, storing or transport, etc. The specific skills will be developed like observation skills, social and behavioural skills, communication skills, analytical skills and decision-making skills;

As these farmers are adult and have specific attitude for obtaining new knowledge and skills, it is proposed they to build their capacity through establishment Farm Business Schools.

## 8.1 What is FBS

Today there is a need for shift from the traditional focus on improving productivity towards farming as a business. It is therefore, required to build farmer's entrepreneurship and managerial capacity to be enabled this shift.

The question is how to build farmer's capacity today? It can be done through several ways. For example:

- By obtaining new knowledge from the market, knowing its rules, as well as enhancing existing connections or establishing new linkages with new potential market;

- The farmer must change his attitudes as a small size producer and/or subsistence farmer, planning his production and playing a small role in the market. The farmers needs to adopt new production and post-harvest techniques and place himself as part of the whole food supply chain as a relevant player;
- By enhancing his skills and tools in order to commercialize his production (e.g. organized procurement of inputs, improved grading, storage and transport, building better negotiation skills to deal with providers of financial resources, input suppliers, buyers, acquire techniques and analytical skills of market follow-up, etc.). Other specific skills such as observation, social and behavioural, communication, and decision-making skills are also required.

Farmers are adult persons and have a specific attitude towards learning. The FBS could be the best to build their capacity.

## 8.2 Why FBS

In the past, extension organizations were concerned with the process of disseminating technical information about farmers' production. This process allowed the farmers to increase their yields. This was considered to be the end goal for good extension service.

However, today the demands on extensions services are much greater. There is a need not for providing just technical information but also economic and market information. Farm business management tools can help farmers to have produces which will be possible to be sold at the market and which will bring them profit. It should be cleared that farm business management tools and techniques must be used by the farmers because they answer to following questions:

- What produce is profitable?
- What farmers can market?
- Who will want to purchase it?
- What payment they are likely to receive?

The financial and marketing-related issues are critically important for improving the incomes of small farmers.

The FBS is realized through the concept of farmer to farmer learning, as participants are adult farmers which show better results in learning by doing.

## 8.3 Aim of FBS

***The FBSs' aim is to make farming an economic enterprise responding to make market demands***.

The model can be used in all agriculture sectors like vegetable and fruit growing, livestock keeping, beekeeping and etc. In principle, the number of FBS participants is smaller than the one of FFS. The concentration of participants is mainly on the most advanced and dynamic farmers in order to be ensured in the long run multiplier effects. The FBS includes development of marketing strategies and resource management. FBS can also facilitate improved access to loans and encourage the beneficiaries to apply jointly to MFIs in order to overcome collateral requirements.

The final decision of the activities will be based on the identification by the participant of FBS.

Principles of functioning of FBS are:

- Farmers work in small groups;
- FBS are established at their place of living and production;
- The FBS sessions are carrying out at an agreed time and duration;
- The learning adheres to the Participatory Mutual Training and Learning Approach (PMTLA)

The farm management and marketing methods taught in an FBS are not greatly different from traditional ones. The major difference is that the FBS approach is based on continuous learning through experience, which means farmers learn as they do things on their farm known as "action learning". The differences can be grouped as:

- Continuous learning through experience "action learning";
- The management is combined with the technical aspects of production and marketing;
- The farmers make decisions based on their observations and analyses;
- The farmers pass the acquired knowledge and skills to other farmers;
- They become facilitators and trainers for other groups;

FBS is based development approach to extension and has two components:

- Development of appropriate training materials for facilitators and farmers;
- Organizational component where extension workers and lead farmers organize farmers into small groups to build collectively their capacity to produce for the market and to respond to market demands.

FBS facilitators would be supported by back-up teams, who will coach and mentor the work of FBS, Lead farmers and FBS participants.

## Participatory Mutual Training and Learning Approach (PMTLA)

The learning approach builds the capacity of the participants and gives them new tools and ideas in their activities. The principles on which this approach is relying on are:

a. *Experience*, based on what they know through: reflection on the topic, sharing experience, knowledge and understanding on the subject;
b. *Generating New Knowledge*, based on the experience shared. This generates new insights and new knowledge helping the participants to understand the subject and situation better;
c. *Innovation and Creativity*, the participants to be motivated and to be initiated these attitudes. FBS should support the old ideas to be improved or to be created completely new ones through joint decision-making and action;

The approach has six important purposes, namely:

- to heighten awareness and knowledge of the participants on the required subject;
- sharpen inter-personal and communication skills of the participants;
- stimulate thinking and generates new and functional knowledge;
- influence change in attitude and behaviour of participants for positive action,
- better performance and increased productivity;
- strengthen team building, group co-operation and collaboration among colleagues and stakeholders;

# 9. Business School programme implementation process

During preparation and establishment of FBS, the following stages are proposed:

1. ***Establishment of a core team of trainers (CTT).*** The first step and is identical like the step with FFS (page 23)
2. ***Brainstorming session among CTT*** and planning of next steps of activities.
3. ***Selection and training of farmer facilitators***.

Though FBS facilitators could be extensionists, NGOs staff or private sector representatives, the most recommendable is they to be the **Lead farmers** in the community/municipality.

**Planning questions for FBS training of facilitators:**

- Which training needs should be addressed first?
- Which can be addressed later in the season/year?
- How many trainings and how long will it last?
- Is it needed refresher courses and if yes, when?
- How many people should be trained?
- What equipment and materials are needed?
- The type of training depends from the budget and available time for attendance?

It is good precondition if the selected facilitators are good communicators and with previous experience in farm business management. It is also recommendable during the selection of the facilitators to be taken in mind that the local people could be the best FBS facilitators because they:

- are part of the community;
- are familiar with the nature and extent of community problems;
- are generally trusted, and more willing to help;
- live within the community, so can lend a hand at any time;
- know the local traditions;
- are cost-effective in terms of lower transport and other costs;

After identification of the facilitators it should be organized direct meeting with all of them in order to become familiar with:

- The idea for FBS;
- FBS aims and objectives;
- What is expected from the facilitators;
- To motivate the facilitators to contribute their imagination, time and effort;
- To establish team spirit;

Lead Farmers as Facilitators need different skills from those required in conventional teaching as FBS is not a conventional school. Learning by doing is the base, rather than on conventional instruction-based learning. They should contribute to the meeting and ask questions. A good FBS facilitator must be motivated to work with farmers.

Appropriate training programme has to be developed and adapt it to the local context, which will be used in training of selected Lead Farmers. Consideration needs to be taken into account of literacy levels, to be attractive, easy for understanding, concise and with educative local stories and illustrations.

The duration of the training would vary depending on the level of skills and capacity of the

facilitators. As the training programme can't be realized at once in order the same to be successful, it should be divided into shorter sessions over a longer period.

The period of training, frequency of sessions and the topics will came from the training programme for CTT, as well from the actual needs in the Farm Business School. The best examples come from the participants, as well from the trainer's experience.

During the training should be covered:

- The FBS methodology and its development from the FFS approach.
- Working with resource people.
- Developing a FBS curriculum.
- Organizing and managing a FBS.
- Facilitators' roles, responsibilities, code of conduct and ethics.
- Participatory and gender-sensitive facilitation skills.
- Evaluation of farmer's resources.
- Identifying common enterprises.
- Creating a business vision.
- Preparing business plans.
- Marketing.
- The links between the farm business, the market and other external linkages.
- Collaborating with government, NGO, and other partners.
- Creating network among FBS.

The technical materials will cover full season with field exercises substituted by classroom simulations. Skills will be transferred through participatory discussions, case studies, and classroom exercises.


At the end of the season good performers to be awarded with a certificate recognizing them as Master Farmers - Facilitators and other farmer participants with a proficiency certificate of completion.

The graduated participants will follow up by establishing local level farm business management schools in the resident villages. It is suggested team of two persons (of mixed gender) within a single community to be selected as facilitators, to support each other and divide the workload. The Facilitators / Lead Farmers will be mentored and coached by Extension provider.

***Organisation and implementation of farm business schools at village/field level.***

The concept of FBS is:

- The schools to be set up within villages;
- The schools are established at their place of living and work;
- Farmers work in small groups;
- The meetings are with an agreed time and duration;

The school should fit into their working activities and avoid causing unnecessary disruption to their current farming operations.

There are possible two scenarios for establishment of FBS:

The criteria for inclusion of farmers:

- Interested;
- Committed;
- Recognise the need to produce for the market;
- The farmers may also be participants of previous farmer field schools;
- They should be market oriented or have the potential to do so;

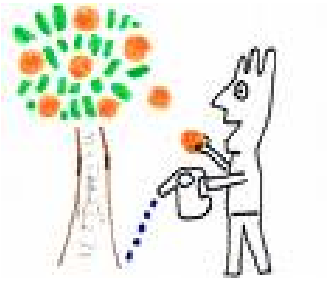
1. Already established FFS or farmer groups to develop adequate FBS;
2. Trained Lead Farmer as Facilitators to spread and organize the interested farmers in FBS;

The FBS facilitators together with participants will design farm level training programmes amongst interested farmers. It will be on specific location with a season long duration.

The content of the FBS includes the same topics covered in the extension facilitator training. It should be monitored the performance and appraised during the programme.

# 10. FBS phases

The FBS is a season long programme structured in three phases:



**1. Farm enterprise identification and planning guide, which is also known a Pre-Saison phase.** In this phase, it is proposed the FBS participants to become familiar with some basic preconditions of farm business like understanding the purpose of FBS, its establishment and managing, farm as business and business cycle elements, farm enterprises, farm income, costs and profit, as well they to be familiar with the business plan elements and to be ready for preparation of their business plans for the growing season, etc.

**2. Farm enterprise season guide, which is also known as Implementation Season.** The farmers must make practical steps towards implementation of their agreed business plans like procurement of inputs, providing financial sources for the activities, monitoring of the markets and establishment of strong links with the buyers, post-harvest operations and adding values to their products, carrying out changes towards adaptations to market requirements, etc.

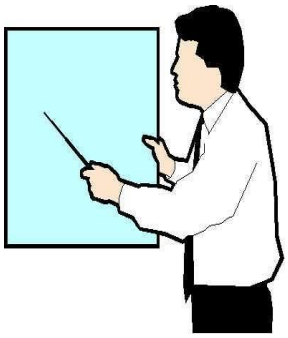
**3. Review and follow-up planning guide, which is also known as Post-Season phase**. At the end of season it is crucial to be assessed the functioning of FBS and to be evaluated the realization of the Farm Business Plans. It should be analysed what was functioning well and what bad, what should be changed in the future. Based on this analysis, it should be prepared Business plan and Action plan for the new season.

# 11. Non-Formal Education Methods

## Principles of Adult Learning

One of the most important characteristics of good adult education is that it is based on "Problem-posing". As Mao Zedong said, "the role of the facilitator is to present to the community in a challenging way the issues they are already discussing in a confused way".

**The whole emphasis is on learning, not teaching**. This means that "traditional teachers" need to be re-educated to understand the role of the facilitator, i.e. to be in mind:



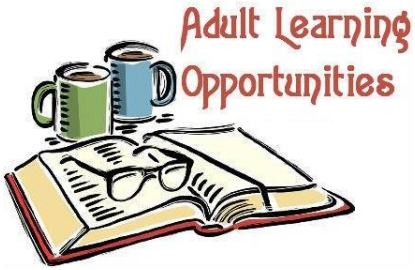
- Creating a learning climate,
- Posing problems,
- Encouraging a process of search for causes and solutions,
- Assisting the group to discover as much as possible for themselves, and
- Setting up a process for planning action.

All this is very different from the "traditional teachers" role. We all have strong memories of "what-a-teacher-does" from our own school days, but if we are to work effectively with adults using the problem-posing method, we need to wipe this model right out of our heads.

Adult learning psychology (by Malcolm Knowles, a pioneer of new methods of adult education) is characterized by:

1. **Adults have a wide experience and have learnt much from life**. They learn most from their peers. So facilitators help them to share their own dialogue with one another
2. **Adults are interested to learn quickly** about those things that are **relevant to their lives**. So the facilitator needs to create a situation in which they can share in the planning, choose the topics and participate in regular evaluation of what they are doing.
3. **Adults have a sense of personal dignity**. They must be treated with respect at all times and never feel humiliated or laughed at before others.
4. As adults grow older, their memories may get weaker but **their powers of observation and reasoning often grow stronger.**

Here bellow, there are some principles of adult learning:




Principle 1: Learning is an experience, which occurs inside the learner and is activated by the learners;
Principle 2: Learning is the discovery of the personal meaning and relevance of ideas;
Principle 3: Learning (behavioural change) is a consequence of experience;
Principle 4: Learning is a co-operative and collaborative process;


Principle 5: Learning is an evolutionary process;
Principle 6: Learning is sometimes a painful process;
Principle 7: One of the richest resources for learning is the learner himself;
Principle 8: The process of learning is emotional as well as intellectual;
Principle 9: The process of problem solving and learning is highly unique and individual;

# 12. Facilitation

Facilitation is a process known as "to make easy" or "ease a process". At the FFS and FBS approach with help of the facilitators, the trainers, participants and farmers guide and manage the activities and events organized ensuring that that group's and individual farmer's objectives are meet effectively, with clear thinking, as well with active and efficient participation from everyone who is involved.

