

## 6 FARM MANAGEMENT



Draft Version 1.0  
June 2011  
Ready for field testing

# IMPRINT

**Publisher:**

FiBL, Research Institute of Organic Agriculture, Switzerland, [www.fibl.org](http://www.fibl.org)

**Collaboration:**

- > IFOAM, International Federation of Organic Agriculture Movements, Germany, [www.ifoam.org](http://www.ifoam.org)
- > NOGAMU, National Organic Agricultural Movement of Uganda, [www.nogamu.org.ug](http://www.nogamu.org.ug)
- > FENAB, Senegal
- > OPPAZ, Organic Producers and Processors Association of Zambia, [www.oppaz.org.zm](http://www.oppaz.org.zm)

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Draft version 1.0, September 2011.

This is an interim version. Comments and recommendations for improvement are welcome.

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The production of this manual was funded by the Bill and Melinda Gates Foundation and the Syngenta Foundation for Sustainable Agriculture with the goal to promote organic farming in Africa.

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The African Organic Agriculture Training Manual is based on research funded by the Bill & Melinda Gates Foundation and the Syngenta Foundation for Sustainable Agriculture. The manual's findings, conclusions and recommendations are those of the authors, and do not necessarily reflect positions or policies of either Foundation.

Please cite this publication as follows:

FiBL (2011): African Organic Agriculture Training Manual. Version 1.0 June 2011. Edited by Gilles Weidmann and Lukas Kilcher. Research Institute of Organic Agriculture FiBL, Frick

ISBN 978-3-03736-197-9

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# 6 MANAGING AN ORGANIC FARM

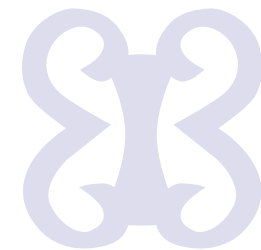
## Learning targets for farmers:

- › Recognizing the farm as an enterprise that focuses on reducing expenses and improving benefits from the farm
- › Learn how to manage a farm as an enterprise, which requires regular planning and record keeping
- › Understand the need to invest in the long-term productivity of the farm to ensure its survival
- › Understand the relevance of making the farm a self-reliant unit to minimize production and financial risks

## 1. Introduction

Management of an organic farm enterprise basically has the same underlying objective as any other business; it aims at improving the benefits to the farmer or group of farmers. This is generally done by following two approaches. First, organic farmers focus on reducing farm expenses by optimizing the use of the farm own resources. Secondly, they focus on minimizing production and financial risks, which may be caused by climatic stresses, pest and disease attacks, or price fluctuations.

One of the most valuable resources of an organic farm is the fertility of its soils, as it ensures the long-term productivity of the farm. While proper diversification of crops and animal products will improve the market opportunities and help to reduce production and financial risks. The farmer, as the manager of the farm enterprise, is at the centre of all farm activities. He/she is the overall decision-maker who determines the farm development goals and how well the farm will perform. He/she makes decisions on what to produce and where, how much to produce, what methods of production; where to sell and how, etc. However, in order to take the right decisions, he/she needs to do a proper assessment of the farms resources and potential, expenses, outputs and the resulting profit from the farm activities. This will be followed by proper planning, organising and monitoring of the farm activities in a continuous and cyclical process. The farmer, therefore, continuously needs new information and knowledge which he



can get by attending trainings, meetings and discussions with other farmers. It further requires him/her to be proactive to try and test new practices, varieties and breeds in order to continuously improve the farm.

