



Farmer Business School

Production System of Arabica Coffee, Plantain and Maize

Training Notebook and Workbook – Cameroun

1st edition June 2026

My name :



Ministry of Foreign Affairs



In cooperation with



FOREWORD

The **Farmer Business School (FBS)** approach was developed for cocoa production systems in 2010 by the Sustainable Cocoa Business (SCB) Project¹ of the German Development Cooperation with Sub-Saharan Africa and local partners in Ghana, Nigeria, Côte d'Ivoire and Cameroon. With support from the German Federal Ministry for Economic Cooperation and Development (BMZ), the World Cocoa Foundation, the Central Bank of Nigeria and the European Union, more than 480,000 cocoa farmers, 29% of whom are women, have completed the training. Other development programmes have developed more than 80 curricula for 34 flagship products other than cocoa in 25 African countries. By January 2025, the total outreach in Africa has exceeded 1.9 million smallholder farmers.

Following the encouraging results of this approach, it is now part of the extension tools used by state structures in Cameroon as well as various producer organizations and NGOs.

The “coffee” value chain is a source of income and employment for young people and women. This tool will enable the actors concerned to professionalize their activity.

The Agri-Business Facility for Africa (ABF) provided the economic analysis tools and reference material for adaptation and supervised the work on this training manual for the context of Cameroon, specifically for the Arabica coffee production areas.

FBS trainers follow a special qualification programme that includes classroom training and apprenticeships with farmers in order to train producers in accordance with the principles of discovery-based adult learning and FBS quality standards.

Only Farmer Business School trainers who have completed a special qualification programme lasting several months are allowed to train producers in accordance with quality standards. This approach, together with a computerized monitoring system, ensures the efficiency, quality and effectiveness of implementation in line with the FBS quality standards

Ask for your FBS participation certificate with serial number and signature!

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I TRAINING WORKBOOK

Introduction to the Farmer Business School

What are the benefits?

The lessons taught at the Farmer Business School will allow you to become a better entrepreneur who:

- Take advantage of good agricultural practices and market opportunities to increase income.
- Plan and adapt his production to assure food security for their families.
- Target decisions and investments in planting, replanting or regeneration of coffee trees.
- leads professional negotiations with buyers, input suppliers, credit institutions, and landowners.
- Manages well financial means and credit

Planification



M1

Is farming a business?

Units



M2

Know the units to know your assets

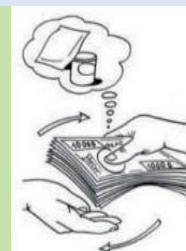
Nutrition



M3

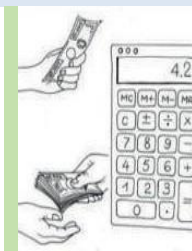
Manage the farm for enough food

Economics of current techniques and GAP = Decisions for higher income



M4

Money out, money in, know Whether you do good business



M5

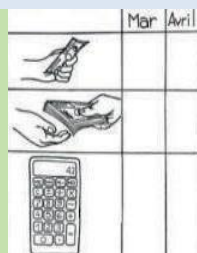
Decisions for more income



M6

Seize opportunities to diversify your farm enterprises

Financial management



M7

Manage money throughout the year

Financial department



M8

How to get good financial services

Quality of Coffee



M9

Make more money with quality coffee

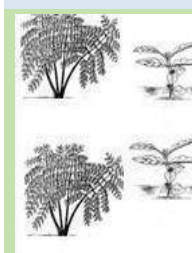
Producer Organisation



M10

Benefits of Membership in FO

Investing in Replanting



M11

Investing in replanting of coffee

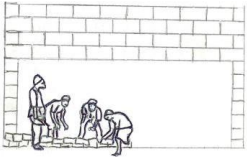


M12

An entrepreneur in practice

Module 1: Is farming a business?

What examples of businesses do you know of?

Examples of businesses	Starting and end of activities	Capital requirements	Money in
Construction business 	one can start when you have a contract with a client. One must respect the terms and conditions of the client. One construction site follows the next	one needs capital for the machines, materials and employees.	Generates income when a project is completed.
Commerce 	One can start and stop commerce at any time .	Capital is needed to purchase goods and pay employees.	Gives income each day all year long
Processing of agricultural products 	Processing can begin at any time if the equipment, raw materials and market are available. Processing stops if raw materials and markets are no longer available.	Capital is needed to purchase raw materials and equipment and to pay employees.	Gives income each day all year long
Agriculture 	Agricultural work must begin at the start of the rainy season. Cultivation work cannot be stopped before the harvest.	Capital is needed for tools, equipment, inputs and to pay workers	Gives income at the moment of sales after harvest

What do you need and use to produce? (Collect examples)

Inputs	Tools and equipment	Labour	Money	Land
Seeds Insecticide fungicide	Machete, hoe Pulveriser, drier	Family work force Paid workers	Own money Credit	Own land Rented Share - cropping

N.B.: Only if necessary, minimal use of insecticides and fungicides using a sprayer is recommended.

Main lesson

- Farming is a business like any other. It is a productive activity aimed at making profit (earning more than you spend) to meet household needs.
- The agricultural entrepreneur (man or woman) plans and organizes to have the inputs, tools, labour money necessary for the production at the right time.

What do you need to know if you want to do good business in agriculture?

➡ Soil ➡ Relief ➡ Hydrography ➡ Climate (rainfall patterns, temperatures) ➡ Vegetation	➡ Market ➡ Road networks ➡ Distance from point of sales to point of production ➡ Market prices ➡ Availability of inputs ➡ Professional organisation ➡ Supervision ➡ Processing unit	➡ Obligations ➡ Land tenure system ➡ Diet system
This is the natural environment compatible with the chosen crop	This is the technical and economic environment	It is the social environment

Agricultural product markets	Input and equipment markets
➡ What product quality is demanded on the market ➡ Comparison of market prices ➡ Who needs the product and wants to buy it ➡ Market locations	➡ At what prices are inputs and equipment sold ➡ Comparison of input prices ➡ Places of sale ➡ Who sells the equipment ➡ The quality of inputs

How are agricultural product prices changing?

Agricultural product prices change from <u>season to season</u> • When there is an abundance of produce, agricultural product prices are lower • In times of scarcity (e.g. during dry periods), agricultural commodity prices are higher	Agricultural commodity prices change <u>from year to year</u> • A product that more people need will see its price increase from one year to the next • A product that is produced and sold in abundance will have a price that decreases
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How can the effect of price changes be reduced (price reduction)?

- Agricultural entrepreneurs (men or women) ensure that they produce by reducing production costs in a reasonable manner in order to achieve their production objectives.
- Agricultural entrepreneurs (men and women) ensure high productivity by following recommended good agricultural practices (profit is not only determined by price, but also by productivity and quality!).
- Agricultural entrepreneurs (both men and women) ensure that their agricultural businesses are diversified.

Main lesson

- To do good business, agricultural entrepreneurs (men and women) need to understand their socio-economic environment, stay informed about prices and compare them.
- This enables them to plan production and make decisions about purchasing inputs, equipment and sales.

Module 1.1 : Crop calendar for planning coffee production

The task of the entrepreneurs during the season	Jan	Feb	Mar	Apr	Mai	June	July	Aug	Sept	Oct	Nov	Dec
Manual weeding 1												
Application of herbicide												
Manual weeding 2												
Application of base fertilizer												
Spraying of foliar fertilizer												
Maintenance (Pruning, thinning and selective harvesting)												
Application of insecticide												
Cherry harvest												
Transportation of fresh cherries												
Fermentation (wet processing)												
Washing												
Pulping												
Drying												
Hulling												
Sorting,bagging and storage												
Transport and marketing												

N.B.:

1. With climate change, we can refer to the CICC document on coffee phenology in the appendix.
2. For plots that are more than 25 years old, please refer to Module 11 for the crop rotation schedule relating to replanting

Module 1.2: Agricultural calendar for planning maize production

Work during the main season is indicated with a square..	■
Work during off season is indicated with a circle.	●

The task of the entrepreneur during the season	Jan	Feb	March	Apr	Mai	June	July	Aug	Sept	Oct	Nov	Dec
 Clear/clean the field or plot												
 Buy seeds and fertilizer												
 Ploughing												
 Sowing												
 Weeding												
 Fertilize												
 Apply insecticide												
 Harvesting and storing												
 Selling the Maize												

Module 1.3 : Agricultural calendar for planning plantain production

	Jan.	Feb.	March	Apr.	May	June	July.	Aug	Sep.	Oct.	Nov.	Dec.
Monomodal diet												
Bimodal diet												
 Field clearing												
 Purchase of inputs												
 Prepare the field												
 Buy and plant plants												
 Fertilize the field												
 Weed the field												
 Control pests												
 Harvest and transport the plantain												
 Sell the plantain												

Main lesson:

For a good yield, agricultural entrepreneurs (both men and women) plan to do the necessary work in the field and apply inputs at the right time.



BEWARE OF CLIMATE CHANGE

Have you noticed any changes in the crop calendar in recent years? This is due to climate change.

What does climate change mean?

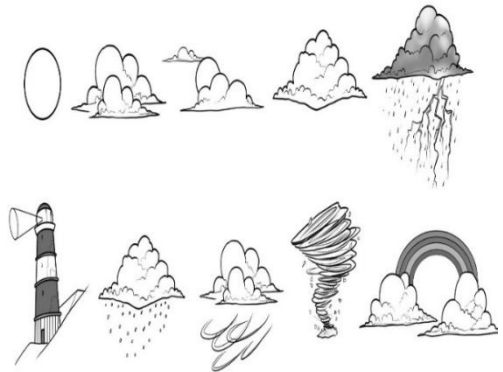
To understand climate change, you first need to know the difference between weather and climate.

Weather describes the conditions outside at a specific time in a specific place.

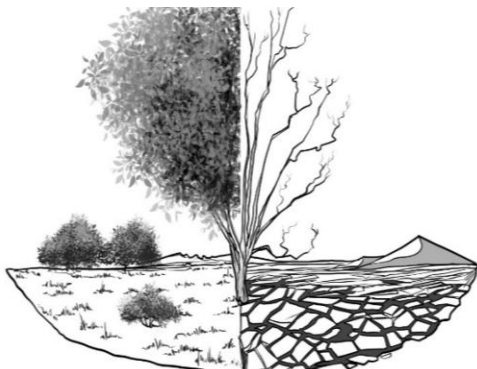
For example, if you see that it is sunny outside right now, that is one way to describe today's weather. The six main components of weather are:

- temperature (degree of heat or cold),
- Wind (air movement),
- cloud cover (amount of clouds covering part of the sky),
- precipitation (water that forms in the atmosphere and falls to the ground),
- humidity (amount of water vapour in the air),
- and atmospheric pressure (weight of the air around you – low pressure/high pressure).

Rain, sun, wind, storms are all weather events.



Climate is more than just one or two sunny days. Climate describes the expected weather conditions in a region at a particular time of year. The climate of a region is determined by observing its weather over a period of several years – usually around 30 years or more.



Climate change describes a change in the average climate conditions in a region over a long period of time. This includes warming temperatures and changes in precipitation, as well as the effects of global warming, such as:

- An increase in the number of extreme weather events, such as prolonged periods of drought, heavy rainfall and flooding, storms, etc.
- Changes in the flowering times of flowers and plants
- Shrinking watersheds.

All these factors have led to the changes we are seeing in our cropping calendar, causing shifts from what we are used to, based on our experience.

Main lessons

For a good yield,

1. The agricultural entrepreneur (man or woman) knows the workload and plans the work force for each crop on their farm.
2. Agricultural entrepreneurs (men or women) plan to carry out cultivation work and apply inputs at the right time.
3. **Good agricultural entrepreneurs (men or women) regularly check the weather forecast and consult their extension agent at the right time.**

Module 2: Know the units to know your assets

Before we begin, let's practice a little with the calculator.

How to use a calculator

What is it?