Here are some Guide questions which replies has to help in understanding the whole process of facilitation, which consisting part of the FFS and FBS operations**:**

- Define the following terms: Facilitator and Facilitate!
- Differentiate between teaching and facilitating!
- What are the roles and duties of an FFS Facilitator?
- What are some of the undesirable behaviour of a FFS facilitator?
- What does a good facilitator do?
- What are some of the key skills of a facilitator?

1. ***FACILITATOR*** **is s**omeone who guides a process and who ensures effective flow of information within a group so that participants can share information and arrive at a decision. He/she is a moderator of a participatory learning process and assists in sharing of information in a participatory way.
2. ***FACILITATE*** is process of making the learning easier, for which are necessary skills and practiced ability to facilitate the learning easier. The facilitation is strengthening through having enough ability i.e. experience and knowledge to do something well. The facilitation contributes to the ability to deliver desired output or results successfully.

***3. DIFFERENTIATE BETWEEN FACILITATING AND TEACHING***

Table 3: Differences between facilitating and teaching

| | **Facilitating** | **Teaching** |
|---|---|---|
| 1 | Involves discussion | little discussions |
| 2 | Full participation | Less participation |
| 3 | Promotes existing and new ideas | introduces mainly new ideas |
| 4 | Horizontal communication | Vertical communication |
| 5 | Informal learning | Formal learning |
| 6 | Collective decision making | Partial decision making |
| 7 | Shares ideas | Directs |
| 8 | Bottom up | Top down |
| 9 | Curriculum developed through need assessment | Curriculum centralised |
| 10 | Learning materials are learner generated | learning materials are teacher generated |

## 4. UNDESIRABLE BEHAVIOUR OF FFS FACILITATOR

| | | |
|---|---|---|
| • To be a teacher; |  | • Self-pride; |
| • To be an instructor; | | • Carelessness; |
| • Commanding and arrogant; | | • Should not assign unclear tasks; |
| • Not transparent; | | • Should not fail to admit where he doesn't know; |
| • Non tolerant and impatient; | | • Should not be disorganized; |
| • Lateness; | | • Should not lack self confidence |
| • Immoral behaviour; | | • Should not be possessive; |

## 5. WHAT DOES A GOOD FACILITATOR DO?

| | |
|---|---|
| • Creative | • Act within capacities and emotion of the group |
| • Flexible | • Delegates tasks and responsibilities |
| • Good listener | • Put in special efforts |
| • Tactful | • Presentable |
| • Patient | • Audible |
| • Transparent | • Confident |
| • Consultative | • Good collaborator |
| • Tolerant | • Don't force participants to his plans |
| • Committed | • Sensible |
| • Trustworthy | • Give timely explanations |
| • Social | • Don't hide constraints |
| • Tolerant | • Show concerns |
| • Accessible | • Explains situations before hand |

## 6. SKILLS OF A FACILITATOR

| | |
|---|---|
| • Listening; | • Feedback techniques; |
| • Managing group dynamics; | • Summary skills (take home messages); |
| • Negotiating skills; | • Intellectual capacity; |
| • Good questioning techniques (probing); | • Technical skills; |
| • Good observation skills; | |

## 7. GOLDEN RULES OF A FACILITATOR

| | |
|---|---|
| • Good listener; | • Well mannered; |
| • Respect others opinions-open mind; | • Composed/confident; |
| • Cheerful; | • Be in control of audience; |
| • Eye contact; | • Convey acceptance; |
| • Know your audience in advance (Level); | • Time management (Conscious); |
| • Should be well prepared (Firmly grasp the subject); | • Impartial; |
| • Dress appropriately; | |

## 8. HOW CAN FACILITATORS IMPROVE THEIR RELATIONSHIP WITH PARTICIPANTS (FARMERS)

| | |
|---|---|
| • Get to know each other (Establish rapport) | • Accept genuine criticism |
| • Use of right language (brief and clear) | • Be timely |
| • Create a conducive environment | • Commitment to the group and the team |
| • Encourage full participation | • Team up with them norms |
| • Understand & respect the cultural norms | • Being a role model |
| • Display/depict good morals | • Know farmers priorities |
| • Make your mission clear | • Deliver quality service |
| • Avoid gender bias | • Encourage dialogue |
| • Adhere to your promises and programme | • Keep abreast with new technologies |
| • Be flexible | • Be professional and rational |
| • Be transparent and accountable | |

# 13. Report writing

Every FFS must make recording about the activities which serve as basis for analysis and decision making. Therefore here are some useful hints about the reports.

**The Lead Farmers/facilitators should be aware for some report writing principles and to be aware for issues like:**

- What is a report?
- Why do we make reports?
- What types of reports can be?
- What are the characteristics of a reliable report?
- What are the qualities of a good report?

**What is a report?**

- A report is data that has been collected, analysed and presented in Organized form to a person or organization requesting that information.
- Reports are also required to clarify or answer questions or compile problems and verify data.
- Summary of what has been done

**Why do we make reports?**

- For monitoring and evaluation.
- For the purpose of presentation of information for future reference.
- To pass information to others.
- Utilization of given resources.
- To appraise relevant authorities on ongoing activities.
- To verify data/information.
- To invoke action as deemed necessary to parties concerned.

**Types of reports.**
We can categorize the reports according various criteria, for example the reports based on time:

| | | |
|---|---|---|
|  | • Weekly report; | • Daily report; |
| | • Quarterly report; | • Annual report; |
| | • Biannual report; | • Fortnightly report; |

The reports based on criteria content:

| | |
|---|---|
| • Progress report; | • Project report; |
| • Baseline report; | • Evaluation report; |

**Characteristics of a reliable report**

The reports, what the FFS will have is desirable to have the following characteristics:

- **Objective and accurate**.
  - Facts must be presented objectively and not exaggerated or understated.
  - If data are inconclusive, tentative, insufficient of conflicting, the report must say these clearly so that management can take appropriate action.
  - Objectivity must be backed by accuracy.
  - Wrong data may lead to wrong conclusion and errors in decision. Even using harmless typographical error may cast doubt on the credibility because such error may indicate that mistakes may have crept into other parts of the report
- **Non-Emotional**
  - Report should not appeal to the emotion as a vehicle for persuasion
  - It must stand on its own merit and is accepted because of its data.
- **Simple and straightforward**
  - Report must use formal language and standard format.
  - No beating around the bush or vagueness in presentation of facts.
  - Being forthright does not mean being blunt or impolite.
- **Well Organized**
  - Facts must be logically arranged

In order the report to be with good quality, it must comply with the following criteria:

| | |
|---|---|
| • Relevant | • Complete |
| • Reflective | • Indicate time frame |
| • Systematic | • Clear understanding |
| • Reliable | |

# 14. Groups

As it was explained above, the functioning of FFS and FBS is based on Participatory Group approach. Here are some valuable principles of working in participatory group.

- All learning is done in sub-groups (smaller groups of 3-5 members)
- Each group is responsible for a treatment or a series of treatments for comparison studies
- Treatments are at the learning site.

- There are no replications in the same school.
- Each group plays host on the day of FFS activities.
- Each sub-group has officials therefore FFS has several leaders at different levels.

The following Guide Questions has to be in mind when we raise the issue of working in groups:

- What do you mean by group?
- What kinds of group could be?
- Why do people form groups?
- What are the dynamics of group development?

**Definition, various but simple could be:**
A number of people or things that are located close together, who are developing communication and joint activities helping themselves to achieve certain results and to satisfy the individual needs.

**Kinds of groups**

- **Formal** - highly structured and registered;
- **Informal** - non structured and unregistered groups e.g. wedding/burial groups

**Why do people form groups?**

- To generate income
- Environmental conservation
- Survival (Self-help groups)
- Pooling resources together
- Addressing common problems (water use, easier market access, etc.)
- Social groups

# 15. Team Building

It is very important to make difference between group and team. So the farmers have to be aware about these issues, and to be fully involved in the process of building team capacity. Here are some guiding questions helping this process:

- Defining the term team.
- What is the difference between a group and a team?
- How does the team develop?
- What is the facilitating climate for team development?
- What factors contribute to effective team?
- What enhances teamness?
- Discuss how the team spirit to be kept and to enhance teamness in the FFS?

**Definition**
A team is a group of people with a clear objective or goal, shared by all members e.g. a football team (the goal is to win).
**What is the difference between a group and a team?**

We would call five people sitting in a hotel bar a "group". In this case, they are merely a set of individuals, brought together in the same place at the same time, for a common purpose, i.e. to have a beer.

A team, as in "football team", has a meaning far more specific. To be successful, any team must:

- Have a clear objective or goal, shared by all members;
- Be made up of members committed to this objective;
- Have members able to work well together;
- Have members with skills necessary to complete the teams tasks;
- Be co-ordinated so that these skills are spread throughout the team i.e. no individual is continually over burdened with work while other members have little to do;

These five points are as important to the teamwork as they are to the football rugby or any other team.

**How does the team develop**

The process of team development can be seen as a clock face with the undeveloped team starting at midnight and complete maturity being achieved within 12 hours. A useful way to relate the theory to your own situation is by considering the position on the clock face of a team or teams of which you are a member. Whatever stage of team development you are in, try to assess the degree to which you have worked through it on the path to the next stage.

**Stage 12.00 – 3.00 known as Undeveloped team** is characterized with: "Feelings not dealt with", "Workplace is for work" , "Established line prevails", No "rocking the boat", "Poor listening", "Weaknesses covered up", "Unclear objectives", "Low improvement", "Bureaucracy" and "Boss takes most decisions".

**Stage 3.00 – 6.00 known as Experimenting team** is characterized with "Experimentation", "Risky issues debated", "Wider options considered", and "Personal feelings raised "and" Increased listening.

**Stage 6.00 – 9.00 known as Consolidating team** is characterized with "Experimentation, plus Methodical working", "Agreed procedure" and "Established ground rules".

**Stage 9.00 – 12.00 known as Wining team** is characterized with "Experimentation", "Consolidation", "Flexibility", "Appropriate leadership", "Maximum use of energy", "Principles considered", "Needs of individual met" and "Development a priority"

**What is the facilitating climate for team development?**

Team development climate is characterized with:

1. Clear objectives and agreed goals: Clear direction, Relevance, Commitment to achievement.
2. Openness and interaction: Freedom of participation, Freedom of speech, Healthy arguments
3. Mutual support: Support adds strength, Mutual respect
4. Co-operation and conflict: Sharing, Trust, Overcome weaknesses
5. Workable procedures: Decision making, Objective setting, Work allocation
6. Appropriate leadership: Cohesion, openness, trust and mutual support, Flexibility, Delegation
7. Regular review: Checks, Progress, Roles
8. Individual development: Function of individual ability, Opportunities, Positive outlook
9. Good inter-group relations: Cohesion, Communication, Co-operation, Learning
10. Readiness: Organization, Members

**What factors contribute to effective team?**

The Team members and the Leader developed activities like listening, communication, respecting the leadership, setting objective, working together to team building, active role in the process of decision making, in process of problem handling and existence of motivation.

**What enhances teamness**

Team culture "A culture where people feel free to contribute their ideas, where involvement in problem solving and decision making is the norm".

It is useful in the groups with the farmers, facilitators and trainers to be developed group discussion and to be identified the ways and means about keeping the team spirit with the FFS members and to enhance the teamness in the FFS.

# PRACTICAL EXCERCES

## 1. Establishment of a Core Team of Trainers (CTT)

This will be probably first step in order sound foundation for the increasing awareness and promotion of the Farmers Field School and Farmers Business School to be prepared in the project. Ideally, the establishment of the FFS and FBS should start at village level as basic organization and in later phase the networking of the established among different FFS and FBS to be carried out. However, having in mind the concentration and distance among the farmers engaged in organic farming around particular villages in the project, as well the different type of enterprises in FAO project, it will be challenge for the selected BDS providers and facilitators to define the area for this type of activities. The FAO project and COP Selenca as partner in the project, will create the Core team of trainers (CTT) and it is expected the same to be composed by relevant persons from government institutions, NGOs and private sector, who are interested to facilitate the process in FFS/FBS, to train the Lead Farmers and to provide coaching during the FFS/FBS sessions.

Ideally, the members of the CTT would have previous experience in farming as a business as well as experience with farmer-to-farmer approach. The core team shall be responsible for training and guiding leading farmers as facilitators.

The CTT, with the help of appropriate guides prepared by FAO, will identify the most relevant topics for FFS and FBS (e.g. criteria for selection of facilitators/lead farmers, facilitation cycle, role of extension worker as facilitator, design and organisation of farmer business schools, qualities of entrepreneurship, mentoring and coaching, monitoring and evaluation, etc.).