### 1.1 Common limitations to proper farm management in Africa

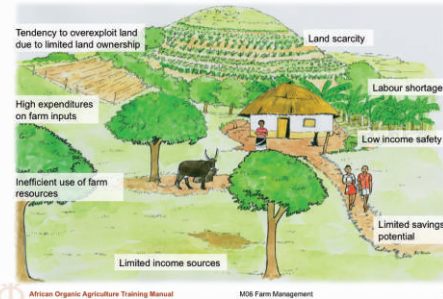
- › **Limited incomes sources on farms** - In most African societies, farming is done with the primary objective to generate enough food for household consumption. Any surplus is then sold to the market. The obtained money helps farmers to access products and services that the farm cannot produce: cloth, household and school items, etc. As African family-based farms tend to be rather small and growing limited options of nearly the crops, most farmers are not able to meet all their basic requirements from the farms. This is because they are normally affected by the same production and marketing risks.
- › **Limited saving potential** - Most farmers do not have the capacity to make savings that can enable them to invest in long term improvement of production conditions. The income from production is rather spent on household needs related to food, education, health care, and social commitments (i.e. marriages, funerals). This leaves little or no money for re-investment back into farm activities.
- › **Communal decision making** - Many African societies think and work communally. They make farming decisions together deciding what, when, and where to grow, and by whom. Through this interaction they learn from each other and develop trust. The side effect is though that such collective decision making limits the independence, and thus interest, of a particular farmer in implementation of innovations for improvement.
- › **Land ownership/tenure system** - In many areas of Africa, farmers do not own the land on which they produce crops or grow animals. Thus, instead of investing into long-term improvement of land productivity, they tend to over-exploit these surfaces, causing substantial damages related to overgrazing and soil mining. Moreover, farmers in this case cannot use such lands to access credit for loans or to use the land for activities with long term benefits like tree planting.
- › **Land scarcity** - is especially a problem in densely populated areas with little arable land. Under such conditions, farmers may not be able to produce





## TYPICAL CHALLENGES TO FARM MANAGEMENT

### Typical challenges to farm management



enough to make a reasonable living from field crops. Highly intensive and potentially more profitable enterprises like vegetable production, poultry keeping, honey production, etc. may be limited due to lack of experience, knowledge and money to invest.

- › **Labour shortage** - The increase in the number of school-going children, rural-urban migration and the AIDS epidemic have led to widespread scarcity of labour available in most rural areas. This is especially critical in crops like rice, coffee, etc where there is high labour requirement either during planting or harvesting. This implies that labour costs have risen to a level which may not be profitable anymore for a typical farm.

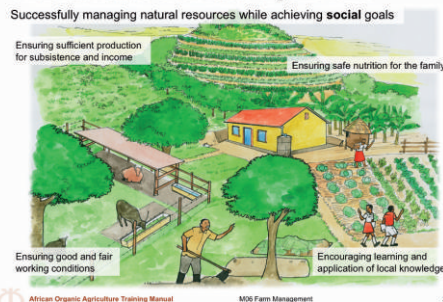
Although the above challenges may slightly differ between small and big farms, their effects to proper farm management remain the same.

This chapter presents key tools for proper management of a farm enterprise. It emphasizes the importance of proper analysis of the farm situation in terms of resources available, which form the basis for improvement of the farm into a productive and profitable short- and long-term organic enterprise.



## CHARACTERISTICS OF AN IDEAL ORGANIC FARM

### Characteristics of an ideal organic farm



## 1.2 Characteristics of an ideal organic farm

Organic agriculture aims at successfully managing natural resources to satisfy human needs while maintaining the quality of the environment and conserving resources. Organic agriculture thus aims at achieving economic, ecological and social goals at the same time:

1. Ecological goal: “How does the farm improve nature and survival of other organisms?”
2. Social goal: “How do other people benefit from the farm?”
3. Economic goal: “What benefits do I generate from the farm?”

### The ecological goal

The ecological goal basically relates to maintenance of quantity and quality of natural resources. Farming should be done in an environmentally-friendly manner, whereby the soil, water, air, plants and animals are protected and enhanced. Organic farmers pay special attention to the fertility of the soil, the maintenance of a wide diversity of plants and animals, and to animal friendly husbandry.