A calculator is a tool you can use to add, subtract, multiply and divide

To turn on the calculator

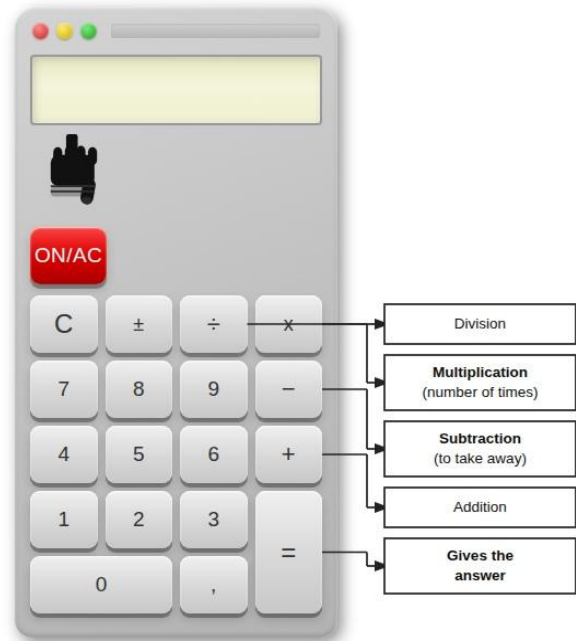
Press the ON/AC button

To correct an incorrect number

Press the C – CE button

To start a new calculation

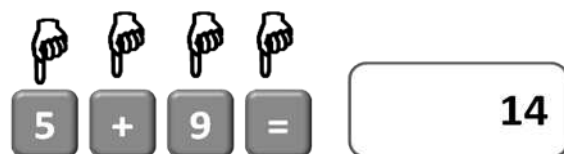
Press ON/AC



Addition (Plus)

Example: Press

$$5 + 9 = 14$$



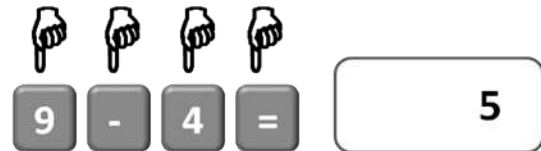
Example: Press

$$10 + 20 = 30$$



Subtraction (Minus)

Example: Press
 $9 - 4 = 5$



Example: Press
 $100 - 20 = 80$



Example Press
 $20 - 29 = - 9$



If you subtract a larger number from a smaller number, the calculator will give you a 'negative number' as in this example. You will know this by the small dash '-' in front of the result.

Example: Press
 $- 20 - 29 = - 49$



If you subtract a number from a "minus" number, the calculator will give you a "minus number" as in this example. You will know this by the small dash "-" in front of the result.

Multiplication (Multiply)

Example: Press
 $25 \times 12 = 300$



Example: Press
 $22 \times 27 = 594$



Division (Divide)

Example: Press

$$26 \div 2 = 13$$



Example: Press

$$123 \div 3 = 41$$

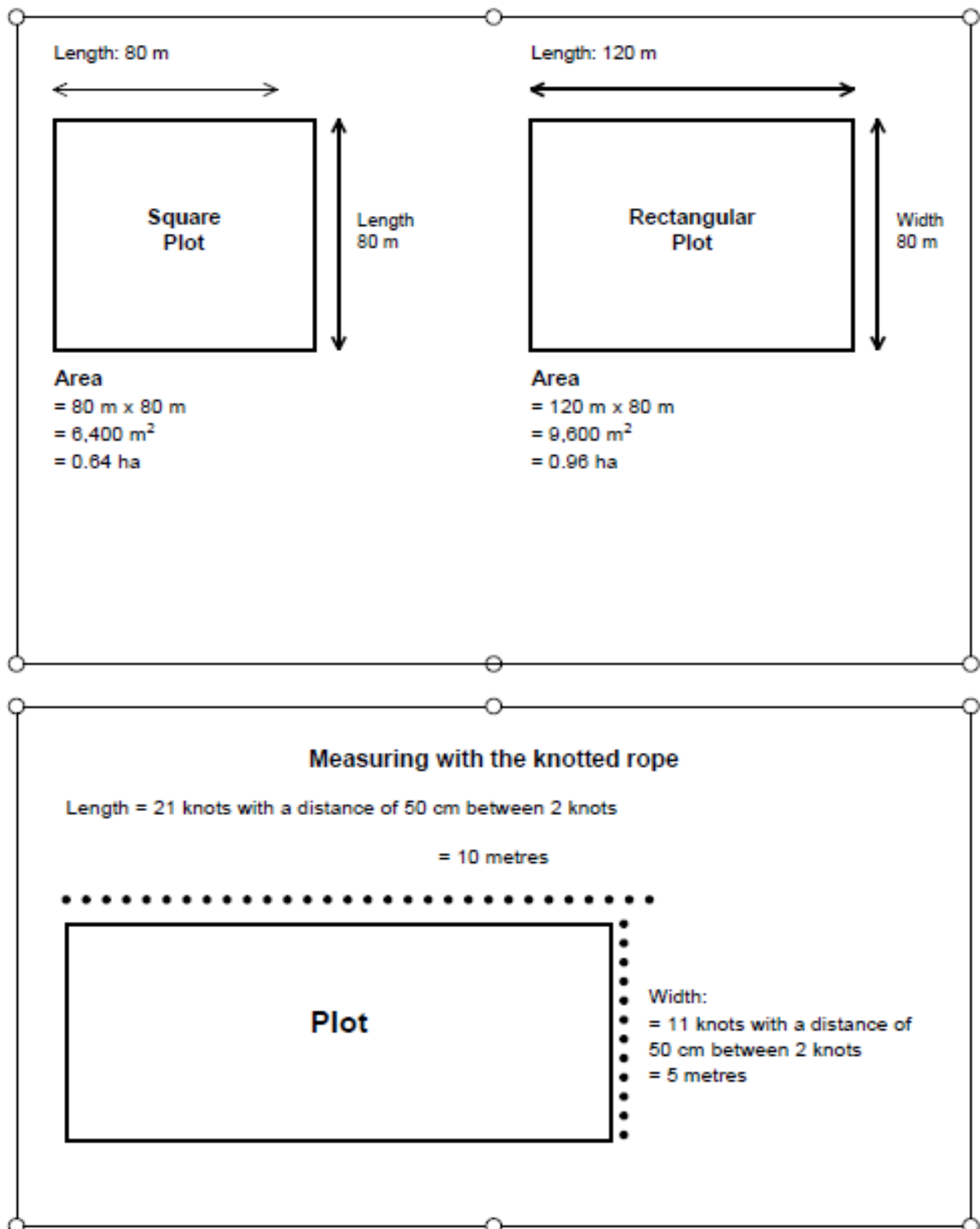


Here are some examples. Try to get the same result.

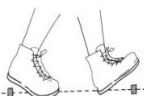
Addition (plus)	Subtraction (minus)
100 + 250 = 350	33 - 13 = 20
124 + 24 + 52 = 200	175 - 35 = 140
1035 + 465 + 120 = 1620	1243 - 12 = 1231
Multiplication (multiply)	Division (divide)
33 x 3 = 99	200 ÷ 4 = 50
75 x 5 = 375	350 ÷ 7 = 50
12 x 12 = 144	1100 ÷ 8 = 137,5

Measure and calculate the surface area of a field.

The area of a plot is measured in square metres or hectares (ha). 1 hectare is equal to 10,000 square metres (m^2)



Measurement competition results

Method	Group	Measurement of sides				Area (m ²)	Average area (m ²)	Gap / Decam.	Rank
		C1	C2	C3	C4				
Estimation by steps 	1								
	2								
	3								
Tape measure 	1								
	2								
	3								
Knotted rope 	1								
	2								
	3								

The group closest to the measurement taken with the tape measure or GPS wins!

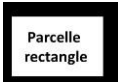
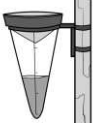


The most accurate way to measure the surface area of a field is to use a GPS. Farmers do not usually have access to these, but some institutions or companies do, such as extension workers. They can help you get an accurate measurement.

Main lessons

1. Measures of the size of a field by using walking steps are not always accurate
2. The agricultural entrepreneur (man or woman)
 - a who underestimates the field size risk using little fertilizer and seeds. This can reduce yields.
 - b who overestimates their field size risk using too much fertilizer and seeds and risks having a very high planting density. This can reduce yield and unnecessary spending.
3. Accurate knowledge of size of the farm is important for production planning, correct input dosages and correctly space plants. For these reasons, a good agricultural entrepreneur (man or woman) measures their field with GPS, a tape measure or a metre stick. They may also seek the services of a technician to measure their field (especially those with irregular shapes) with GPS.
4. A good agricultural entrepreneur (man or woman) knows the number and age of the coffee trees (or other trees) planted on their plot.
5. A good agricultural entrepreneur (man or woman) adopts rectangular or square plots. These are easy to measure. On such plots, it is easier to sow or plant in rows while respecting the correct spacing intervals.

Standard measurements and units to know

	Distance Length and width of a field	1 metre = 100 centimetres (cm) Kilometre (km): 1 km = 1000 metres (m)
	Area	Square metre (m²) Hectare (ha) = 10,000 square metres
	Weight	Gram (g) Kilogramme (kg): 1 kg = 1,000 g Ton (t): 1 tonne = 1,000 kg
	Yield per area	Kilogram per hectare (kg/ha)
	Volume	Litres (L)
	Time	Hour (h) Day = 24 hours
	Agricultural work	Man/Day (PERS/D), one day's work by an adult man. Example: Work on one hectare requires 10 man-days (10 PERS/D / ha). The work can be done by one man over 10 days, or by 10 men over one day. It is important to specify the working hours in PERS/D!
	Temperature	Temperature is measured in Degrees Celsius (°C) 0°C = Temperature at which water freezes 100°C = Temperature at which water boils Temperature can be measured using a thermometer.
	Precipitation	Precipitation is measured in terms of equivalent water height over a given period (e.g. mm/year, mm/month, mm/day).

Main lessons

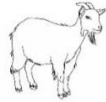
Knowledge of measurements and units is important for agricultural entrepreneurs (men and women). They are essential for:

- Knowing precisely what resources are available, in terms of land and labour force;
- Plan production correctly;
- Measure inputs precisely;
- Knowing exactly how much has been harvested;
- Correctly assess profits or losses;
- Sell your products more effectively.

Measurements and units are essential for doing good business in agriculture.

Module 3: Manage your farm for enough food

Making money from agriculture is good, but the farm must also provide enough good food to feed the family. For this reason, we need to address this topic.

	These foods provide us with energy and physical strength for work			These products provide us with physical strength and mental force							
 Plantain  Rice  Sorghum			 Yams  Sweet potato  Maize			 Eggs and Poultry products  Groundnuts  Beans			 Meat  Fish		
 Oil			 Milk and dairy products								
 Protective foods, clean drinking water											
Honey 		Fruit gives us energy (sugar) and health 		Vegetables gives us health and make meals tasty 							
				Clean drinking water protects us from disease 							

Adapted from FAO 2004. Family Nutrition Guide; <http://www.nutritiondata.com/facts/fats-and-oils/575/2>

Main lessons

1. Agricultural entrepreneurs (men and women) know that each type of food is necessary for their families to have a balance diet.

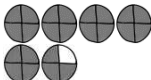
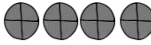
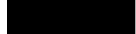
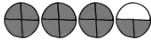
2. Agricultural entrepreneurs (men and women) strike the right balance between food crops and cash crops. In this way, they ensure that their families are well nourished while also producing enough to increase their income.

Foods and their energy, protein and fat content.

Which food is richest in energy?

Which food is richest in protein?

Which food is richest in fat?