## 2. Training of Trainers (ToT)

With help of this Manual, the CTT will be introduced in the FFS and FBS approach and provided guidance for running training of Lead farmers (LF) and their assistants up to the point of being good farmer field school facilitators. It combines traditional teaching and participatory approach of learning, as the facilitators will learn and teach – focusing on methods that are practical and readily replicable.

This ToT is designed as cost-effective training enabling the trainers to agree about the approach and topics to be discussed with the Lead Farmers at their training. It is estimated that the trainers have specific knowledge about the required topics with the farmers participants in the FFS and FBS, and through process of brainstorming with the Lead Farmers, the identification of relevant topics is going to be finalized (for example, water and soil conservation, commercial planting material development, livestock and others as well as new impact survey methods).

## 3. Organization TOT

There are cases that the Trainers are well educated and experienced staff, which requires the Training of Trainers (ToT) to be participatory forum which will determine the guides for the training of the Lead Farmers or facilitators. The training is going to follow the same approach as the FFS and FBS approach, and that is participatory approach. First step is:

## *1. PARTICIPATORY INTRODUCTION OF THE PARTICIPANTS*

This step should help:

- For participants to know each other;
- To help participants relax;
- To encourage openness and start developing team spirit;

***The coach can propose to the participants they to propose any participatory method*** which can be used to conduct this session.

**Example 1**: Participants to pair up and introduce each other in turns. Each participant is required to pick on a partner he has not known before. Guide questions are then given by the facilitator and each participants interviews the other.

**Example 2:** Working in small group of 3 people.

- **Form groups of 3 people**, who do not know each other;
- **Create one joint, creative poster, stating:**
  - Who you are and where your roots are?
  - What you are really proud of in your personal and professional life?
  - What you always wanted to do, but so far never had the chance to do (Your dream)?
- **Present your poster to the rest of the group as a team (A presents B, B-C, & C-A) in less than 3 minutes.**

## *2. FACILITATION PRINCIPLES AND METHOD*

This session is mainly to introduce the facilitation principles and method that are going to be used in the training. Key core facilitation values and methods used are:

| ***CORE VALUES*** | ***Methods*** |
|---|---|
| ➢ Inclusiveness; | ➢ Visualization; |
| ➢ Ownership by participants; | ➢ Small and big group discussions; |
| ➢ Adaptive learning and management; | ➢ Informal and structured discussions; |
| ➢ Integrity (Not taking sides); | ➢ Field exercises; |
| ➢ Open dialogue; | ➢ Group dynamics; |
| ➢ Informality/relaxed atmosphere; | ➢ Field Visits; |
| ➢ Any contribution appreciated; | |
| ➢ Transparency; | |

## *3. GROUPING*

Participants in the TOT learn in **sub-groups** just as is done in FFS so participants have to be split into groups. The number of groups formed depends on the total number of participants. 4-6 groups are recommended as ideal. This Grouping of participants is done randomly. Each group then chooses a leader, name and slogan. Each time when presenting their output in the plenary each group calls out its slogan and the rest of the group responds.

**Example:**

| ***Group*** | ***No. of Members*** | ***Name*** | ***Slogan*** | ***Team leader*** |
|---|---|---|---|---|
| 1 | 6 | Voce | Zdravo voce | Marko |
| 2 | 6 | Kikinda | Zdrav zhivot | Andrea |
| 3 | 6 | Selenca | Zadovoljni kupci | Jozef |
| 4 | 6 | Meso | Srekne zhivotinje | Tanja |
| 5 | 6 | Subotica | Osvojimo trzhishte | Bilja |

## *4. LEVELING OF EXPECTATIONS*

This session is used to level the expectation of participants. This can be done individually or in a group. The following guide questions are given to each group or individual:

- What are the expectation of the participants from the course
- What are the expectation of the participants from the facilitators
- What are the expectations of the facilitators from the participants

Thereafter the output is presented to the plenary and the host team summarizes the output onto flipchart paper or pin card, which is pinned on the wall/table. The participants will use this to monitor if their expectations are being met.

**Example for expectations:**

**I. Expectations of participants from the course**

- Understand well the concept of FFS and have skills to utilize it;
- Learn new technologies;
- How to identify farmers and build groups;
- Incorporate new technologies of FFS according to local conditions;
- Group dynamics;
- Good graduation;
- Have a certificate of Participation;

**II. Expectation of participants from Facilitators (Trainers)**

- Good communication and coordination;
- Know the topics and give hand-outs;
- Participatory approach;
- Interact with participants;
- Teach the experiences about the FFS, Success and failure;
- Effective costs and sustainability of FFS;

**III. 4.3 Expectation of facilitator from participants**

- Commitment;
- Cooperation;
- Respect of opinions;
- Sharing of experience;


## *5. SETTING OF LEARNING NORMS*

Laying down rules and regulations during the entire training period. Since participants come from different sites and are to be together for some time it is important to set own rules that govern their stay. The objectives of learning norms are:

- To create order;
- To avoid unnecessary interruptions;
- To create a good learning environment;

**Procedure:**

- Each participant/group to write down on a small piece of paper what rules / regulations they would like to govern their stay;

- The whole group then discuss and agree on the rules/regulation;
- The rules/regulations are then compiled and pinned on the wall for everyone to note;

**Examples of norms set by the participants:**

| | |
|---|---|
| ➢ Respect the time; | ➢ Make a summary (always) of the previous lesson; |
| ➢ Switch off or keep the mobile phones in silence mode; | ➢ Avoid unnecessary movements during session; |
| ➢ Speak one at a time; | ➢ Do physical exercises; |
| ➢ Active participation; | ➢ No smoking or drinking in class; |
| ➢ Active concentration; | ➢ Group work should be taken serious; |
| ➢ Be tolerant (Patient with others); | ➢ Punctuality should be observed at all time; |
| ➢ In case of absence always inform; | |

## *6. HOST TEAM AND FUNCTIONS OF HOST TEAM*

The host team is the sub-group responsible for the activities on a given learning day. Each group is responsible for managing the day's activity and this is done on rotational basis such that if group 1 is the host today, group 2 will host tomorrow and so on. In this way all participants in the ToT share the responsibilities during the training.

Functions of host team are:

- Facilitate the whole week/day(s) activities;
- Prepare the opening program and schedule of activities;
- Arrange the training venue;
- Keep the training hall and premises clean;
- Provide the energizer/ice-breakers;
- Introduce the resource person/guest speaker;
- Check the weekly attendance of the FFS Participants;
- Serve as the time keeper;
- Distribute the reading materials and others;
- Assist the Facilitator or reporter in the reporting and discussion;
- Do other functions assigned by Facilitator;

**How do the FFS and FBS function?**

As it was explained in the methodological part above, FFS and FBS approach is different approach than the traditional approach of education. Instead of transferring technologies to farmers by extension service providers ("top-down"), the farmers at the group are the starting point of the education activities, they provided initiatives, they observe the issues and challenges, they analyse, communicate and bring decisions with help of the facilitators and competent production and business service providers. The BDS providers provide mentoring to the facilitators and participate more with field demonstrations than classical lectures.

**Comparison between FFS and conventional T&V**

Table 1.

| PARAMETER | FARMER FIELD SCHOOL | CONVENTIONAL T & V |
|---|---|---|
| 1. Learning method | By doing, experimenting, participating, discovering | By listening ( Element of experimenting and discovering still absent) |

| PARAMETER | FARMER FIELD SCHOOL | CONVENTIONAL T & V |
|---|---|---|
| 2. Training venue | Subject of learning (field, crop, animal, etc.) | Training hall or shade |
| 3. Duration | Complete study (Season long | One or two sessions |
| 4. Extension Agent and their role | Trained expert. Spends most of their time assisting farmers convince themselves about a | Jack of all trades. Spends most of their time trying to convince farmers |
| 5. Farmer and his/her role | Participator, Contributor, Decision-maker. Assumption- farmer is a cup of tea full of knowledge but needs | Listener. Management decisions usually prescribed. Assumption- farmer is an empty cup of tea that needs |
| 6. Qualification to participate | None discriminatory | Need to be able to write with some intensive programmes (Master farmer training) |
| 7. Programme Planning | Done and agreed upon by/with farmers. Extension agent commits themselves | Office work. Extension commitment not quarantined |
| 8. Evaluation and adoption | Together with farmers. Adoption is the choice of the farmer. | Office. Usually persuasion/force |

The FFS usually comprises a group of 20–30 farmers who meet regularly over a defined period of time, a crop production season for example, to validate (new) production options with the help of a facilitator. The FAO project is promoting this role to the Lead Farmer, as he/she is member of the community and in a position to mobilize members and provide feasible facilitation.

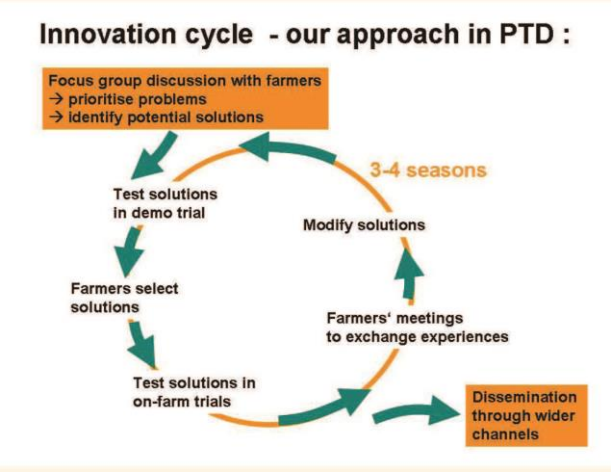
Through work in group, the FFS provide also organizational skills and practice, where they have the ownership of the learning process and feeling that they are members with full rights in the operations and functioning of the group. Within the process of building trust and confidence among the members of FFS, farmers are in position to build joint enterprises and to have more successful market entrance.

Management decisions are made at the end of every meeting on what action to be taken. After the end of the crop production season, farmers continue to meet and share information inside the group. The idea is the group to have proper skills and capacity for preparation of eligible production programmes and to provide financial sources for its realization. The sources could vary from donor's projects, credit institutions involved in rural financing, state programmes to some interested business investors ready to establish cooperation in various forms, such as contract farming.

# 4. Considerations in establishing of PTDS

The farmers have to follow these guides in establishing PTDs in order the specific farm problems to be addressed effectively:

a. Sufficient Ground working activities by the TOT facilitators and TOT participants should prioritize local field problems.
b. PTD activities at FFS sites shall be jointly identified, established and managed by the FFS participants and facilitators based on the prioritized local field problems in close co-ordination and consultations with researchers.
c. Innovation, technology gap and new problems shall be utilized as additional basis for prioritizing;
d. PTD methodologies shall be standardized and data base system shall be established in the community. A compilation of all possible studies form previous PTD activities shall be made available as reference for conducting future PTD activities.



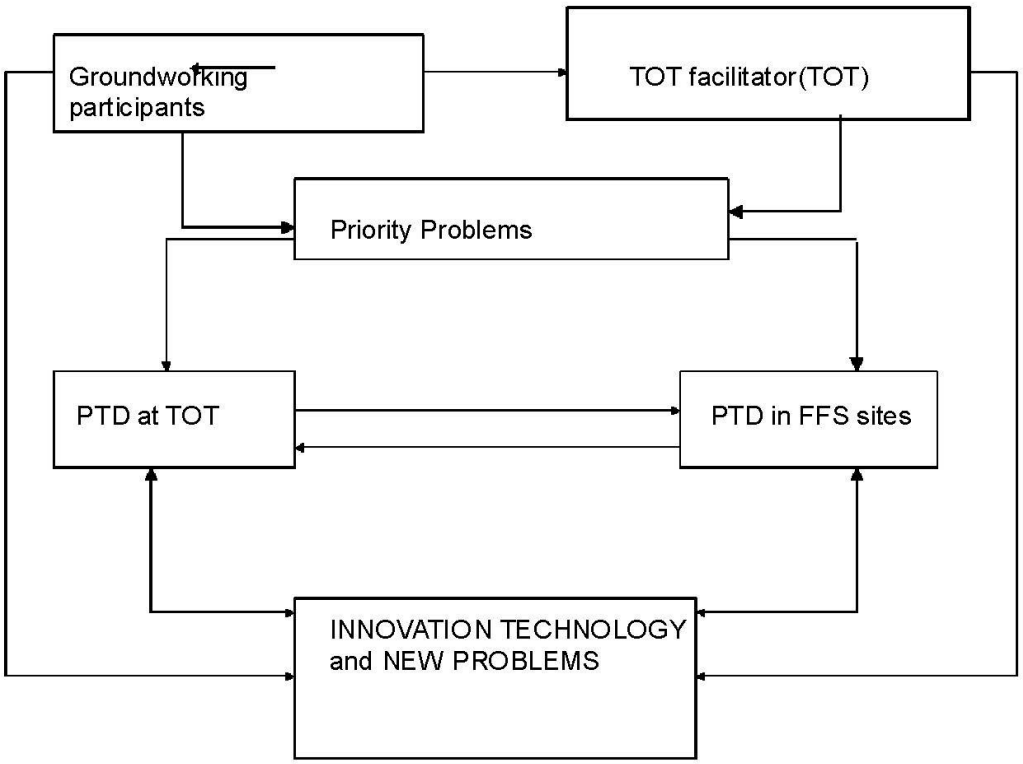

# 5. Steps in establishing PTD in TOT and FFS sites

PTD in Farmer's field schools can be best operational by combining local farmers' knowledge and skills with those of extensionists to develop specific site.