## Discussion on the key limitations to proper farm management

To understand the common limitations to proper farm management in the local context assess the local situation by asking the farmers the following questions, under the different themes:

**Sources of income:** What other income activities are you involved in besides farming?

**Money saving:** What do you think about saving?

**Decision making:** Who takes the overall decision on what is grown, where, how and by whom?

**Land:** Do you own the land on which you produce crops and animals? Is there enough land to expand production?

**Labour:** Do you have enough labour from your homes?



Important environmental goals are:

- › Prevention of loss and destruction of soil due to erosion and compaction.
- › Increasing the humus content of the soil.
- › Recycling farm-own organic materials and minimizing use of external inputs.
- › Promotion of natural diversity of organisms - being a criterion of a balanced natural ecosystem.
- › Prevention of pollution of soil, water and air.
- › Ensuring husbandry that considers natural behaviour of farm animals.
- › Use of renewable energy, wherever possible.

To achieve these goals organic farmers maintain wide crop rotations, practice intercropping and cover cropping, plant hedgerows and establish agro-forestry systems. They further avoid the use of synthetic fertilisers and pesticides as well as genetically modified organisms (GMOs), which have proved to have negative effects on nature.

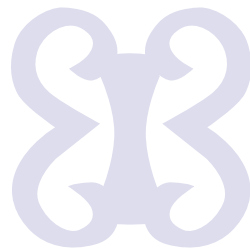
### **The social goal**

Organic farming aims at improving the social benefits to the farmer, his/her family and the community in general.

Important social goals include:

- › Creating good working conditions for all.
- › Ensuring a safe nutrition of the family with healthy foods.
- › Ensuring sufficient production for subsistence and income.
- › Encouraging fair and conducive working conditions for hired workers.
- › Encouraging learning and application of local knowledge.

From an organic perspective, at the household level fair participation in farm activities of all family members and proper sharing of the benefits from the farm activities is essential. On community level, knowledge and experiences should be shared, and collaboration strengthened in order to obtain higher benefits.

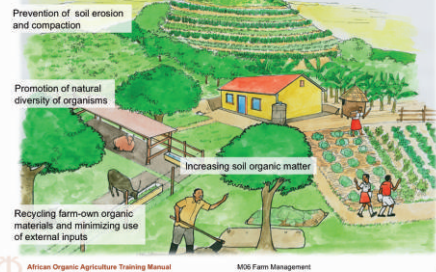




## KEY GOALS OF AN ORGANIC FARM

### Characteristics of an ideal organic farm

Successfully managing natural resources while achieving ecological goals



### The economic goal

In an economic sense organic farming aims at optimizing financial benefits to ensure short- and long-term survival and development of the farm. An organic farm should not only pay for production costs, but also meet the household needs of the farmer's family.

Important economic goals include:

- › Satisfactory and reliable yields.
- › Low expenditures on external inputs and investments.
- › Diversified sources of income for high income safety.
- › High value added on-farm products through improvement of quality and on-farm processing of products.
- › High efficiency in production to ensure competitiveness.

Organic farmers try to achieve this goal by creating different sources of income from on- and off-farm activities. Usually different crop and animal enterprises are adopted simultaneously in a mixed production system. The target also includes being more self-sufficient in terms of seeds, manures, pesticides, food, feeds, and energy sources and thereby minimizing cash outlay to purchase off-farm items.

## 2. Perceiving the farm as an enterprise

Most small-holder farmers in Africa do not treat their farms as businesses. In other words, they grow crops or animals the way their parents did or the community has been doing for generations. Proper reflection and setting of farm goals for farm development to meet present and future income needs is very rare.

Treating a farm as an enterprise involves careful analysis of the farm resources and potential in order to understand the full potential of the farm. This is then compared with the way the farmer is currently utilising those resources to identify any gaps or necessary improvements. This will be followed by the careful selection of crop and animal enterprises and practices, needed to improve short- and long-term productivity of the farm.



### Group work: Drawing a farm map indicating the key resources

Show the farmers a sample farm map (check transparency 4) and explain to them, how to draw a farm map. Then organise them in groups of 2 to 3 persons and provide them with pencils and paper and let each farmer draw a map of their farms indicating the key resources.