Food		Energy Kcal* per kg	Fat Grams per kg	Protein Grams per kg	
Maize		 3.530	★ 38	 93	
Rice		 3.610	↘ 10	 65	
Ground-nut		 5.670	★★★★★ ★★★★★ 450 ★★★★★	 258	
Soya beans		 4.160	★★★★★ 200	 365	
Beans/ cowpeas		 3.330	↘ 8	 226	
Plantain		 1.110	↘ 2	25	
Yam		 1.180	↘ 2	15	
Meat		 1.610	★★ 79	 195	
Eggs		 1.580	★★★ 112	 120	
Fruits (Oranges)		450	↘ 2	9	
Vegetables (Carottes)		305	0	7	
Potato or manioc leaves		86	1.2	8.3	

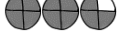
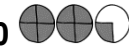
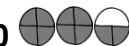
Adapted from FAO 2004. Family Nutrition Guide; <http://www.nutritiondata.com/facts/fats-and-oils/575/2> Nutrient Database for Standard Reference Legacy Release <https://ndb.nal.usda.gov>

(*) **Explanation: A kilocalorie (kcal or 1000 calories)** is a measure of the energy released by a food. The number of kilocalories per kilogram of a food shows whether the food is high or low in energy.

Main lessons

1. The agricultural entrepreneur (man or woman) knows that different types of food must be combined to ensure that their family has a balance diet.
2. Agricultural entrepreneurs (men and women) strike the right balance between food crops and cash crops. In this way, they ensure that their families are well fed while also producing enough to increase their income.

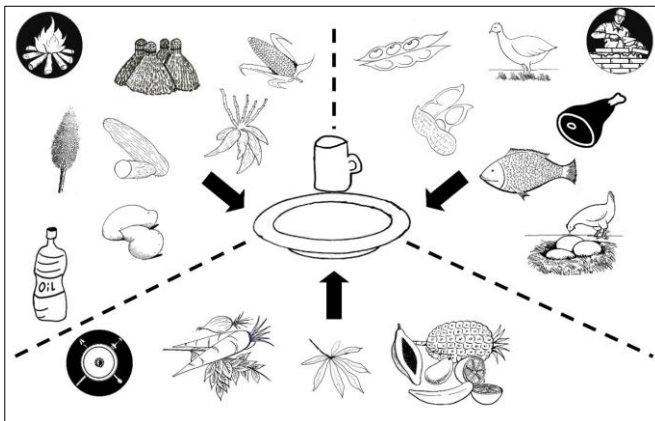
How much energy and protein do we need per day?

					
	Pregnant woman	Breastfeeding woman	Children 0 to 6 months	Children 7 to 11 months	Child aged 1 to 3 years
Energy kcal per day	2.690 	2.860 	524 	708 	1.022 
Protein Grams per day	47 	60 	12 	14 	14 
			Breast-feeding alone	Breast-feeding plus 2 to 3 meals per day	Breast-feeding plus 3 to 4 meals per day
					
	Children aged 4 to 6	Children aged 7 to 9	Girls aged 10 to 17	Boys aged 10 to 17	
Energy kcal per day	1.350 	1.700 	2.330 	2.830 	
Protein Grams per day	22 	25 	43 	48 	
					
	Men aged 18 to 59	Women aged 18 to 59	Men aged 60 and over	Women aged 60 and over	
Energy kcal per day	3.100 	2.500 	2.410 	2.140 	
Protein Grams per day	50 	50 	41 	41 	

Main lessons

1. The agricultural entrepreneur (man or woman) knows that family members have different nutritional needs.
2. Good nutrition for pregnant and breastfeeding women ensures good health and proper growth for babies.
3. From 7 months onwards, babies need good quality meals (without spices) and breastfeeding for proper growth and health.
4. Older children need almost as much food as adults.

What is a balanced diet?



Main lessons

1. Agricultural entrepreneurs, whether male or female, know that they need to combine food groups to ensure a healthy and balanced diet for their families.
2. Fruit is a protective food that should be eaten every day. This helps to prevent disease.
3. Agricultural entrepreneurs drink clean water (boiled water).
4. Agricultural entrepreneurs engage in at least 30 minutes of physical activity per day, which can also be achieved through agricultural activities.

Micronutrients and their roles in the body

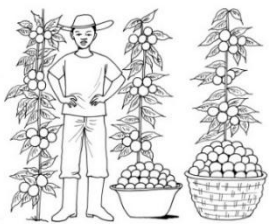
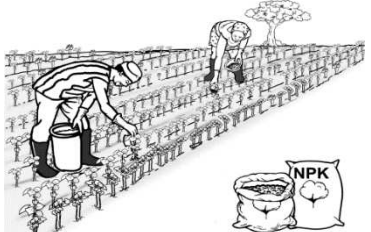
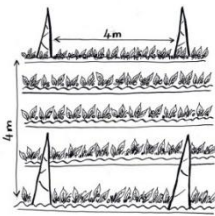
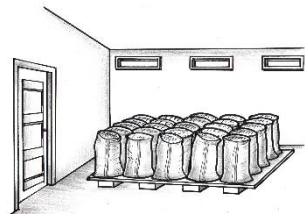
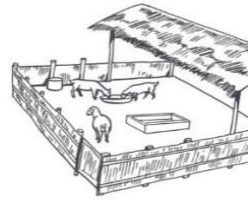
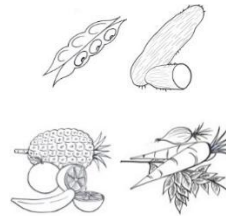
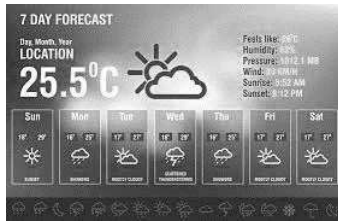
Micronutrients	Roles and useful information	Where to find them
Vitamin A	Saves lives and eyesight. Protects the body from disease. This is your baby's first vaccine. Do not discard the mother's first milk. This yellow milk is rich in vitamin A.	
Iron	Strengthens the blood and protects against anaemia. To avoid malaria, sleep under mosquito nets.	
Iodine	Protects against miscarriages, goiters, and having children with Down's syndrome. Iodized salt should be stored away from heat and added at the end of cooking to prevent the iodine from being destroyed.	
Zinc, calcium, magnesium	Help reduce recovery time after illness. Relieve fatigue and help you stay fit for work.	

Nutritional calendar: How do you meet your family's nutritional needs?

- Mark a square $\square$ if the product is sold
- Mark a circle $\bigcirc$ if the product is eaten
- Which months have high prices and which have low prices
- Mark a triangle $\triangle$ in the months when you need to buy the product
- Indicate with a line ----- the availability of a product from your own production

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.
 Maize												
 Beans												
 Yams												
 Groundnuts												
 Rice												
 Fish												
 Fruit												
 Vegetables												
 Plantain												
 Sorghum												

How can we have more and better food?

Improving yields				
Use improved varieties	Use organic fertilizer	Apply mineral fertilizers	Crop rotation	Intercrop
				
Reduce storage losses through improved methods	Improve money management for food purchases	Raising livestock	Growing multiple crops	Check weather forecasts regularly.
				
Other possibilities				
➤ Grow crops or varieties that ripen earlier or are drought resistant. ➤ Collect water for small-scale irrigation; ➤ Establish fishponds for families that can afford them.				

Source: Adapted from FAO 2004. Family Nutrition Guide

Module 4: Money out, Money in: Know whether you do good business

Let's see how we can tell if a deal was good or bad.

We will calculate the money in and outflows for different crops.

Work to be done for the following 3 tables:

- Multiply the quantity by the price for each line
- Add up the money out for inputs and work force
- Multiply the yield by the selling price
- Deduct or subtract the sum of the money out from the money in
- Determine whether there is a loss or profit

Module 4 : Work sheet 1 : Arabica Coffee – Common Practice



1 hectare of Arabica coffee, “local variety, no fertilizer, no pruning, yield: 600 kg/ha”	Unit	Quantity	Price (FCFA)	Total (FCFA)
1. money out				
Inputs and services				
Purchase of NPK base fertilizer (15-15-15)	Bag of 50kg	0	x 22 000	=
Purchase of foliar fertilizer (10-10-10): 2 litres per hectare, twice a year	Litre	0	x 10 000	=
Purchase of Insecticide	Litre	0	x 7 000	=
Purchase of herbicide	Litre	0	x 5 500	=
50 kg bags for the harvest	Bag	15	x 300	=
100 kg packaging bags	Bag	7	x 500	=
Machine-based coffee hulling service	Bag	29	x 1 000	=
Post-fermentation pulping service	FCFA/Kg	10	x 1 000	=
Total cost of inputs and services				
Works				
Manual weeding 1	H/D	10	x 2 500	=
Application of herbicide	H/D	0	x 2 500	=
Manual weeding 2	H/D	10	x 2 500	=
Application of base fertilizer	H/D	0	x 2 500	=
Spraying of foliar fertilizer	H/D	0	x 2 500	=
Maintenance (Pruning, thinning and selective harvesting)	H/D	10	x 2 500	=
Application of Insecticide	H/D	0	x 2 500	=
Harvesting of cherries	H/D	15	x 2 500	=
Transportation of fresh cherries	H/D	4	x 2 500	=
Fermentation (Wet processing)	H/D	4	x 2 500	=
Washing	H/D	4	x 2 500	=
Drying	H/D	5	x 2 500	=
Sorting, bagging and storage	H/D	5	x 2 500	=
Transportation and marketing	H/D	3	x 2 500	=
Total labour cost	H/D			
Total money out (Input costs + Labour costs)				
2. money in				
Production x selling price	Kg	600	x 2 500	=
3. Loss or Profit ? (money in – money out)			☹ or ☺	



Module 4: Worksheet 2: Maize – Current practice

1 hectare of maize, "local variety, with fertilizer": 1,100 kg/ha	Unit	Quantity	Price (CFA)	Total (CFA)
1. Money out				
Money out				
Purchase and transport of seeds	kg	25	250	
Purchase and transport of NPK	50 kg bags	2	25 000	
Purchase and transport of urea N 46%	50 kg bags	1	25 000	
Purchase of total herbicide	l	2	6 000	
Purchase of selective herbicide	l	1	6 000	
Ginning service	Bags	11	1 000	
Foliar fertilizer	l	0	10 000	
Purchase of insecticide	l	0	7 500	
Purchase of packaging bags	100 kg bags	9	500	
Transport	Flat rate	1	20 000	
Total cost of inputs and services				
Works				
Land clearing	Per/D	16	2500	
Cleaning of the plot	Per/D	10	2500	
Application of herbicides	Per/D	3	2500	
NPK spreading	Per/D	2	2500	
Urea spreading	Per/D	1	2500	
Sowing	Per/D	8	2500	
Re-sowing	Per/D	4	2500	
Thinning	Per/D	2	2500	
Herbicide application	Per/D	3	2500	
Application of insecticides	Per/day	0	2500	
Harvesting and destemming	Per/D	10	2500	
Drying, sorting and winnowing	Per/D	2	2500	
Packaging and storage	Per/D	3	2500	
Marketing	Per/D	2	2500	
Total labour requirements and costs		66		
Total outputs (Input costs + Labour costs)				
2. Money in				
Production x Selling price	Kg	1 100	250	
3. Loss or profit? (Money in – Money out)			☹ or ☺	