It is a process of purposeful and creative interaction between local communities and outside facilitators which involves:

a. Gaining joint understanding of the main characteristics and changes of that particular agro-ecological system by conducting sufficient ground working and village activities in the proposed PTD sites;
b. Defining priority problem in the area;
c. Experimenting locally with a variety of options derived from indigenous knowledge sources (local farmers, extensionists, researchers, NGOs, government services) by property planning, designing, and implementing PTD activities for the community;
d. Enhancing farmers' experimental activities and farmer to farmer communication by properly collecting interpreting and utilizing PTD results.

FLOW CHART FOR ESTABLISHING OF PTD IN TOT AND FFS SITES




At least seven (7) important steps should be followed in conducting PTD:

**Step 1: Conduct Ground working activities**

The TOT participants introduce themselves and the programme to build up a good relationship with the farmers and local leaders/authorities. In the process, board ideas on field problems, indigenous farm practices and cultural management techniques are gathered.

Likewise, initial contact with local researchers is established, which are useful at this stage to determine existing technologies that may be necessary in addressing perceived field problems. Board ideas about the attitudes, values and norms of the people in the community can also be shared during this stage.

**Step 2: Conduct FFS sites introduction activities**

The TOT participants, backstopped by the facilitators are raising the awareness in the villages identified as possible FFS sites, based on suggestions of the local officials and relevant stakeholders. Similarly, they introduce themselves and the program to build up a good relationship with village leaders and farmers. During this stage, participants validate local field problems and current farming practices gathered during Ground working activities by the facilitators with farmers in the community.

**Step 3: Prioritizing field problems**

Utilizing the data obtained in the Ground working and village introduction activities a baseline survey tool is utilized to obtain more specific details of the field problems in the proposed FFS sites. Field problems are then prioritized by analysing the agricultural situations, which will eventually form a basis for cooperation with farmers and facilitators to start the process of

participatory technology development. This includes widening the understanding of all involved about ecological, socio-economic, cultural, and political dimensions of the current situations.

**Step 4: Plan and design PTD activities**

After prioritizing field problems, the planning and designing of PTD activities commence within the identification of promising solutions, in order to set up on agenda for experimentation. In this stage, the participants (facilitators and farmers) in close consultation with local researchers identify which PTD activities will be set up in FFS sites. The PTD experiments should be simple enough, but which should give reliable results and can be managed and evaluated by the farmers themselves.

**Step 5: Implement PTD activities**

The participants should jointly evaluate all activities. PTD activities in the TOT sites are managed by the TOT participants.

The TOT and FFS participants and facilitators should agree upon the decision as to what PTD activities should be set-up in the FFS sites. Usually the problems that need to be addressed immediately with enough demonstration technologies (i.e. indigenous or research developed) are established in FFS sites. As the participants carry out, measure, and access PTD experiments, they simultaneously build up farmers experimental skills and strengthen their capacity to conduct and monitor their own experiments.

**Step 6: Collect and interpret result of PTD activities**

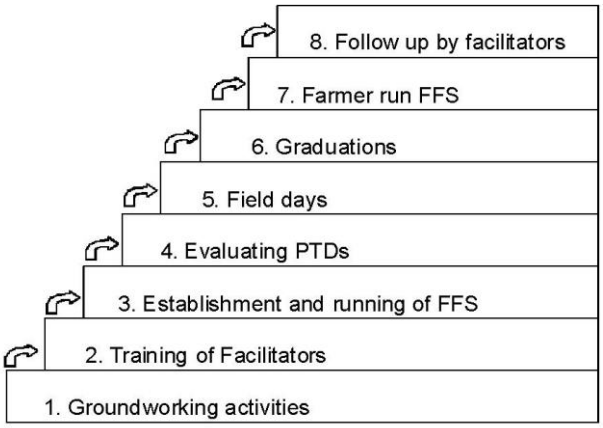
Depending upon need for information, the participants should be able to collect and interpret PTD results. Since farmer field school training is focused on agro-ecosystem analysis (AESA), this helps the participants to gain insight into the ecological interactions in the field and they are able to develop innovations or discover technology gaps or new problems for consideration in succeeding PTD activities for the community.

**Step 7: Utilize result in succeeding PTD activities**

In order to make PTD a sustainable way of addressing future field problems in the community, PTD results should be continuously utilized. Any innovations developed in conducting PTD activities should be utilized in addressing similar field problems in futures. Technology gaps or new problems discovered in previous PTD experiments will have to be addressed in succeeding PTDs by utilizing them as additional basis in planning designing and implementing PTDs for succeeding TOT and FFS activities in the community.

# 6. Organisation of the Farmer Field School

The following steps are recommended in the organization of FFS:





## 6.1 Phase Ground working or preparation

**Guidelines/steps in ground working**

This phase includes the steps and activities leading to the actual implementation of FFS core activities. The implementing partner/s (BDS providers, COPs, etc.) will therefore have to help and coordinate the Lead Farmers in establishing the FFS. In this view, it has to be carried out activities of briefing the staff of COP and plan their involvement and cooperation in the project activities, particularly providing information about the FFS and FBS methodology. Additionally, it has to be planned the briefing of the responsible authorities, particularly the local branches of the Ministry of Agriculture and to determine their support, and how they are going to be involved.

It has to be started the dialogue with local leaders and leader of farmer's organization, as well to be discussed with farmers at the farmer meetings and with local representatives. It is very crucial to be properly explained to the farmers that their membership and activities carried out are on voluntary base, no compensation as salary or fee will be paid. They must be aware about the benefits what they could have from the participation at the FFS and FBS.

Depending on the circumstances, a two-week period is usually required with five half-day sessions to conduct all the activities. During that period, the BDS providers/COPs together with facilitators will help the FFS group to be formalized. The BDS providers/COPs should have a backstopping role in preparation activities.


It is again important to be stressed that FFS will be managed exclusively by FFS members. In this way, the FFS is empowered and able to achieve the goals set in the global action plan (GAP). The facilitator should lead in maintenance of cohesion within the group.

Before establishing an FFS, it is recommendable a simple survey to be performed by the BDS provider to assess the conditions for FFS implementation. This will ensure that the environment is suitable for the approach. Questions raised will help a feedback to be obtained for support by the regional branches of the Ministry of Agriculture and for synergy and complementarity with similar initiatives or programs. The survey has to provide info about the possibilities for linking with various

agriculture organizations and associations, the availability of FFS trainers, how far is FFS suitable approach to tackle existing problems, existence of any cultural barriers to the FFS approach, the suitability of extension workers or other competent persons to be included in the Core Team of Trainers, knowledge about their willingness to facilitate the implementation of FFS approach, estimation how many FFS can be implemented, etc.

Results of the pre-condition survey will help assess if an FFS is suitable for a particular region. If the FFS has been recognized as a potentially appropriate method, the remaining activities will help assess the costs and needs for external inputs and to determine the level of difficulty in establishing the FFS.

It is recommendable to have information about:

- Determination of the actual needs of the area;
- Determination level of technology;
- Collection information on the ecology of the area;
- Identification of existing technology which are not yet fully utilized;
- Identification focus enterprises;
- Identification priority problems;
- Identification solutions to identified problems;
- Establishment farmers' practices;
- Planning of the facilitators/Lead farmers and their training;
- Identification field school participants;
- Identification field school sites;

Some criteria have to be respected at the identification and of the selection of Lead Farmers by the staff of BDS providers/COPs, like for example:

1. They are ready to accept farmers as equal partners;
2. They are ready to become familiar with the FFS and FBS concept and the procedures;
3. They possess and/or ready to be trained for obtaining the desired technical skills;
4. They are going to practice and improve their facilitation skills;
5. They possess good communication skills
6. They are ready to accept their role at the FFS and FBS through:
   - Their Commitment;
   - Voluntary provision of FFS Site;
   - Provision of input (Labour);

## 6.2 Phase - training of facilitators/Lead farmers (TOF)


The CTT and the staff of COP, with support of the FAO project, will train the LFs prior to the activities of establishment and facilitating the FFS.

The TOF is a one-to-two-week training programme to prepare participants on the principles and core elements of FFS methodology and facilitation skills. Additional training on specific topics (technical and methodological) will be organized in order to further develop their capacity.

**What is a facilitator?** A facilitator is a person who has been trained and has hands-on experience with participatory methodologies and adult learning. The facilitator has the role of creating conditions for farmers to learn through observation and analysis what they experience. He should encourage farmers to take an active role in their own learning processes.

The process of becoming a facilitator could not be achieved simply by attending the Training of Facilitators (TOF), but it is combination of training, retraining and practical experience with managing FFS and FBS sessions. As there is experience among the local BDS providers like

COP Selenca, they will mentor Lead Farmers in performing facilitation exercises.

The Lead Farmers, attending a TOF course, should demonstrate willingness to adopt participatory methods when working with farmers and have an interest in learning about organic farming. The TOF training should be offered to anyone with an interest to practice and facilitate the FFS and FBS approach.

The learning objectives at TOF event:

- Participants are aware of the necessary skills and attitudes of a facilitator and how to monitor these qualities;
- Participants examine their own skills and attitudes;

At the end of the TOF, it is expected that the Lead Farmers will be able to understand the differences between facilitation and traditional lecturing, the key characteristics of a facilitator, the importance of open dialogue and how to monitor and evaluate facilitation skills and attitudes, both in oneself and in others.

At the training of the Lead Farmers, some questions can be raised, such as:

**1. Why do I want to become a facilitator?**

Every potential Lead Farmer should write his/her answer on a pin card and later discuss about the expectations from the TOF event.

**2. What is good facilitator?**

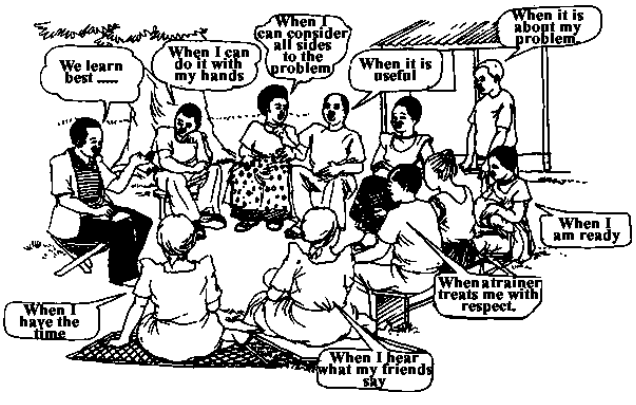
The participants can be divided in groups and to discuss what the qualities of good facilitator. The summarized skills of a good facilitator can be discussed through a process of open questions as a learning tool.

The open dialogue, whereby one question is answered by another question to the group or the learner, is an essential process for the participants to develop their own analytical and understanding skills. The facilitator should remember to use open questions that can be answered with "yes or no". Posing a closed question means losing a learning opportunity. Examples of open questions are: what is this, why is this so, what has happened since the last field visit, how did it happen, when did it occur?

It is important to have a balance between straight answers and open questions. There are times when straight answers are called for. The facilitator should be willing to share her knowledge and expertise, but he/she should always reiterate that he/she does not always have a straight answer. Providing straight answers do not enhance problem-solving skills.

**3. How to communicate with adult farmers?**

The BDS trainer introduces a role play of good and bad facilitation, introducing skills and attitudes of a good and bad facilitator. For example, the farmers, listening to the Lead Farmer/Orator in the middle of the group, are in passive position; and the question is if they will participate in the discussion. Better results can be achieved if the facilitator takes turns two by two to try and communicate better with the farmers.



**4. Developing a monitoring sheet**

Participants are asked to develop a simple monitoring and evaluation sheet, which will be used to evaluate the facilitation skills of participants. The sheet will be used for the following FFS test session, where participants will practice their facilitation skills in an on-going FFS. Participants are asked to identify the most important issues when evaluating the skills and attitudes of their peers.

The following tips can be used as Checklist of the characters of a good facilitator:

- Ability to show warmth, approval and acceptance of trainees;
- Socially skilled person, with ability to bring the group together and control the learning processes, without controlling the outcome;
- Enthusiasm for learning himself or herself and able to keep an open mind about new ideas and not anticipate outcomes.
- Focused on learning rather than teaching;
- Open towards local traditions, knowledge, technology and skills;
- Flexible and focused at the same time;
- Knowledgeable about the subjects, with a clear demarcation of own limitations;
- Opens up dialogues and does not give simple straight answers;
- Skilled in reflection on subjects as well as processes;

Some training areas which can be practiced at the training of facilitators (TOF) are:

- FFS and FBS methodology and principles;
- Crop/livestock production and protection technologies;
- Guides on how to effectively deliver crop/livestock production and protection topics using non-formal education methods (NFE);
- Participatory technology development (PTD) with emphasis on the approaches and developing guidelines on conducting PTD;
- Non-formal education methods (NFE) with emphasis on what, when and how to use NFE in FFS;
- Group dynamics;
- Special topics to be addressed at every stage of training.
- Identify and selection field school participants;
- Identify field school sites;

At the ToF, the participants have to discuss about the next priorities which are identification of the FFS and FBS participants, and the field sites which will be learning site for the participants.