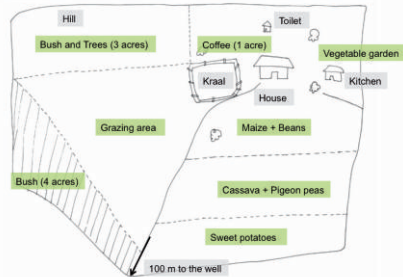






## A SAMPLE FARM MAP INDICATING KEY FARM RESOURCES

Example: farm map indicating the key resources



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## 2.1 Mapping of farm resources

Resource mapping is the process of identifying of all the physical, land and water resources available on their farms. This is done by drawing a clear map of the farm including all its crop fields indicating the type of crops grown and the area covered, soil types, bushes/forests, water sources, hills, valleys, and all features like roads and buildings. Additionally the amount of labour available, total size of land, access to water, tools, number and types of animals are identified and listed.

The exercise of resource mapping helps farmers to:

- i. Identify the kind of resources available on their farms.
- ii. Realise how much of the resources are currently being utilised.
- iii. Understand quantities of resources entering (inputs) and leaving (outputs) the farm every season.
- iv. Plan how to benefit more from utilised and unutilised resources in order to improve the farm, for example allocating labour more efficiently to various farm enterprises.

## 2.2 Evaluation of the present farm and defining goals

After identifying all resources available on the farm, its present status can be evaluated in relation to the ideals that organic agriculture proposes and what farmers may want to achieve.

By comparing the characteristics of an ideal organic farm and the current situation of the farm, farmers are able to set both short- and long-term goals for their farms. The long-term goals can refer to the any of the following general criteria:

- > Diversifying sources of income
- > Minimising dependency on external inputs
- > Improving level and safety of yields
- > Efficient use of resources such as labour and area
- > Value addition on the farm
- > Improving profitability of the farm



### Discussion/Group work: comparing the current farm with development goals

Take an example of a farm map and the corresponding list of resources, and discuss with the farmers, what needs to be done in order to improve the farm towards an ideal organic farm. Record all the recommendations and help them to set short- and long-term goals for improving the farm. Then let the participants discuss in groups of 2 to 3 persons, what needs to be done to improve their individual farms. What could be short- and long-term goals for improving their farms?





Examples of specific short-term goals include:

- › Introducing other crops on the farm to meet crop rotation and intercropping requirements.
- › Expanding on the area under production of crops and to utilise labour more efficiently through better planning.
- › Introducing animals to the farm in order to have an on-farm source of manure, and increasing income sources on the farm.
- › Establishing enough on-farm sources of food, feeds, seeds, manure, pesticides or firewood/energy sources so as to minimise off-farm purchases.
- › Constructing a farm store in order to add value to farm products so as to increase income and profitability.
- › Initiating on-farm or off-farm non-agricultural activities that will increase income.

### 2.2.1 Evaluating the current profitability of the farm

The evaluation of the current profitability of the farm is necessary, when one of the goals of the farm is to improve profitability. This involves comparing the amount of money spent on various production activities on the farm (expenses) and the money received from the outputs from the farm (incomes). The difference between the expenses and income will indicate how much money the farm is currently making (profits).

The total profit of the farm is determined by summing up all the incomes that are generated from the different on-farm and off-farm activities minus the expenses needed to perform these activities. In this sense, the profit of the farm represents the amount of money that the farmer is left with, from the total amount he/she receives from various sources and what was paid out for all the work, materials and services used on the farm. From this profit, the farmer is able to pay for household expenses, make investments, and save part of it.

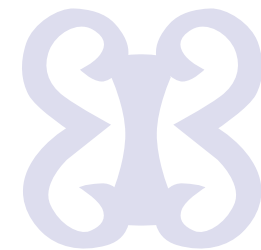
In addition to financial profitability, farming (and especially organic farming) may offer to the farmer and his family many other benefits such as satisfaction, a healthy living and others. These benefits are, however, difficult to calculate in terms of money. Although they are not included in the calculation of the current profits from the farm activities, they will greatly contribute to the future profitability of the farm.



#### Individual exercise: Evaluation of sources of income

Let each participant identify the different sources of income on their farm and the uses of the income of a season. Each participant should note his/her results on a piece of paper including the amount of money for each source.