Module 4: Worksheet 3: Plantain – Current practice



1 ha of plantain "local variety, without BPA": 7,000 kg/ha	Unit	Quantity	Price (CFA)	Total (CFA)
1. Sorties d'argent				
Intrants et services				
Purchase of waste	Waste	1200	x 100	=
Transport of waste	Waste	1200	x 50	=
Purchase and transport of pegs	m	1200	x 60	=
Purchase and transport of NPK	50 kg bags	0	x 22 000	=
Purchase and transport of urea N 46%	50 kg bags	0	x 25 000	=
Purchase of total herbicide	l	2	x 5 500	=
Purchase of selective herbicide	l	1	x 4 500	=
Purchase of nematicide	Kg	2	x 3 000	=
Purchase of ropes	Roll	0	x 12 000	=
Compost (bedding)	50 kg bags	0	x 1 000	=
Purchase of insecticide	l	0	x 7 000	=
Transport	Flat rate	1	x 20 000	=
Total cost of inputs and services				
Works				
Land clearing	Per/D	16	x 2 500	=
Cleaning of the plot	Per/D	5	x 2 500	=
Application of herbicides	Per/D	2	x 2 500	=
Staking	Per/D	3	x 2 500	=
Hole drilling	Per/D	12	x 2 500	=
Compost spreading	Per/D	0	x 2 500	=
Planting	Per/D	12	x 2 500	=
Application of nematicides 1	Per/D	4	x 2 500	=
NPK spreading	Per/D	2	x 2 500	=
Urea spreading	Per/D	1	x 2 500	=
Hole punching	Per/D	12	x 2 500	=
Staking	Per/D	0	x 2 500	=
Pruning	Per/D	15	x 2 500	=
Herbicide application	Per/D	3	x 2 500	=
Spreading nematicides 2	Per/D	0	x 2 500	=
Harvest	Per/D	6	x 2 500	=
Transport and storage	Per/D	8	x 2 500	=
Marketing	Per/D	6	x 2 500	=
Total labour costs	Per/D			
Total outputs (Input costs + Labour costs)				
2. Money in				
Production x Selling price	Kg	7 000	x 200	=
3. Loss or profit? (Money in - Money out)			☹ or ☺	

Comparison of results

Participants identify good and bad deals

				
Product		Coffee Arabica	Maize	Plantain
Area (ha)		1,0	1,0	1,0
Production	Kg	600	1 100	7 000
1. Money out	CFA	222 000	299 750	561 000
2. Money in	CFA	1 500 000	275 000	1 400 000
3. Loss or profit? Money coming in MINUS Money going out	CFA	1 278 000	- 24 750	839 000
		 Very good deal	 Bad deal	 Good deal

Main lessons

1. To determine whether a crop is a good deal, you need to know exactly how much money is coming in and going out.
2. A good agricultural entrepreneur (man or woman) records the amounts spent on inputs and work force for each plot of land and calculates the money in and money out.
3. They subtract the money out from the money in. The result indicates whether they are making a loss or a profit.
4. The agricultural entrepreneur (man or woman) makes a profit if the income is greater than the expenditure. In this case, they are doing **good business**.
5. The agricultural entrepreneur (man or woman) makes a loss if the money out are greater than the money in. In this case, they are doing a **bad deal**. A loss is indicated in the calculations by a minus sign (-) in front of a figure.
6. In the event of a loss, a good agricultural entrepreneur (male or female) will abandon that crop or use a better technique to make a profit.
7. To be sure of making a profit, a good entrepreneur calculates the money out and money-in of the improved technique **before producing**.

Module 4 : Solution exercice 1: Arabica coffee – Common Practice



1 hectare of Arabica coffee, “local variety, no fertilizer, no pruning, yield: 600 kg/ha”	Unit	Quantity	Price (FCFA)	Total (FCFA)
1. money out				
Inputs and services				
Purchase of base fertilizer NPK (15-15-15)	Bags of 50kg	0	22 000	0
Purchase of foliar fertilizer (10-10-10) : 2l/ha-2times/year	Litre	0	10 000	0
Purchase of insecticides	Litre	0	7 000	0
Purchase of herbicide	Litre	0	5 500	0
50 kg bags for the harvest	Bag	15	300	4 500
100 kg packaging bags	Bag	7	500	3 500
Machine-based coffee hulling service	Bag	29	1 000	29 000
Post-fermentation pulping process	FCFA/Kg	10	1 000	10 000
Total cost of inputs and services				47 000
Work				
Manual weeding 1	H/D	10	2 500	25 000
Application of herbicide	H/D	0	2 500	0
Manual weeding 2	H/D	10	2 500	25 000
Application of base fertilizer	H/D	0	2 500	0
Spraying of foliar fertilizer	H/D	0	2 500	0
Maintenance (Pruning, thinning and selective harvesting)	H/D	10	2 500	25 000
Application of Insecticide	H/D	0	2 500	0
Harvesting of cherries	H/D	15	2 500	37 500
Transportation of fresh cherries	H/D	4	2 500	10 000
Fermentation (Wet processing)	H/D	4	2 500	10 000
Washing	H/D	4	2 500	10 000
Drying	H/D	5	2 500	12 500
Sorting, bagging and storage	H/D	5	2 500	12 500
Transportation and marketing	H/D	3	2 500	7 500
Total labour cost	H/D	70		175 000
Total outputs (Input costs + Labour costs)				222 000
2. money in				
Production x Selling price	Kg	600	2 500	1 500 000
3. Loss or profit? (Money in - Money out)			☹ or ☺	1 278 000

Module 4 : Solution to exercise 2: Maize – Current practice



1 hectare of maize, "local variety, with fertilizer": 1,100 kg/ha	Unit	Quantity	Price (FCF A)		Total (FCFA)
1. Money out					
Inputs and services					
Purchase and transport of seeds	kg	25	x	250	= 6 250
Purchase and transport of NPK	50 kg bags	2	x	25 000	= 50 000
Purchase and transport of urea N 46%	50 kg bags	1	x	25 000	= 25 000
Purchase of total herbicide	l	2	x	6 000	= 12 000
Purchase of selective herbicide	l	1	x	6 000	= 6 000
Ginning service	Bags	11	x	1 000	= 11 000
Foliar fertilizer	l	0	x	10 000	= 0
Purchase of insecticide	l	0	x	7 500	= 0
Purchase of packaging bags	100 kg bags	9	x	500	= 4 500
Transport	Flat rate	1	x	20 000	= 20 000
Total cost of inputs and services					134 750
Work					
Land clearing	Pers/D	16	x	2500	= 40 000
Cleaning of the plot	Pers/D	10	x	2500	= 2 5000
Application of herbicides	Pers/D	3	x	2500	= 7 500
NPK spreading	Pers/J	2	x	2500	= 5 000
Urea spreading	Pers/D	1	x	2500	= 2 500
Sowing	Pers/D	8	x	2500	= 20 000
Re-sowing	Pers/D	4	x	2500	= 10 000
Thinning	Pers/D	2	x	2500	= 5 000
Herbicide application	Pers/D	3	x	2500	= 7 500
Insecticide application	Pers/D	0	x	2500	= 0
Harvesting and destemming	Pers/D	10	x	2500	= 25 000
Drying, sorting and winnowing	Pers/D	2	x	2500	= 5 000
Packaging and storage	Pers/D	3	x	2500	= 7 500
Marketing	Pers/D	2	x	2500	= 5 000
Total labour requirements and costs		66			165 000
Total outputs (input costs + labour costs)					299 750
2. Money in					
Production x Selling price	Kg	1100	x	250	= 275 000
3. Loss or profit? (Money in - Money out)			☹ or ☺		-24 750



Module 4 : Solution to exercise 3: Plantain – Current practice

1 ha of plantain "local variety, without BPA": 7,000 kg/ha	Unit	Quantity	Price (CFA)	Total (CFA)
1. Sorties d'argent				
Intrants et services				
Purchase of waste	Waste	1200	☒ 100	= 120 000
Transport of waste	Waste	1200	☒ 50	= 60 000
Purchase and transport of pegs	m	1200	☒ 60	= 72 000
Purchase and transport of NPK	50 kg bags	0	☒ 22 000	= 0
Purchase and transport of urea N 46%	50 kg bags	0	☒ 25 000	= 0
Purchase of total herbicide	l	2	☒ 5 500	= 11 000
Purchase of selective herbicide	l	1	☒ 4 500	= 4 500
Purchase of nematicide	Kg	2	☒ 3 000	= 6 000
Purchase of ropes	Roll	0	☒ 12 000	= 0
Compost (bedding)	50 kg bags	0	☒ 1 000	= 0
Purchase of insecticide	l	0	☒ 7 000	= 0
Transport	Flat rate	1	☒ 20 000	= 20 000
Total cost of inputs and services				293 500
Works				
Land clearing	Pers/D	16	☒ 2 500	= 40 000
Cleaning of the plot	Pers/D	5	☒ 2 500	= 12 500
Application of herbicides	Pers/D	2	☒ 2 500	= 5 000
Staking	Pers/D	3	☒ 2 500	= 7 500
Hole drilling	Pers/D	12	☒ 2 500	= 30 000
Compost spreading	Pers/D	0	☒ 2 500	= 0
Planting	Pers/D	12	☒ 2 500	= 30 000
Application of nematicides 1	Pers/D	4	☒ 2 500	= 10 000
NPK spreading	Pers/D	2	☒ 2 500	= 5 000
Urea spreading	Pers/D	1	☒ 2 500	= 2 500
Hole punching	Pers/D	12	☒ 2 500	= 30 000
Staking	Pers/D	0	☒ 2 500	= 0
Pruning	Pers/D	15	☒ 2 500	= 37 500
Herbicide application	Pers/D	3	☒ 2 500	= 7 500
Spreading nematicides 2	Pers/D	0	☒ 2 500	= 0
Harvest	Pers/D	6	☒ 2 500	= 15 000
Transport and storage	Pers/D	8	☒ 2 500	= 20 000
Marketing	Pers/D	6	☒ 2 500	= 15 000
Total labour costs	Pers/D			267 500
Total outputs (Input costs + Labour costs)				561 000
2. Money in				
Production x Selling price	Kg	7 000	☒ 200	= 1 400 000
3. Loss or profit? (Money in - Money out)			☐ or ☐	839 000

Module 5: Decision for doing good business

Agricultural entrepreneurs (men or women) must explore ways to improve their profits and income.

As we have seen, producers make a profit when their income exceeds their expenditure.

The greater the income relative to expenditure, the greater the profit.

Profits are determined by price and production.

So how can decisions be made to do more good business?

Often, entrepreneurs cannot influence the price they receive for their harvest. But they can influence production, for example by improving crop management (good agricultural practices) or by using higher levels of inputs to improve yields.

Now let's do the same calculations as in Module 4, but with improved techniques. Improved techniques involve adopting good agricultural practices in regenerative coffee farming to improve productivity and quality.

Let us take, for example, a plantation already in production where we want to increase yields. We can list the following techniques:

- Maintain the plot by pruning the plants, removing suckers and harvesting cleanly;
- Applying organic fertilizer to promote productivity;
- Introducing high-quality cover crops or intercrops;
- Regularly weeding the coffee plot;
- Harvest only ripe coffee cherries;
- Dry the coffee thoroughly as quickly as possible after harvesting;
- Sort and winnow the coffee thoroughly;
- Hull the coffee using a well-adjusted machine;
- Store the coffee in suitable bags, in a well-ventilated place away from moisture.

Let us now look at the costs associated with these possible improvements to current practices.