**Selection of participants**

The representatives of COPs and the Lead farmers must in cooperation to define the criteria for selection of the participants at the FFS and FBS schools. Some of practiced criteria are:

1. Active and practicing farmer
2. Willingness to participate (on volunteer base);
3. Ready to work in a group;
4. Socially acceptable;
5. Must have good relationship with others;
6. Willing to learn for their own development;
7. Farmers must have a common interest;
8. Must come from same locality (area) if applicable;
9. Willing to follow the norms set by the group;
10. Must be willing to share experiences;

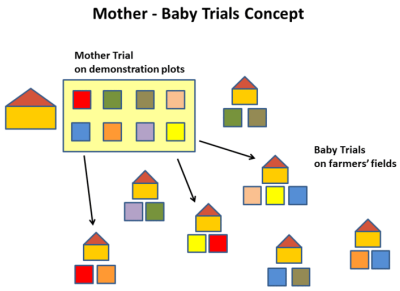
**Identification of field school sites**

At the selection of the site, the members must also have in mind some criteria, to analyse and discuss it:

1. Accessibility of the site;
2. Suitable for the particular activities to be done;
3. Within the community or close the FFS and FBS members;
4. Should be acceptable to all the farmers (Every member of the group have to agree about it);
5. It is desirable to be centrally located among the farmers;
6. Data processing site is an advantage;
7. Security issues to be ensured.

**Farmers site vs demonstration sites**

When there are sensitive challenges for selection of farmer's plots, alternative option is identification of demonstration plots. The pilot fields could be provided by some of the farmers and COP Selenca. If the farmers/participants agree on such option for field work, in that case the practice "mother-baby trial design" could be applied. This mean that it will be determined a specific site for on-farm trials addressing bottlenecks of organic farming, where the farmers will collect and evaluate the data. These farmer field trials will serve as a meeting point around sustainable agricultural production, where results are disseminated to farmers, extensionists and additional stakeholders.




FIBL is implementing this model in the projects implemented for organic farming and provide clear definition: "A mother-baby trial design is used, with mother trials taking place on demonstration plots and subsequent baby trials on farmers' fields. Since part of the trials is conducted on-farm, farmers have the opportunity to gain experience in the implementation of new technologies and innovations and adapt them further to their particular requirements".

## 6.3 Phase - establishment and running of FFS

**Conditions of successful FFS**

In order an efficient FFS to be established and to be operational, the following conditions must be fulfilled:

- Well trained facilitators;
- Well defined priority problems;
- Organized community that is dedicated/committed and willing;
- Clear understanding of the concept and procedure by all stakeholders;
- Support and goodwill of the authorities at various levels;
- Availability of appropriate technology;
- Adequate resources and logical support;
- Proper identification of site/area;
- Proper identification and selection of participants;
- Flexible and dynamic farmer group that is well organized and structured;
- Farmers with common interest;
- Proper and guaranteed supervision, monitoring and evaluation of the activities.

Therefore to fulfil above mentioned conditions of successful FFS, it is recommended following activities to be realized:

**Carrying out awareness-raising meetings** to introduce the FFS concept with the potential participants.

As FFS is relatively new approach, an awareness raising meeting is required for introduction of the FFS approach. There is a need to explain what FFS is and how it works, so that participants know what to expect and can join the FFS. It is very important that the first contact makes a sound and clear impression.

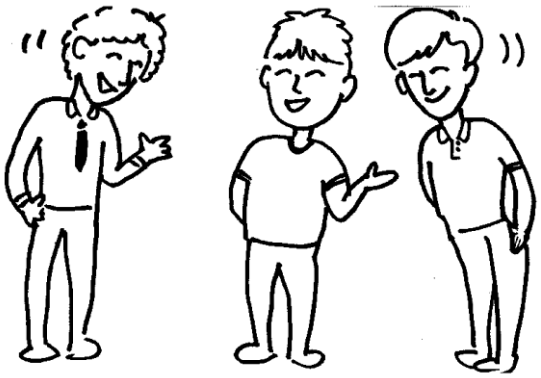

The objectives of the meetings could be following:

- To introduce the FFS methodology, with its specific characteristics, to farmers and other community members;
- To provide interested farmers with a clear and real view of the FFS approach so they know what to expect.

The LF/BDS provider needs to ensure that community members have a clear understanding of what they can expect from the FFS. Participants and the facilitator can then discuss how to move forward in implementing the FFS.

**1. Participatory introduction of the participants**

It is essential the potential participants find themselves in good ambiance and to feel comfortable in order to contribute their best. Therefore, the first step is to ensure that FFS participants know and feel comfortable with each other. Even when the participants already know each other, it is useful to do this exercise to encourage participation from the beginning.



The objectives of this activity are:

- To encourage participants to know each other and learn a little about each other's personalities;
- To break any barriers between farmers and the facilitator (to help participants relax);
- To discover what the participants want to achieve from the FFS;

There are several methods for participant introduction. The *Pair-wise interviewing* is one. The key point of this exercise is that participants do not introduce themselves in the group, therefore not becoming nervous while waiting for their turn. Participants sitting next to each other do the interview together.

The participants are split into pairs (e.g. by combining people that sit next to each other). Each participant interviews his partner by focusing on questions such as: "What is your name?", "Can you share your experiences as a farmer?", "What do you do?", "What is your interaction with extension workers?" and "Can you name two likes and dislikes?"

After five minutes of interviewing each other, participants then report in a plenary session about their partner, summarizing the main information in two minutes. For this can be used the pin cards or flip chart sheets for writing and presenting the data.

**2. Levelling of expectations**

In order to facilitate the learning process, it is important to level participants and facilitator expectations. To avoid disappointment and drop-out among FFS participants, the LFs/facilitators and the group have to be aware of what everybody expects from the FFS. In this way, at a very early stage, unrealistic expectations can be recognized and aligned before the participants commit themselves.

Only a well-informed person can be fully committed. In addition, being aware of expectations helps the group to plan the FFS and, later, to monitor whether they are still focused on the initial objectives.

The objectives of this activity are:

- To discover what participants want from the FFS;
- To become aware of unrealistic expectations;
- To help the facilitator and group plan the activities of the FFS;
- To help the facilitator and the participants monitor and evaluate the FFS.

The levelling of expectations should follow the participant's introduction. The facilitator could raise questions such: "Why have you joined the FFS?", "What do you hope to gain?", "What do you expect from the project/BDS provider" and "What do you think I (the facilitator)/the project expect from you?"

The participants will be divided in groups of a maximum of five participants and discuss the questions. The answers shall be written on a flip chart or pin cards and a representative of each group will present their responses to the whole group.

The facilitator and the group summarize together the expectations. It follows discussion and responds to each expectation. The group will be asked whether they think the expectation is realistic and achievable within the FFS cycle.

The facilitator has to make sure that unrealistic expectations are levelled and realistic expectations become part of the FFS programme.

### 3. Identifying the host team

The host team is an important functional element in the FFS. It is the helping hand of the Lead Farmer and is responsibility for:

- assisting the Lead Farmer/Facilitator;
- preparing the daily programme and schedule of activities;
- arranging and setting ready the training venue;
- providing energisers/group dynamics;
- introducing visitors (e.g. a resource person) to the FFS;
- checking the weekly attendance of the FFS participants;
- serving as time-keepers;
- distributing reading and other material;
- acting as a recorder and reporter of discussions;
- upon request, assisting the facilitator in other functions;

The objectives of this activity are:

- to enhance responsibilities, participation and FFS ownership;
- to support the FFS facilitator in setting up and facilitating FFS activities;
- enhance farmers' organisational and communication (presentation) skills;

The concept and functions of host team should be explained by the facilitator. The participants are split in groups and each will receive a card with numbers from one to five. Those with the same number would form a group.

Each of the five sub-groups selects a leader and a secretary, decides on the group's name and develops a group slogan. After that each group presents their members, name and slogan in the plenary to the other FFS members.

Each group will be host team at least once. A schedule is made for each group with the dates to be the host team.

**5. Participatory planning of activities** through development of FFS's group action plan (GAP).

Once the participants have been selected, expectations levelled and they have a clear understanding of the objectives of the FFS approach, the group shall develop a Group Action Plan (GAP).

The objectives of this activity are:

- to be set a clear path on what the FFS will achieve and how to achieve it;
- to create feelings of ownership among the FFS group and thus enhance commitment and sustainability;
- to pool resources, synchronize efforts and avoid duplication;
- to increase accountability and transparency and thus permit monitoring and evaluation of the performances of the FFS;
- to train farmers in how to organize and manage themselves better.

The following activities are recommended in developing a GAP:

**6 Establishing the FFS group**

The FFS group should have an identity, organized structure and resources to work effectively. Farmers effectively united in a group can interact, share experiences and stimulate learning. The group of farmers responding to the criteria will officially establish their own FFS by:

- Choosing a name for the FFS and (optional but recommended) a slogan;
- The group will elect officials (e.g. a chairperson, secretary, members to form a board). The roles and responsibilities of each person should be defined and be clear to all;
- If the group plans to source funds, through personal contributions, commercial production, donors, etc., the management of the funds should be regulated;
- setting ground rules or a constitution is also called "setting of learning norms". The FFS members shall set the learning norms to ensure a suitable learning environment and avoid interruptions and frustrations.

Interruptions (e.g. people coming in late, under the influence of alcohol, using mobile phones, domineering attitude, not participating, etc.), hamper the learning process and should be controlled.

The facilitator can contribute in the preparation of rules and suggest on what should be done in case of problems such as latecomers, absenteeism, dominant people or lack of order in the group, people not contributing to group work, members who do not respect other people's opinions, etc.

The learning norms should be pinned up on the wall for everybody to see throughout the FFS sessions.

**7. Problem analysis and ranking**

The first FFS sessions will be used to analyse the problems perceived by the farmers in the focal activity/enterprise of their choice.

Farmers in organic farming can face with many problems, some of which requiring more immediate actions than others. To get a clear understanding, it is important that the FFS participants share their ideas and perceptions. Since the FFS has a limited time frame, it is not able to address all the problems faced by the group. It is therefore important to identify the most pressing problems or those shared by the majority.

The objectives of this activity are:

- gain joint understanding of the farmers' problems in organic farming ;
- share insights into the potentials and constraints facing FFS participants (analysing the cause–effect
- relationship of specific problems);
- prioritize problems and identify which problems the FFS is going to address;

During the plenary session, it should be identified the problems. Therefore the group has to list all the problems they face in organic farming and write it on a flip chart.

Each problem is analysed by discussing why it is a problem. The responses should be recorded. At the end of the analysis there should be a list of indicators (reasons) for each problem.

The participants need to focus on the most important problem; therefore the problems need to be ranked. Ranking methods, such as pair-wise ranking, can be used. The pair-wise matrix is implemented step-by-step. The scoring is calculated and then the problem having the highest score is marked as the most pressing problem. The second highest score can be seen as the second most pressing problem, etc.

In the table next, each problem is compared in systematic turn with each of the other problems. Thus "*Lack of seeds*" was compared first with "*Lack of fertilizer*". The farmers found that "*Lack of seeds*" is more important than *"Lack of fertilizer*" and so a '1' is placed in the cell in the "*Lack of seeds*" row under problem number 2 ("*Lack of fertilizer*"). This was repeated until all problems had been compared with problem number one, "*Lack of seeds*".

| Problem | Problem number | | | | | | | | Score | Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| 1. Lack of seed | | 1 | 1 | 1 | 1 | 6 | 1 | 1 | 6 | 2 |
| 2. Lack of fertilizer | | | 2 | 2 | 4 | 6 | 2 | 2 | 4 | 3&4 |
| 3. Lack of transport | | | | 3 | 5 | 6 | 3 | 3 | 3 | 5 |
| 4. Poor roads | | | | | 5 | 6 | 4 | 8 | 2 | 6&7 |
| 5. No shops for inputs | | | | | | 6 | 5 | 5 | 4 | 3&4 |
| 6. Far selling market | | | | | | | 6 | 6 | 7 | 1 |
| 7. Lack of labour force | | | | | | | | 8 | 0 | 8 |
| 8. Administrative barriers | | | | | | | | | 2 | 6&7 |

Participants then decide which or how many of these problems the FFS can realistically address. These problems will be defined and prioritized and will direct the learning programme of the FFS.

### 8. Identifying potential solutions

The main problems need to be analysed intensively. A brainstorming session aims at developing options that can be tested and evaluated.