Collect the notes and pin them on the wall. Select a few papers and use them to determine the amount of profits that the farms are making.





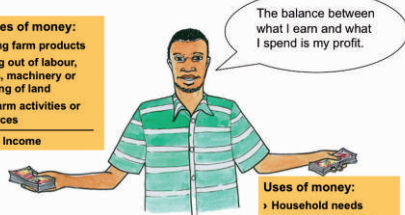
## CALCULATING FARM PROFIT

### Calculating farm profit

#### Sources of money:

- › Selling farm products
- › Hiring out of labour, tools, machinery or renting of land
- › Off-farm activities or services

Total = Income



The balance between what I earn and what I spend is my profit.

#### Uses of money:

- › Household needs
- › Farm variable costs
- › Farm fixed

Total = Costs

**Profit = Income – Costs**



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### Main sources of income (money) for the farm include:

- › Selling farm products like crops, animals, animal products (e.g. milk, eggs), seeds, other planting materials, manure, mulching materials or other farm products (e.g. timber, firewood, charcoal, bricks).
- › Hiring out of labour, tools, machinery or renting of land.
- › Charges and donations collected from visitors to the farm.
- › Off-farm activities or services like brick making, charcoal making, harvesting of wild products, etc.

### Main uses of income (money) on the farm include:

- › **Household needs** - These are costs associated with the well-being of the farmer and his family, e.g. food, water, health, education, accommodation, clothing, entertainment, etc.
- › **Farm variable costs** - These are costs that the farmer pays for whenever he needs to perform an activity or to increase production. Variable costs include cost of seeds or planting materials or animals to keep, manure, mulching materials, labour (including family labour), fuel, packing materials, annual or seasonal land renting, hiring of equipment, etc.
- › **Farm fixed costs** - These are costs that the farmer pays for an item once, but which he continues to use for a longer period of time. Farm fixed costs include rent (if land is hired) or purchase of land, farm buildings, machinery, tools, etc.

## 3. Investing in the long-term productivity of the farm

The productivity of a farm depends on several factors (e.g. farm output, production risks, costs of production, access to markets). This implies that the productivity of the farm can be improved through any of the following strategies:

- › Increasing crop and animal products from the farm;
- › Minimizing the potential risks to crop and animal production;
- › Adding value in order to obtain better prices or accessing premium markets;
- › Reducing production costs especially for farm inputs;
- › Engaging in other activities to supplement farm income.



### Discussion: How can organic farming improve the productivity of the farm?

Using the same examples of farms used in section 2.2, ask the participants to identify how organic farming can help to improve such farms. List all contributions and guide the selection of specific contributions from organic farming before introducing the general discussions below.



Adoption of organic farming helps to increase the chances of increasing the productivity of a farm through the following strategies:

### **Reducing production risks**

The potential negative implications of drought, pest, disease or parasite damage and postharvest losses are minimised through organic farming. Organic farming encourages crop and animal enterprise diversification, building up soil fertility, and limited reliance on external inputs which together minimises the production and financial risks.

The income of many small-holder farmers mainly depends directly on the sale of the harvest of crops and/or animal products. If prices for these commodities drop, these farmers inevitably face problems. Even with steady prices, large losses can occur when yields suddenly drop, for example due to pest or disease incidence which could not sufficiently be controlled. Highly diverse organic farms with a range of crops will suffer less yield fluctuations. If one crop fails, another crop will be harvested to make up for the loss, and in case market prices fall, there is enough security from the other enterprises. Organic farms employ another risk management strategy of lowering production costs by substituting the buying of most off-farm inputs with on-farm inputs.

### **Improving overall production**

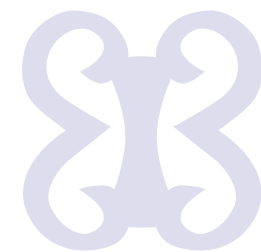
In organic farming, total farm production is primarily improved by using carefully selected and tolerant crop varieties and animal breeds, which give good yields under local conditions. Crop yields are also increased through better soil fertility, pest and disease management. Mixed cropping is often seen as a tool enabling more efficient use of space, nutrients and water, and as a result higher overall harvests.