Module 5 : Exercise 1 :Arabica Coffee – Improved practice



1 hectare of Arabica coffee using 'improved practices with pruning and organic fertilizer', 1,200 kg/ha	Unit	Quantity	Price (FCFA)	Total (FCFA)
1. money out				
Inputs and services				
Purchase of NPK base fertilizer (15-15-15)	Bag of 50kg	4	22 000	
Purchase of foliar fertilizer (10-10-10)		4	10 000	
Purchase of Insecticide	Litre	3	7 000	
Purchase of herbicide	Litre	4	5 500	
50 kg bags for harvest	Litre	31	300	
100 kg packaging bags	Bag	12	500	
Machine-based coffee hulling service	Bag	61	1000	
Depulping process following fermentation	FCFA/Kg	23	1000	
Total cost of inputs and services				
Works				
Manual weeding 1	H/D	10	2 500	
Application of herbicide	H/D	5	2 500	
Manual weeding 2	H/D	3	2 500	
Application of base fertilizer	H/D	5	2 500	
Spraying of foliar fertilizer	H/D	8	2 500	
Maintenance (Pruning, thinning and selective harvesting)	H/D	13	2 500	
Application of insecticide	H/D	5	2 500	
Harvesting of cherries	H/D	32	2 500	
Transportation of fresh cherries	H/D	10	2 500	
Fermentation (Wet processing)	H/D	9	2 500	
Washing	H/D	9	2 500	
Drying	H/D	12	2 500	
Sorting, bagging and storage	H/D	7	2 500	
Transportation and marketing	H/D	7	2 500	
Total labour cost	H/D			
Total money out (Cost of inputs + Labour costs)				
2. money in				
Coffee production x selling price	Kg	1 200	2 500	
3. Loss or profit ? (money in – money out)			☹ or ☺	
4. Unit Cost : money out / Main crop production (FCFA / kg)				

Module 5 : Exercise 2: Maize – Improved practice



1 hectare of maize "improved variety, with organic foliar fertiliser + fertiliser and BPA": 3,500 kg/ha	Unit	Quantity	Price (FCFA)	Total (FCFA)
1. Money out				
Inputs and services				
Purchase and transport of seeds	kg	25	x 1 000	=
Purchase and transport of NPK	50 kg bags	4	x 25 000	=
Purchase and transport of urea N 46%	50 kg bags	2	x 25 000	=
Purchase of total herbicide	l	2	x 6 000	=
Purchase of selective herbicide	l	2	x 6 000	=
Ginning service	Bags	35	x 1 000	=
Foliar fertiliser	l	2	x 10 000	=
Purchase of insecticide	l	1	x 7 500	=
Purchase of packaging bags	100 kg bags	35	x 500	=
Transport	Flatrate	1	x 20 000	=
Total cost of inputs and services				
Work				
Clearing	Pers/D	16	x 2500	=
Cleaning of the plot	Pers/D	10	x 2500	=
Application of herbicides	Pers/D	3	x 2500	=
NPK spreading	Pers/D	4	x 2500	=
Urea spreading	Pers/D	2	x 2500	=
Sowing	Pers/D	10	x 2500	=
Re-sowing	Pers/D	2	x 2500	=
Thinning	Pers/D	2	x 2500	=
Herbicide application	Pers/D	5	x 2500	=
Insecticide application	Pers/D	3	x 2500	=
Harvesting and destemming	Pers/D	20	x 2500	=
Drying, sorting and winnowing	Pers/D	6	x 2500	=
Packaging and storage	Pers/D	5	x 2500	=
Clearing	Pers/D	5	x 2500	=
Total labour requirements and costs				
Total outputs (input costs + labour costs)				
2. Money in				
Production x Selling price	Kg	3 500	x 250	=
3. Loss or profit? (Money in - Money out)			☹ or ☺	
4. Unit cost Money out / Main crop production (FCFA / kg)				

Module 5 : Exercise 3: Plantain – Improved practice



1 ha de Plantain “improved variety, with GAP”: 20 000 Kg/ha	Unit	Quantity	Price (FCFA)	Total (FCFA)
1. Money out				
Inputs and services				
Purchase of seedlings	Seedlings	1250	200	
Transport of seedlings	Plants	1250	100	
Purchase and transport of stakes	m	1250	60	
Purchase and transport of NPK	50 kg bags	6	22 000	
Purchase and transport of urea N 46%	50 kg bags	3	25 000	
Purchase of total herbicide	l	5	5 500	
Purchase of selective herbicide	l	2	4 500	
Purchase of nematicide	Kg	25	3 000	
Purchase of ropes	Roll	10	12 000	
Compost (bedding)	50 kg bags	50	1 000	
Purchase of insecticide	l	1	7 000	
Transport	Travel	4	20 000	
Total cost of inputs and services				
Works				
Land clearing	Pers/D	16	2 500	
Cleaning of the plot	Pers/D	5	2 500	
Herbicide application	Pers/D	4	2 500	
Staking	Pers/D	5	2 500	
Hole size	Pers/D	16	2 500	
Compost spreading	Pers/D	4	2 500	
Plantation	Pers/D	16	2 500	
Application of nematicides 1	Pers/D	8	2 500	
NPK spreading	Pers/D	4	2 500	
Urea spreading	Pers/D	2	2 500	
Suckering	Pers/D	23	2 500	
Trellising	Pers/D	6	2 500	
Pruning	Pers/D	36	2 500	
Herbicide application	Pers/D	5	2 500	
Application of nematicides 2	Pers/D	8	2 500	
Harvest	Pers/D	15	2 500	
Transport and storage	Pers/D	15	2 500	
Marketing	Pers/D	12	2 500	
Total labour costs				
Total outputs (Input costs + Labour costs)				
2. Money in				
Production x Selling price	Kg	20 000	200	
3. Loss or profit? (Money in - Money out)			☹ or ☺	
4. Unit cost: Money out / Main crop production (FCFA / kg)				

Explanation of fixed costs and unit costs

☞ Fixed costs

These are costs that do not vary in the short term with entrepreneurial activity or quantity produced. An example of a fixed cost is the rental of a shop: even if the producer does not harvest anything, they will still have to pay the rent. For the rental of one hectare of land for maize production, the producer will pay the same amount regardless of whether the harvest is 1,100 or 3,500 kg.

Fixed costs must be paid with the money that remains to the producer after deducting variable costs (inputs, man-days) from the income from the sale of the product. The costs of equipment such as sprayers and irrigation pumps are also fixed costs that the producer must bear.

☞ Unit costs

Unit costs are the total costs per unit of production, for example the total cost of producing one kg of maize.

The unit cost is calculated by dividing total money out by production.

The entrepreneur can compare the **unit cost** with the market selling price to determine whether he is making a profit.

Calculating unit cost		 Coffee Arabica		 Maize		 Plantain	
Area: 1ha	Unit	Standard practices	Improved practices	Standard practices	Improved practices	Standard practices	Improved practices
Production	Kg	600	1 200	1 100	3.500	7.000	20.000
Money out (input costs + labour)	FCFA	222 000	607 800	299 750	531 500	561 000	1 525 500
Unit cost (Money out/production)	FCFA/kg	370	506.50	272.5	151.9	80.1	76.3

Main lessons

- To know whether a crop is profitable, you need to know exactly how much money is coming in and going out.
- A good agricultural entrepreneur (man or woman) records the inputs and labour used for each plot and calculates the money in and money out.
- They subtract the money out from the money in. The result indicates whether there is a loss or a profit.
- The agricultural entrepreneur (man or woman) makes a profit if the income is greater than the expenditure. In this case, it is a **good deal**.
- The agricultural entrepreneur (man or woman) makes a loss if the money out are greater than the money in. In this case, it is a **bad deal**.
- A loss is indicated in the calculations by a small dash in front of a number.
- A good agricultural entrepreneur (man or woman) will abandon this crop or use a better technique to make a profit.
- A good agricultural entrepreneur (man or woman) makes these calculations well **before the start of the season** to decide what to produce and what techniques to use.
- **During the season,** a good agricultural entrepreneur (man or woman) records the money out and inflows for each plot.
- **After harvesting and selling,** he/she assesses the money in and outflows to determine his/her income and any changes to improve planning for the next production season.
- **Unit cost**
 - Good deal if it is much lower than the selling price
 - Bad deal if it is higher than the selling price
 - In the case of food crops, the unit cost can also indicate whether it is more economical to buy the crop on the local market rather than produce it.
 - The unit cost helps to better set the selling price of your

product on the market

- Calculating costs and profits helps good agricultural entrepreneurs (men or women) decide which crops to invest in to diversify their production.
- Good entrepreneurs incorporate intercropping and/or cover crops into their main crop in order to improve shade in the plot, improve soil fertility, improve the structure of compacted soil and increase their income by selling the associated crop.

Module 5 : Solution exercise 1 :Arabica Coffee – Improved Practice



1 hectare of Arabica coffee using 'improved practices with pruning and organic fertilizer', 1,200 kg/ha	Unit	Quantity	Price (FCFA)	Total (FCFA)
1. money out				
Inputs and services				
Purchase of NPK base fertilizer (15-15-15)	Bags of 50kg	4	22 000	88 000
Purchase of foliar fertiliser (10-10-10)		4	10 000	40 000
Purchase of insecticide	Litre	3	7 000	21 000
Purchase of herbicide	Litre	4	5 500	22 000
50 kg bags for harvesting	Litre	31	300	9 300
100 kg packaging bags	Bag	12	500	6 000
Machine-based coffee hulling service	Bag	61	1000	61 000
Post-fermentation pulping service	FCFA/Kg	23	1000	23 000
Total cost of inputs and services				270 300
Works				
Manual weeding 1	H/D	10	2 500	25 000
Application of herbicide	H/D	5	2 500	12 500
Manual weeding 2	H/D	3	2 500	7 500
Application of base fertilizer	H/D	5	2 500	12 500
Spraying of foliar fertilizer	H/D	8	2 500	20 000
Maintenance (pruning, thinning and selective harvesting)	H/D	13	2 500	32 500
Application of insecticide	H/D	5	2 500	12 500
Cherry harvesting	H/D	32	2 500	80 000
Transportation of fresh cherries	H/D	10	2 500	25 000
Fermentation (wet processing)	H/D	9	2 500	22 500
Washing	H/D	9	2 500	22 500
Drying	H/D	12	2 500	30 000
Sorting, bagging and storage	H/D	7	2 500	17 500
Transport and marketing	H/D	7	2 500	17 500
Total labour cost	H/D	135		337 500
Total money out (Cost of inputs + Labour costs)				607 800
2. money in				
Coffe production x Selling price	Kg	1 200	2 500	3 000 000
3. Loss or profit ? (money in – money out)			☹ or ☺	2 392 200

Module 5: Solution to exercise 2: Maize – Improved practice



1 hectare of maize "improved variety, with organic foliar fertilizer + fertilizer and BPA": 3,500 kg/ha	Unit	Quantity		Price (FCFA)		Total (FCFA)
1. Money out						
Inputs and services						
Purchase and transport of seeds	kg	25	x	1 000	=	25 000
Purchase and transport of NPK	50 kg bags	4	x	25 000	=	100 000
Purchase and transport of urea N 46%	50 kg bags	2	x	25 000	=	50 000
Purchase of total herbicide	l	2	x	6 000	=	12 000
Purchase of selective herbicide	l	2	x	6 000	=	12 000
Ginning service	Bags	35	x	1 000	=	35 000
Foliar fertiliser	l	2	x	10 000	=	20 000
Purchase of insecticide	l	1	x	7 500	=	7 500
Purchase of packaging bags	100 kg bags	35	x	500	=	17 500
Transport	Flatrate	1	x	20 000	=	20 000
Total cost of inputs and services						299 000
Work						
Clearing	Pers/D	16	x	2500	=	40 000
Cleaning of the plot	Pers/D	10	x	2500	=	25 000
Application of herbicides	Pers/D	3	x	2500	=	7 500
NPK spreading	Pers/D	4	x	2500	=	10 000
Urea spreading	Pers/D	2	x	2500	=	5 000
Sowing	Pers/D	10	x	2500	=	25 000
Re-sowing	Pers/D	2	x	2500	=	5 000
Thinning	Pers/D	2	x	2500	=	5 000
Herbicide application	Pers/D	5	x	2500	=	12 500
Insecticide application	Pers/D	3	x	2500	=	7 500
Harvesting and destemming	Pers/D	20	x	2500	=	50 000
Drying, sorting and winnowing	Pers/D	6	x	2500	=	15 000
Packaging and storage	Pers/D	5	x	2500	=	12 500
Clearing	Pers/D	5	x	2500	=	12 500
Total labour requirements and costs		93				232 500
Total outputs (input costs + labour costs)						531 500
2. Money in						
Production x Selling price	Kg	3 500	x	250	=	875 000
3. Loss or profit? (Money in - Money out)			☹ or ☺			343 500
4. Unit cost Money out / Main crop production (FCFA / kg)						151,86