Once the main problems are identified, it is possible to start the process of finding solutions. Different people will come up with different solutions and it is important to have a brainstorming session, where all the participants, including the facilitator, can share their ideas. The different solutions voiced by the group can then be analysed jointly and the best option can be tested in the FFS.

The objectives of this activity are:

- identify solutions to common/major problems;
- plan the activities that will implement these solutions;
- ensure that the FFS group owns the solutions;

At the end, a problem/solution analysis table will be produced (see illustration down) and displayed on a flip chart by the facilitator. In a plenary session, the facilitator explains the different columns. The three or four main problems identified in the pair-wise ranking are put in the table and analysed one by one. The FFS group discusses the signs (indicators/evidence) of each problem and identifies the root cause. Then the strategies farmers use to cope with the problem are discussed and the group brainstorms the possible solutions.

Example of Problem/Solution Analysis table

| PROBLEM | INDICATOR | ROOT CAUSE | COPYING STRATEGY | POSSIBLE SOLUTIONS |
|---|---|---|---|---|
| 1. Inadequate water | - Not regular irrigation<br>- Lower harvested yields | - Water tubes not functional<br>- Pumps damaged | - Raising issue with Water Company<br>- Repair the water networks by the farmers | - Regular services of the pumps;<br>- Alternative irrigation through tanks and drop by drop |
| 2. Lack of quality extension services | - High incidence of diseases;<br>- Poor quality of procured seeds; | - Lack of funds<br>- Lack of knowledge for new seed varieties | - Advices from neighbours at the social places<br>- Advices from shops<br>- Using own seeds | - Establish strong links with trained BDS provider<br>- Education through FFS |

The possible solutions can be ranked by using a matrix scoring method. Each solution is evaluated by the following indicators: sustainability, productivity, time constraints, equitability, cost and social acceptability.

**9. FFS sessions with core activities through carrying out experiments and field trials** related to the selected enterprise, implementing PTDs (testing and validation), conducting AESA and Morphology and collect data, as well processing and presenting the data. All core activities are with support of group dynamics.

# 7. How to conduct AESA

AESA is an approach which can be gainfully employed by extensionists and farmers to analyse field situations with regards to pests, natural enemies, soil conditions, plant health, the influence of climatic factors and their interrelationship for growing healthy crop. Such a critical analysis of the field situations will help in taking appropriate decisions on management practices.

The basic components of AESA are:

- Plant/animal health at different stages;
- Built in compensation abilities of the plants;
- Pest and natural populations dynamics;
- Soil conditions;
- Climatic factors;
- Farmers past experience;

The Methodology of AESA is composed from:

A. Field Observations
B. Drawings
C. Group discussions and decision making

*An FFS participant presents the results of her subgroup to the whole group so that collective decisions can be made*

**A. Field Observations, some tips:**

- The production site has to be checked as well inside, not only at the edge.
- Checking has to be randomly.
- Visual observation has to be recorded, respecting some logical sequence:
  - Flying insects (both pests & natural enemies);
  - Close observation on pests and natural enemies that remain on the plants;
  - Observing pests and natural enemies by scrapping the soil surface around the plants;
  - Record disease and its intensity;
  - Record insect damage and disease incidence in percentage;
- Record parameters like number of leaves, plant height, reproductive parts of the selected plants and other agronomic parameters that are important for decision making for making observation in the following weeks.
- Record the types of weeds, their size and population density in relation to crop plant.
- Record soil conditions.
- Record the climatic factors viz sunny, partially sunny, cloudy, rainy, etc. for the preceding week.

**B. Drawing, some tips**

First draw the plant at the Centre on a chart. Then draw pests on the left side and natural enemies on the right side. Indicate the soil condition, weed population etc. Give natural colours to all the drawing, for instance, draw healthy plants with green colour, diseased plant/leaves with yellow colour. While drawing the pests and the natural enemies on the chart care should be taken to draw them at appropriate part of the plant, where they are seen at the time of observation. The common name of pest should also be indicated alongside the diagram. The weather factor should be reflected in the chart by drawing the diagram of sun just above the plant if the attribute is sunny. If cloudy, the clouds may be drawn in place of sun.

**C. Group discussions and decision making**

The observations recorded in the previous and current charts should be discussed among the farmers by raising questions relating to change in pest and natural enemies population in relation to crop stages, soil condition, weather factors such as rainy, cloudy or sunny etc.

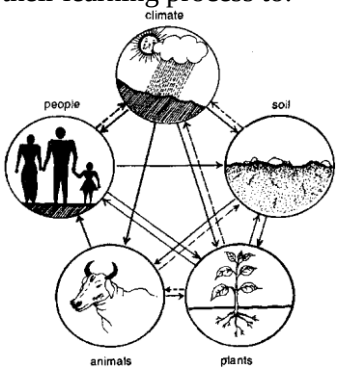
Based on these discussions the group takes judicious decision for specific post management practices.

**D. FFS key concept - Ecosystem**

The Environment of the FFS and farming of the participants is considered as ecosystem. Entails both living and non-living things found in an area and the environment they are in.

Respecting the ecosystem compatibility enables the farmers in their learning process to:

- Facilitate learning by discovery process;
- Guide the process through critically analysis and make better decisions on their field problems




What are components of an ecosystem:

1. **Living things** like for example grasses, crops (maize, wheat, tomatoes, pepper, peaches, etc.), weeds, trees, insects (grasshoppers, ants, moths, spider, wasps), birds, flowers, animals, human beings, and etc.
2. **Non-living things** like soil, sun, buildings, clothes, dead leaves/branches, etc.
3. **Physical environment**

**E. Field activity**

The main classroom of the FFS is field, and most of their activities are at the place in production. As the field is considered as an ecosystem, the farmers practice identifying the functions of the organisms found in the ecosystem and how they interact with each other.

Through such approach they will be in a position to fulfil the following learning objectives:

- To build awareness of the relationships that exists between so many of the living and non-living things found in their environment.
- To appreciate that if one thing in this network of interaction is changed, it can influence all of the components of the ecosystem.
- To become more aware of the things and interactions that makes up the ecosystem of their fields - the "Agro-Ecosystem".
- To start to use their understanding and observations of the Agro-ecosystem as a basis for decision making about crop/livestock management.

The field activity steps:

1. Going in the fields by the FFS participants and bringing by themselves a notebook and pen. Going in the fields can be in sub-groups of 3-5 people, and each group will:
   - Look around as far as the eye can see, and as close as the eye can see;
   - List all the living and non-living things they can see;
   - Discuss how they are connected or how they affect each other.
2. After 20 minutes of observation, discussion and notes-taking, the farmers return to the place where they have the FFS session.
3. It is desirable each group to make a picture showing all the things that they observed and draw lines to show which things are connected or affect each other.
4. Each group to make a presentation in which they explain what they have drawn to the big group.

The farmers are going to learn in this process through answering questions with questions like what is this, what is that? It is a discovery-based learning which leads the learner to the answer by asking questions. Purposes of this process are:

- promoting learning by discovery and leads learners towards their own analysis;
- guide the farmers to critically analyse and make better decisions on their own fields.

The goal of discovery-based learning is to provide a more enlightened educational opportunity for participants. The methodology of learning is very important for achieving the goal of education. One important method is to ask questions that allow the participants to develop their own analysis and understanding. According this type of learning, the participants are stealing an opportunity for education if they reply directly with an answer. Therefore, the facilitator has to motivate and lead the farmers to ask questions.

**Tips for discovery based learning**

There are many ways to answer the question: What is this? For most of us, the natural response is to give the name of the object, often in a foreign language. The question is often answered by saying: Oh that is ….. or "This is …….? The result of this answer is that an education process has been stopped.

**A better way to answer the question is to ask a question:**

- Where did you find it?
- What was it doing?
- Were there many of them?
- Have you seen this before?

(Keep asking questions)

**NEVER GIVE THE ANSWER WITH A NAME, that only kills the question.**

**THE QUESTION IS A CHANCE TO LEARN.**

The idea is promote learning by discovery and to lead the person toward his or her own analysis.

**Example of output of field activity**

Nikola: What has caused this?
Jovan: Where did you find it?
Nikola: In my farm.
Jovan: Is it a big damage?
Nikola: Yes, it has affected half of my maize field.
Jovan: Where was the source of your seeds?
Nikola: From the local seed stockist.
Jovan: Was it certified seed?
Nikola: I assume so because it was packaged and labelled "certified seed" from Agrocommerce company.
Jovan: Had you experienced the same problems before?
Nikola: Yes, last year but not as serious.
Jovan: What did you do with the effected plants last year?
Nikola: I did nothing because I did not think it is serious.
Jovan: How was the size from the affected plants last year?
Nikola: They were smaller compared to the rest.
Jovan: This time how did this problem start? Was it immediately after germination or during growth stage?
Nikola: Well, the germination was quite good, but the problem started at knee height with 3 - 5 plants then within a week or two it spread to half the field.
Jovan: What do you think is the cause of this problem?
Nikola: I cannot say because I have been using same seed variety and from the same company.
Jovan: For how long have you been planting maize in this field?
Nikola: I cannot remember but I think for 8-10 years.
Jovan: Have you noticed any pests on the maize field?
Nikola: Yes, I been seeing some "Hoppers".

**Advice:**

Nikola: Now, this disease is the maize streak virus. It is transmitted by leaf hoppers from one plant to another. When the leaves are this way, the green matter is destroyed and therefore no food is manufactured by the plant – hence reduced yields.

## F. FFS curriculum


FFS curriculum guides realization of the activities to be undertaken during the learning period. The FFS are based on a solid tested curriculum, which covers the entire crop/livestock cycle. The field guides, study fields plus a collection of group dynamic exercises provide the basis for the field school curriculum. These materials are used according to their appropriateness.

Training in the farmer field school is experiential and discovery based. The training activities are designed to have participants who learn by doing. Most of the training time is spent in the field. Exchange of information and generation of knowledge is facilitated through sharing observations, brainstorming and long discussions.

A corner stone of the FFS methodology is agro-ecosystems analysis (AESA) which is the establishment by observation of the interaction between a crop/Livestock and other biotic and abiotic factors co-existing in the field. This involves regular (usually weekly) observations of the crop. Participants work in sub groups of 4 or 5, and learn how to make and record detailed observations including:

- Growth stage of the crop;
- Insect pest and beneficial numbers and weeds and disease levels;
- Weeds and disease levels;
- Weather conditions;
- Soil condition;
- Overall plant health.

The farmers then take management decisions based on these observations. An important aspect of FFS is helping and encouraging farmers to conduct their own experiments and to test out ecological crop management methods.

There are no standard recommendations or packages of technology offered. Farmer groups collectively decide which methods or aspects of crop management should be studied, and undertake action based on their own findings. In this way, farmers become active learners and independent decision-makers through a process of learning by doing.

These activities, together with a group dynamic activity and a special topic, which concerns what is happening in the field, form the core of the field school curriculum.

FFS day is divided into:

- AESA and its relevance to growth stage;
- Group dynamic activity;
- Special topic related to specific village level conditions or problems;

## G. FFS Field Guide and Schedule

It is very important to be prepared the FFS field guides which help the activities to be carried out smoothly within time and each activity to be perspective. If the guide is properly set, it will create precondition the farmers to understand the objective of each activity, it will enable that

everyone knows their role. It will help the facilitator as well to prepare the handling topics and to ensure that all necessary materials are available.

FFS meet for half a day or on agreed duration on the prescribed days. A typical day is divided into:

- Roll call/registering;
- Review of previous activities;
- Briefing on day's activities;
- AESA processing and presentation to larger groups by sub groups for decision making;
- Group dynamic activity in small or large groups;
- Special topic activity;
- Review of day's activities;
- Planning for next session;
- Announcements;
- Roll call/registering;


Table: Example of FFS Field Guide

| **Time** | **Activity** | **Objectives** | **Materials** | **Responsible persons** |
|---|---|---|---|---|
| 10.00 –10.10 am | Roll call, brief & Recap | Know who is present.<br><br>To remind ourselves of previous activities | Register<br><br>Previous AESA | Host team |
| 10.10 – 10.30 am | Field monitoring AESA | To check the progress of our enterprise by collecting data | Books, pens, ruler pencils and weighing balance. | All |
| 10.30 – 11.00 am | Processing of AESA and presentation | To synthesize, analyse the data and present it to the larger groups for collective decisions on what management action to take. | Flip charts, books, felt pens, board crayons ruler and masking tape | Facilitator host team. |
| 11.00 – 11.15 am | Group dynamics | - to energize (revitalize) the group<br>- to enhance participation<br>- to educate on group activities | | Host team/facilitator |
| 11.15 – 11.45 am | Special topic | To input on a special topic which will widen their scope of knowledge/skills. | Books, pens, pencils. | Facilitator |
| 11.45 – 12.00 am | Review of the day's activities and planning next session | To evaluate our achievements and to prepare adequately | AESA materials | Facilitator |
| 12.00 – 12.15am | Roll call Announcements | To note the late comers, absentees | Register | Host team |

**H. Developing the learning programme**

Once the FFS group is established, the FL and the BDS provider develop a programme (i.e. the curriculum for the FFS), based on the main problems identified. In collaboration with the group, the LF decides:

- what activities need to be undertaken to further explore the problems;
- to test the solutions;
- to identify what kind of outside assistance is needed.