Another approach to improve overall production is to intensify production. This is commonly done by increasing nutrient uptake, especially where soil fertility is limiting crop yields. Investment in compost production contributes to better soil fertility and plant nutrition. In case spare green biomass is available, integration of animal husbandry in the farm would result in intensification, as it provides meat, milk and manure. Animal production might be further improved by optimizing the diet, for example through introduction of leguminous crops to enhance protein intake and better housing to better control parasites and diseases.



### **Discussion: Assessment of production risks**

Determine with the farmers the factors that are relevant to assess production risks. Discuss with them the level of the risks and the possibilities to reduce these risks on their farms.



Increased mechanisation may also be required when the land area under farming is enlarged. Otherwise, intensification might be achieved through the introduction of irrigation. If water is scarce, flexible sprinklers or drip irrigation might be a good strategic investment. Final production can also be improved by reducing losses during crop growth, harvest and in the postharvest process.

### Enhancing the value of farm output

In order to increase the market value of the farm products, farmers can adopt different strategies:

- > Adopting more profitable enterprises like vegetable production, dairy, poultry or piggery production, so long as feed and management requirements are suitable.
- > Improving the quality of the products by investing in good storage facilities where produce can be stored to reduce postharvest losses and benefit from off-season prices, which are usually considerably higher.
- > Implementation of processing and storage activities may go hand in hand with accessing new and better markets. Simple on-farm processing activities like threshing, milling, fermenting, grading, cleaning, etc., if well implemented, can increase the value of farm products. If the farmer can make more investments, bigger processing activities might be started such as food processing making jams, dried fruits, pickles or processing milk into butter, cheese, ghee, yoghurt, etc.
- > Specific certification such as organic or fair trade certification, can give higher prices, especially on export markets.
- > The type of market where the produce is being sold will influence the price. In many cases, farmers get exploited by middle men who pay unfair prices. If this is the case, direct marketing of products can be an option. To sell to big wholesalers, a regular supply of items is needed. A single farmer may not be able to provide a sufficient quantity to the wholesaler. Therefore, forming or joining an outgrower producer scheme may be a good option to access a better market and gain more power in price negotiations with traders.

### Reducing expenses where possible

Organic farming aims at closing nutrient and energy cycles and making best use of farm-own resources for highest possible self-sufficiency. Organic farming thus tends to be a low external input agricultural system. This approach includes:



#### Discussion: Assessment of potential for improving overall farm production

Determine with the farmers the potential for improving overall farm production. Which factors are limiting production? Are there any sustainable, low cost and low risk approaches to improving production?





## STRATEGIES TO IMPROVE LONG-TERM PRODUCTIVITY OF THE FARM

**Strategies to improve long-term productivity of the farm**

- Reduce production risks:**
  - › Diversification
  - › Build soil fertility
  - › Reduce external inputs
- Improve overall production:**
  - › Use improved adapted varieties
  - › Improve soil fertility
  - › Ensure proper pest and disease management
  - › Integrate animal production
- Enhance value of farm products:**
  - › Adopt profitable enterprises
  - › Improve product quality
  - › Establish storage and processing facilities
  - › Obtain organic certification
- Reduce expenses:**
  - › Produce own manure
  - › Produce own seeds and planting materials
  - › Make own pesticides
  - › Share equipment and machinery

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- › Using locally available plants to prepare own botanical pesticides.
- › Producing and multiplying own crop seeds, seedlings and other planting materials.
- › Using locally available sources of manures, including waste from local agricultural processing plants, and keeping own animals for manure and other benefits. Use of kitchen waste, pruning from trees and hedges as either compost or mulching materials, will also increase manure sources on the farm.
- › Growing own food for the farm family needs and fodder for the animals.
- › Sharing equipment and machines with neighbours or as a farmers group where the initial cost of buying the equipment can be obtained through a group loan.
- › Using locally available materials for construction of buildings and farm structures.
- › Developing labour-saving production methods, such as growing cover crops to reduce amount of labour for weeding.