Module 5 : Solution to exercise 3: Plantain – Improved practice

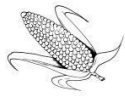


1 ha de Plantain “improved variety, with GAP”: 20 000 Kg/ha	Unit	Quantity	Price (FCFA)	Total (FCFA)
1. Money out				
Inputs and services				
Purchase of seedlings	Seedlings	1250	x 200	= 250 000
Transport of seedlings	Plants	1250	x 100	= 125 000
Purchase and transport of stakes	m	1250	x 60	= 75 000
Purchase and transport of NPK	50 kg bags	6	x 22 000	= 132 000
Purchase and transport of urea N 46%	50 kg bags	3	x 25 000	= 75 000
Purchase of total herbicide	l	5	x 5 500	= 27 500
Purchase of selective herbicide	l	2	x 4 500	= 9 000
Purchase of nematicide	Kg	25	x 3 000	= 75 000
Purchase of ropes	Roll	10	x 12 000	= 120 000
Compost (bedding)	50 kg bags	50	x 1 000	= 50 000
Purchase of insecticide	l	1	x 7 000	= 7 000
Transport	Travel	4	x 20 000	= 80 000
Total cost of inputs and services				1 025 500
Works				
Land clearing	Pers/D	16	x 2 500	= 40 000
Cleaning of the plot	Pers/D	5	x 2 500	= 12 500
Herbicide application	Pers/D	4	x 2 500	= 10 000
Staking	Pers/D	5	x 2 500	= 12 500
Hole size	Pers/D	16	x 2 500	= 40 000
Compost spreading	Pers/D	4	x 2 500	= 10 000
Plantation	Pers/D	16	x 2 500	= 40 000
Application of nematicides 1	Pers/D	8	x 2 500	= 20 000
NPK spreading	Pers/D	4	x 2 500	= 10 000
Urea spreading	Pers/D	2	x 2 500	= 5 000
Suckering	Pers/D	23	x 2 500	= 57 500
Trellising	Pers/D	6	x 2 500	= 15 000
Pruning	Pers/D	36	x 2 500	= 90 000
Herbicide application	Pers/D	5	x 2 500	= 12 500
Application of nematicides 2	Pers/D	8	x 2 500	= 20 000
Harvest	Pers/D	15	x 2 500	= 37 500
Transport and storage	Pers/D	15	x 2 500	= 37 500
Marketing	Pers/D	12	x 2 500	= 30 000
Total labour costs	Pers/D	200		500 000
Total outputs (Input costs + Labour costs)				1 525 500
2. Money in				
Production x Selling price	Kg	20 000	x 200	= 4 000 000
3. Loss or profit? (Money in - Money out)			☹ or ☺	2 474 500
4. Unit cost: Money out / Main crop production (FCFA / kg)				76,28

Module 6: Opportunities to diversify production for more income

After all these calculations, we will determine the opportunities to increase revenues, we will learn how to make investment decisions. We will determine the best opportunities by using Gross Margin, labour productivity and capital productivity

On this basis: è Rank crops based on Profit or Loss. è Make a choice based on this ranking

							
		Coffee Arabica		Maize		Plantain	
		Current	Improved	Current	Enhanced	Current	Improved
Area	ha	1	1	1	1	1	1
1. Money out	CFA	222 000	607 800	299 750	531 500	561 000	1 525 500
= Input costs + Labour costs							
2. Money in	CFA	1 625 000	3 000 000	275 000	875 000	1 400 000	4 000 000
= Production x Selling price							
3. Loss or profit? No risk	CFA	1 403 000	2 392 200	-24 750	343 500	839 000	2 474 500
= Money in MINUS Money out							
Rank							
3. Loss or profit? with risk	CFA	723 000	1 282 200	-24 750	343 500	321 000	994 500
= Money in MINUS Money out							
Rank							

What is risk in agriculture?

Agricultural entrepreneurs (both men and women) dislike risks because they are difficult to predict.

However, it is possible to assess market opportunities.

An entrepreneur can assess whether a risk will have a significant impact on the revenue when planning.

Let us take an example to explain this (the case of plantains).

Let us analyze the production risk for plantains: Let us assume that the yield of standard plantains is lower due to lack of rain and falls by 30%, and that the price of standard and improved plantains rises by 10%.

Market risk	Production risk
Suppose that the <u>price</u> of standard and improved plantains increases by 10%.	Let us assume that the <u>yield</u> of standard plantains is lower due to lack of rain and falls by 30%

Let's do a quick calculation to see if we are making a loss or if the deal is still acceptable. The variable cost does not change because the money has already been spent.

Risk analysis	Unit	Plantain Current	Plantain Improved
Area	ha	1,0	1,0
1. Money out	FCFA	561 000	1 525 500
2. Money in			
Production	kg	4 900	14 000
Price (10% lower)	FCFA/kg	180	180
Money in	FCFA	882 000	2 520 000
3. Loss or profit? With risk	FCFA	321 000	994 500
Money in MINUS Money out			

Are both risks acceptable?

Risk management strategy

Some risks can be managed. Here are some examples of risk reduction strategies:

☞ Production risk

Usually, not all crops are affected in the same way by lower yields and prices. In this case, you can:

- Diversifying production across different crops and varieties can help, even when rainfall is disrupted.
- Purchase inputs from approved sellers;
- Make small savings in case the field needs to be replanted;
- Apply management practices such as GAP and conservation agriculture to make better use of available rainwater.

☞ Market risk

- Spread product sales over a longer period, when prices can be expected to improve again.
- Sell through contract farming, with a guaranteed price and the assurance that everything produced will be purchased.
- Sell to different traders, seeking the best prices and using the information systems available on the market.

Sources of market information

There are several options for receiving market information.

Radio	Market information	Newspaper	SMS Services	Internet web sites	Buyers
					

- Market and price information can be obtained through various channels
- A good agricultural entrepreneur (man or woman) actively seeks market information, for example by subscribing to SMS services, using market information points and listening to the radio.
- Market information helps you to know what price you can get. It increases your bargaining power!
- It is important to diversify, as market prices are unpredictable. A good price in one season does not necessarily mean a good price in the next season.

The power of market information

- Knowing the price increases your bargaining power!
- Knowing specific commercial opportunities and their requirements in order to obtain good prices.
- Decide when is the best time to sell and to whom.
- Plan what to grow for the next season. (It should be noted that a good price in one season does not necessarily mean a good price in the next season, as many farmers may decide to grow the same thing, which can lead to an oversupply!
- Decide to grow "off-season" produce when supply is low.

Market information helps you make informed decisions, reduce market risk, and get good deals.

Main lessons

1. A good agricultural entrepreneur understands that risks and uncertainties are associated with every stage of production and marketing. Risks are a concern for current and improved techniques. He/she plans adequately to minimise risks.
2. Good agricultural entrepreneurs (men and women) know that crop diversification is an important strategy for mitigating price and productivity risks. When growing a specific crop, they ensure that the land and climate are suitable.
3. Comparing the profits of different crops and production techniques helps in making decisions about land use in order to maximise income. Production decisions are based on these comparisons.
4. Good agricultural entrepreneurs (men or women) understand that price fluctuations (market risk) constitute a risk to income. Market prices change during a season, but also from season to season, depending on the demand and supply of a product in a given market. He/she must use this knowledge to manage risk, for example, by not overreacting to an exceptionally good price during one season, as there is no guarantee that the price will be as good the following season.
5. To assess the effects of market risk, a good agricultural entrepreneur (man or woman) calculates money in using a price lower than the current price (or the price of the previous season).

If the "pessimistic" profit can still meet income targets, then the risk is acceptable.

6. Marketing is as important as production itself. Good agricultural entrepreneurs (men or women) must know and analyse prices and markets in order to make good business decisions and be in a better position to negotiate.
7. A good agricultural entrepreneur (man or woman) therefore carefully analyses marketing opportunities and assesses whether or not the opportunity is worthwhile. They make an informed decision based on their ability to meet the buyer's requirements, pre-finance the cost of accessing the opportunity (e.g. transport costs to deliver the product to the buyer), and manage the risks. Prices in urban markets may be higher, but may also involve higher access costs, for example for transport.
8. Good agricultural entrepreneurs (men or women) understand the requirements, benefits, costs and risks of different marketing channels before choosing the best option. They consider more than just the immediate benefits; they think about creating business partnerships that can be beneficial in the medium and long term.
9. Good agricultural entrepreneurs (men or women) do not base their decision to grow a crop solely on the profits shown in cash flow calculations, but also take into account other factors such as:
 - a. The availability of a market for the product
 - b. Pre-financing opportunities
 - c. The availability and cost of transport to market
 - d. The method of payment and payment terms by the buyer
 - e. The availability of inputs
 - f. The suitability of the land and climate for a specific crop to avoid monoculture
10. A good agricultural entrepreneur (man or woman) avoids risks as much as possible, for example by ensuring that they purchase their seeds and inputs from authentic sources and by using water conservation methods to reduce the effects of droughts.
11. Market information enables agricultural entrepreneurs (men or women) to make better-informed marketing decisions about when

and to whom to sell their produce. It strengthens their bargaining power with buyers and helps them obtain better prices.

Module 7: Manage your money throughout the year

Bad money management How do you know if you are mismanaging money? What are the causes? What do you need to do to manage your money well throughout the year?	You have to plan! Because if you fail to plan, you plan to fail.
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First step

We have looked at money in and money out for different crops in the farm. But there are also household expenses. Here are the expenses for a household of six: one child not yet at school, three children at school (primary, secondary, sixth form). Let's discuss whether we can predict all these expenses.

Household money needs	Expenses	Period	Can it be foreseen	Annual expenses
Matches	150	Each month	Yes	1 800
Salt	500	Every month	Yes	6 000
Soap	8 000	Every month	Yes	96 000
Water	3 000	Every month	Yes	36 000
Petroleum/Lighting	5 000	Every month	Yes	60 000
Food purchases	40 000	Every month	Yes	480 000
Communication credit	9 000	Every month	Yes	108 000
Subtotal	65 650	Every month	must be calculated	787 800
Schooling	180 000	September	Yes	180 000
Clothing	240 000	December	Yes	240 000
Happy events	250 000		Yes	250 000
Unexpected events	-	Every month	No	Impossible to predict, leave it blank!
Total household financial requirements for the year		1 457 800		

Step two

Let's put the household figures and the production figures into a financial calendar. On the following pages you will find the figures calculated in Module 5 for current and improved practices. How much money is left at the end of each month? How much money is left at the end of the year?

Please note: All farm produce is sold. The family has therefore not yet had anything to eat! Self-consumption is not yet taken into account and valued.