The key activities to facilitate the learning process in the FFS are the AESA, field comparative experiments and special topics, where group discussion and short- and medium-term learning exercises are conducted.

Field trips or exchange visits with other FFS are also useful methods to enhance learning and Participants' motivation.

The selected priority must be the subject of a follow-up activity, such as a field comparative experiment, participatory learning exercise or special topic.

The learning programme should link activities to objectives and put them in a logical order that works towards addressing priority problems in the field. To ensure that all key topics are dealt within the FFS cycle, the topics for learning derive logically from the participatory planning activities.

The objectives of this activity are:

- to ensure that the learning programme tackles priority topics at the right time during the FFS cycle;
- to facilitate the selection of activities/strategies to enhance learning (e.g. AESA, field comparative experiments, special topics, exchange visits, etc.).


A logical guideline to assist the development of a learning programme, is provided here below:

- The list with priority problems should be displayed in a seasonal calendar in order to guide the planning. Each priority problem is discussed following the order in the calendar. The FFS group, in collaboration with the facilitator, decides what activities need to be undertaken to further explore the problem and test the solutions.
- Each FFS core activity is discussed and the group decides which is most appropriate for each problem. Sometimes a series of different activities can be planned (e.g. the implementation of a field comparative experiment) in which sessions on organic farming topics (topic of the day) and non-organic farming topics (special topics) need to be addressed. Field days, field exchange trips, invitation of farmers/experts, etc. can also be planned.
- In addition, dates of FFS sessions and the topics to be addressed need to be drafted on a flip chart and made accessible to all participants. The programme is not fixed but should be regarded as a flexible guideline that tracks the progress of the FFS and enhances learning and participation.

The plans should also cover topics such as:

- when the FFS will start?
- when sessions will begin and end (depending from the intensiveness of field's activities and outside temperatures)?
- which dates (weekly sessions are recommended)?, and
- when is each host team on duty?

# 8. Group dynamic exercises

There is a variety of team building exercises employed during the training that can be used to enhance group dynamics. The principal emphasis is on creating an environment in which individuals and the group feel free to experience, reflect and change. In particular games and exercises are valuable for:

- Relaxing the participants;
- Illustrating a lesson;
- Rejuvenating/Refreshing the group;
- Making people alert;
- Stimulating the flow of communication between strangers;
- Bringing private expectations and group reality closer;
- Encouraging everyone to participate and learn;
- Rounding off or introducing a session;
- Developing new skills;
- Exposing participants to new ways of judging their own actions, particularly in relation to the impact on group work;
- Developing participants into a closer knit team;
- Establishing a learning climate that is enjoyable as well as fruitful;
- Helping participant's experience what can be accomplished by working together as a team.

**When to use (employ) them**

- To rejuvenate the group/team
- As energizer
- To internalize concepts and lessons
- In conflict resolutions

This method is a suitable way for participants to learn the effects of their behaviour on other peoples and other people's behaviour on them.

**Comments:**
Problems may arise if what the participants learn about himself is distasteful to him. It is important that problems are shared-problem and not particular individual problem.

**Note:** For a group dynamic to be useful, it must be appropriate for the issue being addressed. Some known exercises are focussed to:

- energise participants;
- enhance participation;
- strengthen learning topics;
- strengthen group work and cohesion;
- assist in solving conflicts;

# 9. Developing PM&E plan

As the FFS approach is implemented to make positive changes, there is a need for monitoring the results and progress of the FFS group. The data generated in the problem analysis need to be properly recorded as they provide baseline information for evaluation.

The *participative monitoring and evaluation (PM&E) plan* is an effective management tool that can for conscious observations and analysis of situations and performances of the FFS.

The M&E also embrace participatory principles as a way to enhance learning and stimulate corrective actions. The PM&E is directly linked to the results of the participatory planning (the GAP) as this information provides the basis for continuous M&E.

The main objectives of PM&E are to monitor and evaluate the FFS (performance), monitor and evaluate the FFS sessions (process) and, to monitor and evaluate a field comparative experiment.

The guidelines to reach the above objectives are:

***I. Monitoring and Evaluating the FFS Performance***

The results of FFS performance can be used for different purposes and target different players (e.g. FFS participants donors, community and any other interested parties) in order to assess whether the FFS is achieving the set goals, to provide tools to demonstrate results (for donors, researchers, government, etc.) as well as to enhance transparency of the FFS.

The basis of a PM&E plan is the ”**6 Ws + 1 H”**:

1. **W**hy are we doing the PM&E?
2. **W**hat do I need to evaluate?
3. **W**ho should be involved in the evaluation?
4. **W**here should the evaluation activity take place?
5. **W**hen do you need to start and end, and when in the FFS cycle should the PM&E activities take place?
6. **W**ith what kind of resources you should evaluate?
7. **H**ow should participatory methods and tools be used?

***Why and What:*** PM&E is a management tool that can be used to control, educate, provide feedback, facilitate change, etc. Therefore it should be clearly identified the intended use of PM&E. For FFS, PM&E is used mainly as a tool to enhance learning and identify paths for further development. The identification of objectives are following step. Every FFS has specific objectives because of different conditions and different issues to be addressed. However, there are some basic goals each FFS aims to achieve.

***Who:*** The key actors in the planning and implementation of the M&E plan are the FFS participants. The facilitator will guide the process, making sure that all stakeholders are involved and the roles and responsibilities of each stakeholder are clear to all. It is recommended to invite also other interested stakeholders (e.g. representatives of the state authorities, researchers, neighbouring farmers, etc.) and to find out their opinion. This leads to constructive feedback and refresh views on how to develop the FFS successfully. In addition, it encourages stakeholders to be directly involved and to support the FFS.

***Where and When:*** PM&E is not an activity that has to be done only at the end of the FFS. This is a continuous process. It starts with the initial survey identifying the conditions for the establishment of a FFS. The situation before the establishment of FFS can provide points of reference. Thus, the achieved changes as a result of the FFS activities can be measured.

Continuous monitoring helps to check if the FFS is heading in the right direction. The PM&E starts during the participatory planning, continues during the implementation, and a final evaluation is done at the end of the FFS season. The location and intensity of the monitoring activities depends on the need for information, the type of information required, the budget and the time available.

***With what:*** It is vital to have the required resources available to undertake a PM&E. The PM&E activities on FFS level are incorporated in the FFS learning programme and are thus realized through the project. This includes the initial survey, processing of the final PM&E results and evaluation by project/BDS provider.

***How:*** The same participatory methods and tools used for the participatory planning can be adapted and applied to M&E. There some known some examples of participatory methods like sketches and maps, semi-structured interviews, focus-group discussions, activities analysis, change of success stories, direct observation and etc.

### *II. Monitoring and Evaluating the FFS Session*

It is important to track whether the FFS is achieving its aims and make corrections if necessary. This means monitoring activities in the daily FFS sessions.

With help of specific tools, the concept of PM&E and monitor of the FFS on a regular basis need to be introduced in order to allow the participants to:

- gain an overview of progress and to enhance confidence and motivation;
- draw lessons learned and stimulate corrective action, thus improving the quality of the next FFS;
- get an early warning of problematic activities and processes that will need corrective action.

Regular monitoring will also empower the FFS group by creating opportunities for them to reflect critically on their own progress, the direction of the FFS and to decide on improvements. Some of indicators can be like attendance, appreciation of the specific content of the session, performance of the facilitator, etc.

- ***Attendance/Punctuality***: Why is the attendance/punctuality of the group like this?
- ***Participation of all members***: Why is the participation of FFS group as it is?
- ***Lessons learnt***: Why do we feel like this about what we learned today?
- ***Quality facilitator***: What is the reason for the facilitator to perform like that?
- ***Group work***: Why do we value the work in teams as such?
- ***Level overall***: What is the reason for rating the overall level of satisfaction?
- ***Quality fieldwork***: Why do we feel like this about the field work?
- ***AESA/Experiment***: Topic of the day: Why we rated the special topic as we did?

Afterword, the group decides on the score to each indicator and discusses the reasons behind the scoring. If a low (or negative) score is recorded, solutions to improve the situation need to be sought collectively.

The evaluation wheel should be repeated at the end of every session. Evaluation wheels can be compared week to week to monitor how the FFS is going and to assess progress.

### *III. Monitoring and Evaluating a Field Comparative Experiment*

Experimentation is an important learning tool in the FFS. It enhances farmers' skills of observation, analysis and decision making. Learning how to evaluate the performance of different experimental treatments allows farmers to make well-informed decisions on new technologies.

For example, if the objective of the experiment is to compare the performance of three types of fertilizer treatment in a specific crop, the indicators can be yield, growth rate, resistance to disease/pests, labour requirements, cost of the fertilizer, gross margin, availability of the

fertilizer, etc. The indicators identified need to be evaluated throughout the experiment and recorded.

The evaluation of the experiment should be done during the AESA. To facilitate the evaluation, the FFS participants need to keep adequate records (in the AESA sheet and the members' notebooks).

After the establishment of the FFS, with the guidance of facilitators, the group meets regularly throughout the season, and carries out:

# 10. Organization of field days


During the period of running the FFS, field days are organized where the rest of the farming community is invited to share what the group has learned in the FFS. Usually, such field days could be or 2 per season. Farmers by themselves facilitate the event during this day.

Usually the FFS represent a small group of around 20 – 25 members (optimal number for learning with participatory approach) which is also divided in smaller sub-groups. The FFS has to contribute to overall development of the farming and to provide its contribution in the value chain as important part. Therefore, it is very useful and important to share the positive experiences with other members of the community in order the farming to become serious factor for sustainable development and building stable base for market access. Therefore, the FFS field days should be organized and sometimes could be combined with graduation. Key aspect is that farmers themselves facilitate during the field days.

**What is a Field Day?**

An event when farmers and facilitator show other people or the community what they have learned and the results from their PTD activities. The timing could be different, but there are recommendations to be hold crops/cattle, for example when there is still a standing crop/cattle, nearing maturity and sometimes combined with graduation.

**At the event, following activities ban be carried out:**

- Assembling and/or registration of field day attendants
- Introduction and Presentations about:
  - Objectives of the FFS;
  - Problems being addressed by FFS;
  - Layout of the results;
- Visitations to various plots/stations
- Socializing
  - Speeches;
  - farmer impressions;
  - folk and artistic media;
  - guest of honour;
  - presentation of organic products, local traditions, clothing, crafting, food and beverages;

Facilitators for the day are the farmer participants.

# 11. Exchange visits

Exchange visits to another FFS, an agricultural institution or an innovative farmer are educational tours. They encourage FFS members to compare the activities of different groups with their own and to exchange tested technologies and unique innovations.

# 12. Graduation

This activity marks the end of the season long FFS. The farmers, facilitators and the coordinating office usually organize it. The occasion is used to recognize the time put in the FFS by the farmers and facilitators and the farmers are awarded certificates.


This event has to be understood also as a forum, where the lessons learnt at the FFS will be passed to the public, administrators, and create interest to more farmers to join the next planned FFS in the locality.

At the event are also presented:

- Harvested results of field PTDs;
- The lessons learnt at the FFS.
- Certificates are awarded to participants of FFS.

Accompanying part are participation activities of various local actors, musicians and other community members or guests.

# 13. Phase post harvesting cycle

**1. Follow up of FFS activities.**

At the end of a learning cycle, the FFS normally continues. With the help of the facilitator, the group evaluates the FFS and develops an action plan based on the results of the evaluation.

Farmer run FFS, as they FFS farmer graduated now have the knowledge and confidence to run their own FFS.

In addition, new sessions (different topics or more in-depth learning of the specific topics), implementation of commercial plots or enterprises, linkages with researchers, extension workers and other FFS are planned.

Grants from donors are not always available for FFS follow-up activities. Self-financing groups are flourishing and other alternative funding sources, such as loans and private sector support, should be investigated.

Corresponding activity is follow up by facilitators. Occasionally the core facilitators will follow-up on schools that have graduated preferably on monthly basis. The core facilitators also backstop on-going farmer run FFS.

**2. Establish/create FFS networks.**

When there are several FFS in a region, FFS networks should be encouraged. Networking is a sustainable mechanism to support economic activities and the development of existing and new FFS. It initiates commercial ventures in all affiliated FFS, facilitates fundraising and helps to coordinate marketing activities.

# 14. Preparation and establishment of FBS

The process of establishment of FBS includes various modules. The following actions are proposed as possible in this process:

***Step 1: Selection of target area***

It will be good to be selected communities and farmers with a potential for and interest in the FBS concept. Therefore there is a need to be collected relevant information for the area. Through an analysis, it has to be assessed the capacity of the farmers towards business development.

***Step 2: Awareness creation***

The farmers and authorities in the municipalities in the region must have clear understanding of FBS. With the increased awareness for FBS benefits, it could be generated a willingness for participation in the business school process by the farmers. Identification of potential "lead farmers" should contribute easier acceptance of the institution FBS.