### Discussion: Analysis of the value of the farm products

Analyse with the farmers the value of their farm products. Are there possibilities to increase the value? Discuss different options together.



### Discussion: Analysis of farm expenses

Reflect with the farmers the expenses identified in section 2.2. What is the share of the income that goes to farm expenses? Are there any possibilities to reduce any of these incomes in order to increase income?



## PURPOSE OF PLANNING

**Purpose of planning**

What the farm is like now. → Cyclical planning → What we want the farm to become!

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## 4. Cyclical planning and monitoring of farm activities

The farmer as the manager of the farm enterprise holds the vision of the farm (i.e. what the farm should become in future). The first key role of the farmer is that of decision making, which involves choosing what should be done on the farm, where, when and by whom.

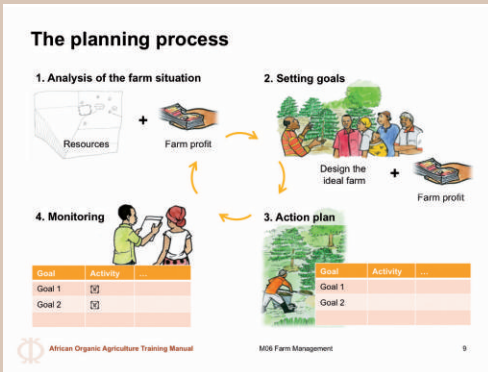
With a proper understanding of the farm resources and potential, the farmer is able to set goals of what he wants the farm to become. These goals will only be achieved through implementation of a given set of activities which should be properly monitored all the way. From the implementation, the farmer will gain experience and knowledge that will help him to set new goals and the process starts again. This is called ‘the cyclical planning process’. It is a continuous process performed to ensure that the farm is guided from ‘what it is’ to ‘what I/we want it to be’.

Proper planning is one of the key management aspects that need to be regularly practiced. It provides a road map and direction for transforming the farm from the current to a desired farm situation or to maintain the route towards a chosen goal. Planning refers to the process of preparing a set of interrelated activities to be implemented within a specific time frame and the necessary re-





## THE PLANNING PROCESS



sources, needed to achieve the desired situation. The aim is to have an organized and consistent way of allocating resources among the different enterprises to achieve the best results and minimize wastage and redundancy.

The result of the planning process is the 'farm plan', which acts as a guide for carrying out the required activities to achieve desired results and effect desired change.

The farm planning process includes the following steps:

### 1. Analysis of the current situation

This step is what is discussed already in section 2 but specifically sections 2.2 and 2.3 whereby the current production situation and profitability are analysed.

### 2. Setting up goals

The most important part of the farm plan is to be clear of what the farmer, the group of farmers or the community want to achieve. That is, the purpose and expected outcome over a specific period of time. It includes the expected change that the farmer or group of farmers want to achieve, after analyzing the present situation. Therefore, the goals/objectives should be made specific and achievable within the farm situation and the given time frame. The goals discussed in section 2.2 can be used.

### 3. Identification of specific activities and innovations

From the goals set in (b) above, clear and specific activities should be identified. The activities demonstrate how the goals will be achieved.

### 4. Schedule of implementation

The plan should also indicate a timeframe when the different activities will be conducted. This should be done in the sequence indicating which activities will be done first and last.





## 5. Plan the persons in-charge and the labour requirement

It is also necessary to identify the responsible individuals in charge of the different activities identified in (c) above. The persons indicated should have the knowledge or ability to perform the activity or should be properly trained to understand the task he/she is responsible for.

## 6. Budget and resources needed

The costs associated with the planned activities and any other resources needed like labour, or machines should be identified. It should be indicated whether these materials needed will be purchased, shared or hired.

The farm plan should be made simple for the farmer to understand and implement. If a detailed plan is needed (e.g. for borrowing money), then you should seek assistance from an adviser for a more detailed business plan. Further information is also available in the Marketing and Trade module).