Exercise 7.1 Financial calendar: Current practices (in CFA francs)

Money out		Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Arabica coffee	1,0 ha												
	Inputs and services	0	0	0	0	0	0	0	0	0	14 500	29 000	3 500
	Labour force	0	25 000	25 000	0	0	0	0	25 000	0	47 500	32 500	20 000
Maize (grains)	1,0 ha												
	Inputs and services	12 000	81 250	0	6 000	0	0	0	4 500	11 000	20 000	0	0
	Labour force	40 000	0	62 500	10 000	10 000	0	25 000	5 000	7 500	5 000	0	0
Plantain	1,0 ha												
	Inputs and services	0	180 000	113 500	0	0	0	0	0	0	0	0	0
	Labour force	0	52 500	132 500	0	5 000	0	37 500	37 500	2 500	0	0	0
	Fixed cost	0	0	0	0	0	0	0	0	0	0	0	0
Household		79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100
Schooling		200 000											
Happy events					200 000								
Clothing													150 000
Total per month		331 100	417 850	412 600	295 100	94 100	79 100	141 600	151 100	280 100	166 100	140 600	742 600

Money in		Jan	Feb	March	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Arabica coffee		0	1 500 000	0	0	0	0	0	0	0	0	0	0
Maize (grain)		0	0	0	0	0	0	0	0	0	275 000	0	0
Plantain		0	1 400 000	0	0	0	0	0	0	0	0	0	0
Total per month		0	2 900 000	0	0	0	0	0	0	0	275 000	0	0

Result	Jan	Feb	Mar	Avr	Mai	Juin	Juil	Aout	Sept	Oct	Nov	Déc
Monthly balance												
Cumulative balance												

Exercise 7.2 Calendrier financier : Improved practices (in CFA francs)

Money out			Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Arabica coffee	1,0	ha												
	Inputs and services		149 000	22 000	0	0	0	0	0	0	0	32 300	61 000	6 000
	Labour force		0	32 500	25 000	25 000	32 500	0	0	7 500	0	105 000	75 000	35 000
Maize (grains)	1,0	ha												
	Inputs and services		12 000	182 500	20 000	12 000	0	0	0	17 500	35 000	20 000	0	0
	Labour force		40 000	0	62 500	22 500	17 500	0	50 000	15 000	12 500	12 500	0	0
Plantain	1,0	ha												
	Inputs and services		0	375 000	523 500	7 000	0	0	0	0	0	0	120 000	0
	Labour force		0	52 500	237 500	0	10 000	0	90 000	90 000	5 000	0	0	15 000
Household			79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100
Schooling			200 000											
Happy events						200 000								
Clothing														150 000
Total per month			480 100	743 600	947 600	345 600	139 100	79 100	219 100	209 100	311 600	248 900	335 100	775 100

Money in	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Arabica coffee	0	3 000 000	0	0	0	0	0	0	0	0	0	0
Maize (grain)	0	0	0	0	0	0	0	0	0	875 000	0	0
Plantain	0	0	4 000 000	0	0	0	0	0	0	0	0	0
Total per month	0	3 000 000	4 000 000	0	0	0	0	0	0	875 000	0	0

Result	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Monthly balance												
Cumulative balance												

Step three Comparison and discussion

Money in at year-end for the three enterprise

Which situation is preferable?			With current practices	With improved practices
	Possible forecast	When	per year (AR)	per year (AR)
Household expenditure	Yes	Every month	787 800	787 800
Money spent on schooling, clothing and special occasions	Yes	Different months	670 000	670 000
Money out for production	Yes	Different month	1 053 950	2 552 700
Total money out			2 511 750	4 010 500
<u>Money in from production</u>	Yes, but subject to change	Different months	2 425 000	6 675 000
<u>Money in from other sources</u>	Yes, but subject to change	Different months		
Total income			2 425 000	6 675 000
Money available for savings and other expenses			-86 750	2 664 500
(Money in minus total money out)				
Difference between the two situations (AR)			2 751 250	

Please note

- ➡ Each day that adult family members work increases the available cash by approximately 2,000 to 2,500 CFA francs.
- ➡ All farm produce is sold! The family has therefore not yet had anything to eat! Self-consumption is not taken into account as it is not valued.

Discuss the differences and which situation is preferable.

What changes are needed?

Comment

Based on everything we have learned, we can conclude that an entrepreneur is a good manager.

Management is the art of running a business, i.e. making choices and decisions.



For a business leader, management encompasses all actions related to decision-making, implementation and follow-up within their company in order to achieve their objectives.

Therefore:

- Managing means planning and deciding
- Managing means taking the time to think about the decisions that need to be made every day
- Managing means looking ahead: "you can't drive by only looking in the rear-view mirror"
- Managing means staying informed and being "curious"
- Managing means considering several scenarios because "planning is not predicting"
- Managing means monitoring, adjusting and controlling
- Managing means measuring, recording, analyzing and acting.

Main lessons

1. In an agricultural business, expenditures (money out) must be spent on production and household expenses every month, while revenue (money in) is only received during the months when crops are harvested and products are sold. It is therefore normal for expenditure to be higher than income in certain months of the year. These months are referred to as "deficit" months.
2. A good agricultural entrepreneur (man or woman) draws up a financial calendar. The husband plans production and household expenses and income with his wife or wives.
3. To be able to fulfill expenditures in deficit months, a good agricultural entrepreneur (whether male or female) saves the surplus cash from product sales.
4. Improved techniques can help increase the revenue of the agricultural entrepreneurs (men or women).
5. Financial requirements for inputs can be planned well in advance of the next season by calculating money out for all plots. This information can be used to make targeted savings or to apply for production loans.
6. A good agricultural entrepreneur (male or female) has a bank account to better manage their finances and facilitate access to available financial products (see next chapter).

Solution 7.1 Financial schedule: Current practices (in CFA francs)

Money out		Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Arabica coffee	1,0 ha												
	Inputs and services	0	0	0	0	0	0	0	3 900	0	2 500	31 800	0
	Labour force	0	0	25 000	0	25 000	25 000	0	0	50 000	25 000	5 000	0
Maize (grains)	1,0 ha												
	Inputs and services	12 000	81 250	0	6 000	0	0	0	4 500	11 000	20 000	0	0
	Labour force	40 000	0	62 500	10 000	10 000	0	25 000	5 000	7 500	5 000	0	0
Plantain	1,0 ha												
	Inputs and services	0	180 000	113 500	0	0	0	0	0	0	0	0	0
	Labour force	0	52 500	132 500	0	5 000	0	37 500	37 500	2 500	0	0	0
	Fixed cost	0	0	0	0	0	0	0	0	0	0	0	0
Household		79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100
Schooling		200 000											
Happy events					200 000								
Clothing													150 000
Total per month		331 100	417 850	412 600	295 100	94 100	79 100	141 600	151 100	280 100	166 100	140 600	742 600

Money in	Jan	Feb	March	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Arabica coffee	0	1 500 000	0	0	0	0	0	0	0	0	0	0
Maize (grain)	0	0	0	0	0	0	0	0	0	275 000	0	0
Plantain	0	1 400 000	0	0	0	0	0	0	0	0	0	0
Total per month	0	2 900 000	0	0	0	0	0	0	0	275 000	0	0

Result	Jan	Feb	Mar	Avr	Mai	Juin	Juil	Aout	Sept	Oct	Nov	Déc
Monthly balance	-331 100	2 482 150	-412 600	-295 100	-94 100	-79 100	-141 600	-151 100	-280 100	108 900	-140 600	-742 600
Cumulative balance	-331 100	2 151 050	1 738 450	1 443 350	1 349 250	1 270 150	1 128 550	977 450	697 350	806 250	665 650	-76 950

Solution 7.2 Financial schedule: Improved practices (in CFA francs)

Money out		Jan	Feb	Marc	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Arabica coffee	1,0 ha												
	Inputs and services	149 000	22 000	0	0	0	0	0	0	0	32 300	61 000	6 000
	Labour force	0	32 500	25 000	25 000	32 500	0	0	7 500	0	105 000	75 000	35 000
Maize (grains)	1,0 ha												
	Inputs and services	12 000	182 500	20 000	12 000	0	0	0	17 500	35 000	20 000	0	0
	Labour force	40 000	0	62 500	22 500	17 500	0	50 000	15 000	12 500	12 500	0	0
Plantain	1,0 ha												
	Inputs and services	0	375 000	523 500	7 000	0	0	0	0	0	0	120 000	0
	Labour force	0	52 500	237 500	0	10 000	0	90 000	90 000	5 000	0	0	15 000
Household		79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100	79 100
Schooling		200 000											
Happy events					200 000								
Clothing													150 000
Total per month		480 100	743 600	947 600	345 600	139 100	79 100	219 100	209 100	311 600	248 900	335 100	775 100

Money in	Jan	Feb	Marc	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Arabica coffee	0	3 000 000	0	0	0	0	0	0	0	0	0	0
Maize (grain)	0	0	0	0	0	0	0	0	0	875 000	0	0
Plantain	0	0	4 000 000	0	0	0	0	0	0	0	0	0
Total per month	0	3 000 000	4 000 000	0	0	0	0	0	0	875 000	0	0

Result	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Monthly balance	-480 100	2 256 400	3 052 400	-345 600	-139 100	-79 100	-219 100	-209 100	-311 600	629 100	-335 100	-775 100
Cumulative balance	-480 100	1 776 300	4 828 700	4 483 100	4 344 000	4 264 900	4 055 800	3 846 700	3 535 100	4 164 200	3 829 100	3 054 000

Module 8: How to get good financial services

Savings

Why is it important to save?

- With savings, you can invest in your business. For example, you can buy improved seeds to get better yields.
- If you save in a bank account, your money is safe.
- With the interest you earn on your savings, you protect your money against inflation (when the cost of living increases).
- Savings in an account serve as collateral for obtaining credit.
- Savings provide insurance against climatic hazards and disasters and also help to manage unexpected events/expenses.

How can you save money and what are the advantages and disadvantages?

	Hide money at home	Bring money to a rural bank
Advantages 	– The money is immediately available	– The money is safe at the bank – Savings can earn you interest. – A savings account makes it easier for you to obtain credit. – You don't make reckless purchases because you have to go to the bank first.
Disadvantages 	– Money can be stolen. – Money can be destroyed (e.g. by fire or mice). – Money does not generate interest. – It can lead to reckless spending.	– The money is not immediately available. – The bank charges management fees.

Community microfinance

It plays the same role as the tontine, i.e. it alleviates the difficulty of accessing credit, especially at low or zero interest rates, with a few specific features, including

- Opening an account with a microfinance institution or bank to secure contributions;
- Forming a committee to manage the group and loans;
- Paying weekly contributions to accumulate enough money before starting to make loans;
- The contribution amount is the same for each member;
- Loans are granted to those who wish to borrow, but with a set number to be met each month;
- Loans are granted after four weeks of contributions;
- The interest rate set for loans should be low;
- Interest on loans remunerates the funds contributed by each member at the end of the year;
- A membership of 20 to 25 members is often recommended.

Bank or microfinance deposits



Commercial banks, rural banks, microfinance institutions and development banks collect money from people who have surplus cash or who save part of their income. Bank customers then deposit their money into an account. If you want to deposit your money into an account, you can choose from the following types of accounts:

☞ **Current account**

A current account offers more services but does not pay interest on deposits. However, the bank charges you bank fees for the services it provides. To withdraw money, you use a cheque or your bank card. You can also pay bills directly by cheque or bank transfer.

☞ **Savings account**

You open a savings account to keep your money safe or to obtain a loan. To withdraw money, you can use your bank card at any time or go to the bank in person. The bank pays you interest on your deposit. As the owner of a savings account with a microfinance institution, you will receive a savings passbook from the bank, in which the money withdrawn or paid into the account is recorded. You can also have a magnetic card for withdrawals at banks and certain microfinance institutions.

Some microfinance institutions do not pay interest on demand savings accounts.

☞ **A term savings account**

It helps you keep your money safe and earn more interest. You can only withdraw your money after the period you have agreed with the bank, for example after six months. Interest is paid according to the amount in the account and depends on how long the

money remains in the account. However, if you withdraw the money before the end of the term agreed with the bank, the bank will charge you a withdrawal fee. This type of account can be used, for example, by an agricultural entrepreneur who is planning to replant his chilli pepper plantation.

Practical tips

You don't have to be rich to save. Anyone can do it.

The minimum we recommend is 10% of your income. If you cannot reach 10%, start with less but save! To achieve this, you need to spend less than you earn and save something every day, every week, every month or every season.

- **Save regularly**
- Save at least 6 months' worth of your monthly expenses in an emergency fund.
- **Finally, remember that saving requires discipline, and discipline is learned through practice.**

Put money into your savings account	Withdraw money from your savings account
Go to the bank or microfinance agency.	Think about why you need money and how much you need. Go to the bank or microfinance agency.
At the bank, fill in the deposit form and deposit your money. The bank will give you a receipt.	At the bank, present your ID and account number, and explain what you need. The bank will give you a receipt for the amount withdrawn.
At the microfinance agency, go to the counter with your savings book and deposit your money. Your deposit will be recorded in your savings book and you will be given a receipt.	At the microfinance agency, go to the counter with your savings book and explain what you need. The amount withdrawn will be recorded in your savings book and you will be given a receipt.
Sign all documents and request all required signatures!	Sign all documents and request all required signatures.
Predicts the deposit fees	
Do not lose your savings book! Keep it safe from mice, termites, rain and children!	