However, as FBS is complimentary school with FFS, so the already established FFS can be realistic base for establishment of FBS at the same production sites.

***Step 3: Farm Business School organisation***

The objective of this stage is to identify interested farmers and organize them into the farm business school. The step also includes setting rules for group management and a programme of meetings throughout the year. Guidelines should be discussed and agreed on collecting funds throughout the year through savings, membership fees or alternatively contributions from revenues. The funds are essential to sustain the farm business school in the future.

***Step 4: Needs assessment and problem/opportunity identification***

This involves extension workers and lead farmers in meetings with the participants to identify the topics of interest and problems that they face. It should combine needs assessment with an appraisal of problems and opportunities.

***Step 5: Planning***

Planning at programme level is necessary to ensure that there is a road map prepared for ease of implementation. The plan should include the priority location, second round sites, identification of participating farmers, the goals, activities, timing and responsibilities of key persons engaged and providing backstopping support. Action planning assists the farmer to achieve realistic goals and attainable targets in a timed sequence.

***Step 6: Implementation***

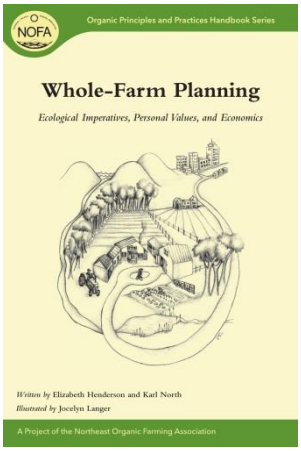
Once the plans are made they have to be put into action. The process of implementation also includes monitoring progress and reviewing performance. The process that should be followed is action-reflection-action. Progress could be monitored throughout the cycle through facilitator training workshops and carrying out monitoring surveys on changes in entrepreneurial skills and competencies of farmers.

Monitoring is vital for better management decisions by generating

vital information that should allow FBS administrators to:

- identify the major problems, constraints and successes encountered during implementation, through analysis of the data collected;
- adjust project activities, plans and budgets according to data generated through the use of M&E tools and methodologies;
- provide information for accountability and advocacy to the targeted communities, to the government agencies, as well to national and international donors involved.

***Step 7: Evaluation***




A final evaluation could be made at the end of the cycle. Any final evaluation should identify areas for future follow-up with participants, as well as ways to improve the training approach and materials and make them more context specific and culturally sensitive. Facilitators can use a variety of techniques such as SWOT analysis to help the farmer assess the success or failure of the business venture. An assessment of the profitability of the business is vital. The household identifies areas which can be improved in the next plan.

The trained LF, with technical backstopping from COPs, will provide training programme to the FBS at field level. They can rely on the prepared manual and the exercises books. The duration will be dependant from the nature of the selected crop by FBS participants.

# 15. Types of non-formal education approaches used in FFS

Key non-formal Education (NFE) Approaches used in the Farmer Field School learning include:

1. Sharing;
2. Case study;
3. Role play (dramatized sessions);
4. Problem solving exercises;
5. Panel discussions;
6. Group dynamics;
7. Small group and large group discussion;
8. Brainstorming;
9. Simulation game;


1. **<u>Sharing</u>** is process of freely exchange of knowledge, ideas and opinions on a particular subject among trainees and facilitators. The method is suitable where the application of information is a matter of opinion. It is suitable when attitudes need to be induced or changed. Trainees are most likely to change attitudes after discussion. The method is also suitable as means of obtaining feedback about the way in which trainees may apply the knowledge learned.

   The trainees may be led away from the subject matter or fail to discuss it usefully. The whole session may be vague. Trainees may become entrenched in their attitude rather than be prepared to change them.

2. **<u>Case study</u>** is when a history of some event or set of circumstances with relevant details is examined by the trainees. Case studies fall into two broad categories.
   1. Those in which trainees diagnose the case of a particular problem
   2. Those in which trainees set not to solve a particular problem

This method is most suitable when participants need to view a problem objectively or free from the pressures of actual events. It provides opportunities for exchange of ideas and consideration of possible solutions to problems the trainees will face in their work situation. It has to be watched if the trainees may get the wrong impression of the real work.

3. **Role play -** Trainees enact, in the training situation, the role they will be called upon to play in their job. They play the playing mainly for the practice of dealing with face-to-face situation, i.e., where people come together in the work situation. This method is suitable where the subject is one that is a near-to-life practice to the training situation. The trainees can practice and receive expert advice or criticism and opinions from fellow trainees in a "protected" training situation. This gives confidence and offers guidelines. The trainees get the feel of the pressures of the real-life situation. It has to be watched if the trainees may be led away from the subject matter or fairly to discuss it usefully.

4. **Problem Solving Exercise** - Participants undertake a particular task that should lead to a required result. The facilitator provides rules. It is usually a practice or a test of knowledge put over before the exercise. Before further information or new ideas are introduced the method may help to discover trainees' existing knowledge or ideas. Use problem-solving exercises with individuals or with groups.

   This method is used method when participants need to practice following a particular pattern or formula to reach a required objective. The trainees are on their own thereby ensuring a highly active form of learning. Using problem-solving exercises aim to find out the extent of assimilation of participants. There is a big room for experimenting and trying out things using this method for the imaginative facilitator. However, the exercise must be realistic and the expected result reasonably attainable by all participants or they will lose confidence.

5. **Panel Discussion (as a method for presenting case studies) -** This exercise is appropriate for assessing learning and participants' performance in trainers' training. It is also effective in farmers' training with 20-25 participants where group members share their learning/experiences through questions and answers. The activity help develop capability to communicate ideas and knowledge with other participants.

**Some tips about panel discussion**

- Divide participants into small groups of five members each.
- Write questions on the board to be answer by groups.
- A facilitator will serve as moderator, timekeeper and at the same time set the rule and regulations for the activity.
- Ask the groups to draw lots as to which one will be the first discussant and the first to act as panel of interrogators, and so on.
- Assign questions for each group to answer.
- After a group has presented its answers to their assigned questions, the panel of interrogators can ask questions related to the discussions/answers made.
- This questions and answer activity will go on until all groups have been able to present their part. While the activity is going on a panel of facilitators may rate the participants as to:
    - Answers and questions raised
    - Group and individual performance/participation

## 6. Group dynamics

This method is a suitable way for participants to learn the effects of their behaviour on other people and other people's behaviour on them. It increases participants' knowledge of how and why people at work behave as they do. It increases skills in working with other people and in getting work done through other people. This method is valuable in learning the skills of communication. Through carrying out the activities, two situation will appear:

1. The behaviour of each participant is subject to examination and comment by the other trainees.
2. The behaviour of the group or groups as a whole Is examined.

It could be challenge if what the participant learns about himself is distasteful to him. They may "Opt-out" if they feel turned off by the searching examination of motives. It is important that problems arising within the group are resolved before the group breaks up.

Tips:
- Divide participants into small groups, giving each group a particular task to accomplish and discuss. The ideal size for small group discussions is at least five and not more than ten members. Big group discussion should not exceed thirty members.
- Give every member of the small group the chance to share his ideas about the assigned task.
- Leaders that each of the groups choose lead the discussions.
- After a certain given time, as all groups to convene and process their discussion with the bigger group.

7. **Small group and big group discussion**

   This method is suitable when eliciting participation and sharing of experiences as well as ideas from individual in groups. It is easier for an individual to share his ideas with a small group than in a big group. This is true all the more when participants are not comfortable with the big group yet as in instances when the training program has just started. Sometimes, participants may feel intimated or threatened when asked to share their ideas with a big group. Thus, it becomes helpful to structure training's in such a way that small group discussions precede large group work / discussions.

Some challenges can happen with this type of activities, like:

- Some members of the group may impose on others, i.e., insist on their ideas.
- There is also a danger that some participants may use up much time in presenting their opinions. These situations may lead to others not having the chance to speak.
- The facilitator should always be sensitive to these behaviours and be able to handle the group so that each member is given a chance to be heard.
- Accept all opinions to show respect for individual members.
- It might be helpful if the facilitator will remember that there are different kinds of people, i.e., need to be encouraged to speak up or some; need recognition. It is his role to clarify inputs and tasks to avoid problems that may arise as a result of differences in personalities.
- Facilitators must maintain good judgement and not be swayed by opinions of any one of the group members.

**Tips**:
- A group of not less than five and not more than ten members should give the best results.
- Either in small groups or as a big group, give participants an issue or problem to be discussed about and deliberated on exhaustively.
- Accept all ideas during the discussion.
- After a thorough deliberation on the issue or problem, the entire group comes up with a consensus as a final output.

8. **Brainstorming** is suitable when tackling issues and problems that need or call for group decision-making. It is particularly helpful when participants are expected to actively join in the deliberation and share their ideas, experiences as well as knowledge about the issue on hand.

Some challenges to be watched:

- If the issue or problem is not clear to the group/s it is possible that participants will not be able to come up with what is expected of them.
- Discussions may move away from the topic.
- As in the small and big group discussion methods, some members of the group may

impose on others, i.e. insist on their ideas.

- There is also a danger that some participants may use up much time in presenting their opinions.
- These situations may lead to others not having the chance to speak.
- The facilitator should always be sensitive to these behaviours and be able to handle the group so that each member is given a chance to be heard and a consensus reached.

However, it is important that all opinions be accepted to demonstrate respect for individual group members.

# 16. Writing report

**Examples of Report format**
**Facilitator's format.**

**FFS Monthly report for (state month)**
**……**

**1.** Introduction

- Name of FFS
- Location of FFS
- Total Membership: Males, Females, Total
- Name of facilitator
- Date started
- Enterprises
- Treatments
- General conditions

2. Activities

**Tips: Six rules to help you write a report.**

1. Be precise – Don't describe, use measures and quantities when possible.
2. Add details – use concrete words that will build pictures in the readers mind
3. Use words that readers can understand.
4. Be direct – Use simple direct words.
5. Be timely – reports cover a certain period of time span during which activities are accomplished.
6. Begin from general to specific

| Wk No | Date | AESA No | Attendance M F T | Host team No./name | Field activity (planting, weeding etc.) | Special topic | Group dynamic |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |

3. Remarks/observations
4. Problems/constraints encountered.
5. Recommendations
6. Concluding remarks

Date and facilitators signature

**Note: the format can be arranged on one sheet of paper for ease of filling**

# 17. Tips and exercise for group - teamwork

The farmers must understand the importance of working together as a team. Why the farmers should work together as a team?

Brainstorming questions guide can be:

- What is a group?
- Can one person do the work of the group effectively?
- If a similar job is assigned to a group and the same to an individual, who will finish faster and more efficiently? Why?
- Why should group members work together as a team?


**Exercise:**

**Step 1**: One bag and group of articles brought by the trainer, as well items collected from the participants.
**Step 2**: All the articles are put one by one on the table.
**Step 3**: Each article is identified by name before being placed on the table.
**Step 4**: All the articles are then returned to the bag.
**Step 5**: One member of the group is requested to go out with one of the trainers and he/she lists the items from the bag he/she can remember (3 minutes).
**Step 6**: The rest of the group members with the other trainer to also list the items jointly.
**Step 7**: The two lists to be compared.
**Step 8**: Processing of the game:

- What happened in the game?
- Why couldn't one person remember all the articles?
- How does this relate to our FFS and us as a group?
- Why is it important for us to work together as a group?
- What have you learnt from this session?

**Step 9**: Conclusion- Emphasize the importance of working together

**The Dynamics of Group development**

In order the group to go through the process development and efficient activities, there is need for:

- Management skills, and
- Inter personal skills

In this process of group development, different stages and different issues have to be taken into account, like for example:

**Level 1: Formation**, where relevant stages and issues will be raised, like:

- Group to be formed;
- Structures to be established;
- How can different people work together?
- How the common problems to be identified?
- How to level their expectations?

**Level 2: Established group,** where:

- Leaders/lead farmers have to be chosen;
- The roles of the members to be assigned;

The following challenges can be raised:

- people have different ideas and leaders believe they know it all;
- most members are confused and not clear of their roles;

**Level 3:** Challenge situation as **dependency from assistance outside.** The members of group in most cases believe that group cannot accomplish its goals without help from the outside. Most of the members are able to identity their problems but expect other people to discuss and even solve the problems for them.

**Level 4: Reactive situation**. The group after identifying a problem to solve encounters difficulties and can react, for example:

- putting the blame on one another;
- putting initial blame on lack of outside help;
- Even blame the person who introduced the project.

**Level 5: Interdependent situation** is characterized with:

- The group works well with field workers or advisors;
- For a time it may need technical advice and how to expand the project;
- The problems are solved and FFS/FBS projects, as well organic farming, are successfully started.
- The work of the group is shared.

**Level 6: Independent stage** is characterized with:

- The group and its leaders work well with minimal outside assistance;
- They can identify and solve their problems and carry out FFS/FBS projects;
- They are able to identify and properly utilise assistance;
- They are able to assist others.