### Group work: Farm planning exercise

Select any of the examples of farms used in section 2.2 to be used and demonstrate to the participants how to develop a farm plan following the steps below:

- > Analysis of the current situation - what is the current situation of the farm(s)? Use the analysis from section 2.
- > Setting up goals - what do we want to achieve? Use the goals set in section 2.2. For example, the goal is to introduce a dairy cow to provide milk and manure.
- > Identification of specific activities to be done - how will the goals be achieved? For example, the activities for the goal of introducing a dairy cow include looking for knowledge of locally adapted breeds, types of fodder, the cost of acquiring the cow and treating common diseases from other farmers or the local extension adviser; Planting enough fodder grass and legumes; Fencing off the paddock where the cow will be grazing; Building a cow shed where the cow will be kept during the night; Building or purchasing a feed and water trough.
- > Schedule of Implementation - when should the activities above be done?
- > Persons-in-charge - who is responsible for what?
- > Budget and resources needed - how much money and other materials are needed and where will you obtain them from?







## A GENERIC FARM RECORD FOR EACH PLOT

### A generic farm record for each plot

Farmer name: \_\_\_\_\_ Year: \_\_\_\_\_ Crop: \_\_\_\_\_ Area under crop (acres): \_\_\_\_\_ Intercrops: \_\_\_\_\_

Date	Activity	Labour		Other Expenses (inputs)			Crop Harvest	
		Description of activity	Labour days	Cost/day (Shs)	Item	Quantity(kg)	Cost	Quantity (units)
12/2					Seed 50	2000		
15/3	Ploughing	6	40					
30/3	Planting	5	40					
Average labour rate value: 20 Shs/day		Intercrops harvest value = D						
<b>Total</b>								



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The results of the above activities can be summarized in a table as follows:

Goal/project	Activities	Indicators	Time frame	Person in-charge	Budget and materials
1.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.
2.					
3.					

Thereafter, let each participant develop a farm plan for his/her farm, which should be refined by the trainer individually with each participant. At the end of the session, each participant should have a plan of activities that he/she is going to implement to improve their farms.

## 4.2 Record keeping as a basis for proper monitoring

For proper monitoring of the farm plan developed in section 4.1, record keeping is very important. For certified organic farms and those under conversion, record keeping is compulsory. Specifically, records are needed related to the following areas:

- > Sources and uses of money on the farm, as described in section 2.3
- > All quantities of inputs used on the farm and the quantities of harvests

Records can be kept either per plot (as in transparency 9) or inform of a farm diary (as in transparency 10) to record daily activities on the entire farm. Whichever documents are used, it is recommended to record as much detail as possible.





## FARM DAIRY

### Farm diary

Date	Activity	Quantity	Person responsible



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Farmer name:    Year:    Crop:    Area under crop (acres):    Intercrops:

Date	Activity	Labour		Other Expenses (inputs)			Crop Harvest	
Day/month	Description of activity	Labour days	Cost/day (Shs)	Item	Quantity (kg)	Cost	Quantity (kg or litres, etc.)	Value (Shs)
12/2				Seed	50	2000		
15/3	Ploughing	6	40					
30/3	Planting	5	40					
Average labour rate value: 20 Shs/day					Intercrops harvest value = D			
Total								

Date	Activity*	Quantity	Person responsible

### Recommended further readings

- > FAO, 2009. Business management for small agro-industries. <ftp://ftp.fao.org/docrep/fao/011/io499e/io499e00.pdf>
- > FAO, 2007. Market-oriented farm management for trainers of extension workers. Africa. Module 2: understanding the farm setting; module 4: farm management tools; module 6: planning. [www.fao.org/docrep/011/a1298e/a1298e00.htm](http://www.fao.org/docrep/011/a1298e/a1298e00.htm)
- > FAO 2009. Course on agribusiness management for producers' associations [www.fao.org/docrep/011/io499e/io499e00.htm](http://www.fao.org/docrep/011/io499e/io499e00.htm)
- > Profitability analyses; for small scale farming in Southern Africa. [www.lutz.se/files/sccbooks/profitability.pdf](http://www.lutz.se/files/sccbooks/profitability.pdf)