Credit

What is credit (lending)?

It is money that you borrow from a person, a bank or a microfinance institution with the obligation to repay that money. It is therefore a service that you obtain and for which you pay a fee: this is called the "interest rate".

Before applying for credit, you need to do some calculations to make sure that the activity is profitable enough to cover all costs, including interest, and still make a profit. You also need to take the risks into account: Bank credit must be repaid regardless of the actual yield of your plot (production risk) and the market price (market risk). **The loan is only used for the planned activity!**

The bank or microfinance institution will give you a letter stating that it has agreed to lend you the money you have requested. It will also indicate when you have to repay the total amount of money. This way, you, the borrower, know what the loan payments will be, how much interest you will have to pay, and when you have to repay the loan. This makes planning very easy for everyone.

What is interest?

Interest is the money you earn on your investment with the bank or insurance company.

Interest on borrowed money can be charged weekly, fortnightly, monthly, or annually.

Reasons why people borrow

- Invest
- To respond to an emergency
- Consumption

Loan terms

- A loan is money that you borrow (credit) from a person or a bank.
- Money can be borrowed for a **short period (1 to 12 months)**.
- Money can be borrowed for a **medium term (1 to 2 years)**.
- Money can also be borrowed for a **long term of 3 years or more**.
- Repayment can be periodic (in instalments) or a single payment at the end of the term.
- Interest can be charged weekly or fortnightly, monthly or annually on the money borrowed.
- **For agriculture, it is advisable that interest be charged with repayment at the end of the term.**

There are two common types of loans

Commercial loan

This type of loan is granted to businessmen and women such as farmers to improve their business (agriculture) or to increase the size of the business (e.g. expanding the farm from 1 to 2 hectares). Business loans are granted to individuals or groups.

Examples of business loans:

Agricultural loan

This may be, for example, a short-term loan for the purchase of planting equipment, seeds, fertiliser, or a medium- or long-term loan for the purchase of agricultural tools.

Expansion loan

This type of loan helps farmers expand their agricultural activity by increasing the area under cultivation. Microfinance offers other types of loans for the purchase of a commercial farm, tractor or other agricultural equipment or tools.

Other investment loans

An agricultural entrepreneur may need a loan to invest in related non-agricultural businesses, such as expanding their agricultural business to include a grocery store.

Personal loan

This type of loan is not for business purposes. Rather, it is used to purchase necessary items for the home (e.g., a solar system) or to pay for tuition fees.

What are the borrower's responsibilities?

- How did you feel when you lent something to someone who did not return it? How did that make you feel?
- How did you feel when you didn't return something you borrowed? What happened when you didn't return what you borrowed?
- When someone borrows something, what are their responsibilities as a borrower?
- What can happen if the borrower does not fulfil their responsibilities as a borrower?

What is the difference between using your own money and using borrowed money?

Using your own money	Using borrowed money
• Fewer obligations and responsibilities. • No interest to pay	• A loan comes with obligations for the borrower, such as repayment with interest and, in some cases, membership in a group. • Borrowing gives the borrower better access to more financial capital. • A loan costs money.

Microfinance institution	The most commonly used sources of credit	Savings and credit cooperatives
		
Banks	Informal lenders	Loans from friends or family members
		

What you need to know before borrowing

- Why do you intend to apply for a loan? What is the purpose? Do you have an investment plan?
- The source(s) of income and/or savings you need to repay the bank (repay the loan).
- When will you obtain the loan?
- The amount of your repayment, including the principal (initial loan amount), interest and fees:
 - In the informal sector, interest rates are generally higher than in the formal sector and are charged monthly as a percentage of the principal amount of the loan. Banks generally use an annual interest rate. Make sure you understand what the interest rate is, not only as a percentage of the principal loan amount, but also in monetary terms.
 - Loan processing fees, which are charged as a percentage of the principal loan amount.

- Guarantees are required to obtain the loan (life insurance, title deed, etc.).
- ➡ From the investment made with the loan money, you will be able to both repay the loan and make a profit.

Understand the repayment schedule and the grace period before the first repayment is due. **When you apply for a loan, the bank or microfinance institution (MFI) will ask you for several things before considering granting you a loan.**

Here are some examples of possible requirements:

- A valid identity card;
- Proof of residence (e.g., a utility bill); and Some form of collateral or mandatory savings.
- The service fees and interest you will have to pay depend on who you borrow from.

How a bank grants a loan

After you apply for the loan, a bank will give you a letter saying that it has agreed to give you the money you requested. The letter also says when you must repay the total amount of money.

The agricultural entrepreneur as the borrower and the bank as the lender know what the loan payments will be, including service charges, interest and repayment of the principal amount, and when all payments are due. This simplifies planning for both parties.



Example:

ATANGANA is an Ivorian farmer who decides to run his coffee farm using good generative agriculture practices while following the technical itinerary. To do this, he must pay 53,000 CFA francs to finance the agricultural season.

He has 500,000 CFA francs in his **savings account**, which represents money for household needs.

He decides to apply for a loan of 53,000 CFA francs from his bank to cover the cost of inputs and services for February and March, as he will be selling his coffee in March. ATANGANA does not borrow money from the bank for labour, only for inputs and services.

The bank knows ATANGANA well because he has a savings account.

To obtain the loan, the bank asks ATANGANA to block the sum of 10,600 CFA francs (20% of the amount borrowed) in his savings account as a financial guarantee.

This is a guarantee for the bank, which agrees to give ATANGANA the 53,000 CFA francs. However, he must repay the full amount of 62,540 CFA francs in March, representing the amount borrowed (53,000 CFA francs) plus 9,540 CFA francs in interest, or 18% of the amount borrowed.

The annual interest rate applied by the bank is 18%.

(intentionally left free to match the French version)

Let us now look at ATANGANA's financial situation: **what can we conclude? Should ATANGANA take this loan or not? Why?**

Summary of financial calendar – Improved practices without loans												
Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Money out	85 000	132 000	152 000	693 500	284 400	189 000	236 500	95 000	260 000	83 000	65 000	465 000
Money in	0	0	750 000	1 250 000	0	0	0	800 000	0	600 000	0	0
Monthly balance	- 85 000	- 132 000	488 000	636 500	- 284 400	- 189 000	- 236 500	705 000	- 260 000	517 000	- 65 000	- 465 000
Cumulative balance	- 85 000	- 217 000	271 000	907 500	623 100	434 100	197 600	902 600	642 600	1 159 600	1 094 600	629 600

Summary of financial calendar – improved practices with loans												
Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Money out	85 000	132 000	152 000	693 500	284 400	189 000	236 500	95 000	260 000	83 000	65 000	465 000
Loan repayment			62 540									
Total cash outflows	85 000	132 000	214 540	693 500	284 400	189 000	236 500	95 000	260 000	83 000	65 000	465 000
Money in	0	0	750 000	1 250 000	0	0	0	800 000	0	600 000	0	0
Loan		53 000										
Total money inflows	0	53 000	750 000	1 250 000	0	0	0	800 000	0	600 000	0	0
Monthly balance	- 85 000	- 79 000	425 460	636 500	- 284 400	- 189 000	- 236 500	705 000	- 260 000	517 000	- 65 000	- 465 000
Cumulative balance	- 85 000	- 164 000	261 460	897 960	613 560	424 560	188 060	893 060	633 060	1 150 060	1 085 060	620 060

Summary of financial calendar – Improved practices with loans and savings												
Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Money out	85 000	132 000	152 000	693 500	284 400	189 000	236 500	95 000	260 000	83 000	65 000	465 000
Loan repayment			62 540				0	0				
Total cash outflows	85 000	132 000	214 540	693 500	284 400	189 000	236 500	95 000	260 000	83 000	65 000	465 000
Money in	0	0	750 000	1 250 000	0	0	0	800 000	0	600 000	0	0
Loan		53 000										
Total money inflows	500 000	53 000	750 000	1 250 000	0	0	0	800 000	0	600 000	0	0
Monthly balance	415 000	- 79 000	425 460	636 500	- 284 400	- 189 000	- 236 500	705 000	- 260 000	517 000	- 65 000	- 465 000
Cumulative balance	415 000	336 000	761 460	1 397 960	1 113 560	924 560	688 060	1 393 060	1 133 060	1 650 060	1 585 060	1 120 060

Main lessons

1. A good agricultural entrepreneur (man or woman) plans their expenses and money entries throughout the year to avoid cash shortages and costly unexpected loans.
2. To meet the needs during deficit months, good agricultural entrepreneurs (men and women) make savings with the surplus cash from product sales to build up savings. This requires discipline.
3. Saving money with a rural bank or microfinance institution close to the village has the advantage of keeping the money safe. Another advantage is that it forces people to plan their expenses before withdrawing money. Savings in a rural bank or microfinance institution are often a condition for obtaining a loan.
4. There are different types of savings accounts that offer different advantages. Rural banks and microfinance institutions provide information and advice to their customers.
5. There are different types of loans. It is important to choose the type of credit that offers a suitable interest rate and repayment period.
6. A good agricultural entrepreneur (man or woman) finds out about the possibilities and conditions for savings and loans before making a decision.
7. A good agricultural entrepreneur (man or woman) only takes out a loan when they are sure they can repay it on time. For this reason, they plan their investment and necessary expenses. Gross margin and financial calendar are the appropriate tools for doing this.
8. Once the loan has been received, a good agricultural entrepreneur (man or woman) maintains the investment objective. Otherwise, the agricultural entrepreneur (man or woman) risks having repayment problems.
9. Good agricultural entrepreneurs repay their loans on time in order to maintain their credibility and avoid problems related to forced collection.

Ways in which money can be borrowed

☞ Business-oriented loans

Business-oriented loans are granted to agricultural entrepreneurs (men and women) to improve their business (e.g. purchase of inputs) or to increase the size of their business (increase in acreage, replanting or other investments).

☞ Loans for individuals

Loans for individuals are for household investments and are normally granted on condition that the borrower has a current account into which a regular salary is paid.

The bank needs a **guarantee** that you will repay the loan. This can be an amount in an account, an insurance policy signed when the loan application is made, or a building or land ("mortgage").

☞ Solidarity loan

For a **solidarity loan**, you borrow money as a member of a group, such as a cooperative or a registered farmers' association. The other members guarantee repayment for each member of the group. If you repay the loan and interest on time, the other members of the group will be happy to keep you in the group. If you do not repay on time, the bank may require other members of the group to pay on your behalf or may make it more difficult for other members of the group to borrow money.

Finance climate-smart agriculture

In Module 1, you learned that climate change and global warming are causing a number of different effects, such as an increasing number of extreme weather events: prolonged periods of drought or heavy rainfall, changes in the flowering periods of flowers and plants.

These effects are often accompanied by negative consequences and additional costs, including for agricultural businesses.

For example, if there is less rainfall, you, as an agripreneur, must invest more in irrigation or face lower yields or even destroyed crops.

Action is needed to further combat climate change and to adapt to the impacts we can already feel and see today. In many countries, the number of climate finance opportunities is increasing. Climate finance can be provided by (micro)financial institutions, producer organizations, and traders or buyers. They themselves may receive incentives from climate-related investors to expand climate finance through concessional loans, grants, funds, donations, or (upfront) payments.

Climate finance can be a business model for agripreneurs (women and men) in the future – to make their businesses more resilient to climate change and contribute to the fight against climate change! Be sure to seek out information and consider partnering with other agripreneurs and organizing yourselves professionally into a group to facilitate access to climate finance.

What specific climate change adaptation activities can be funded?

The following short-term adaptation measures are eligible for funding:	The following long-term adaptation measures are eligible for funding:
– Subscription to weather forecasting and climate information services – Changes in tillage practices (e.g conservation tillage) – Use of appropriate varieties for annual crops (e.g drought resistance) – Optimized use of fertilizers, e.g manure, coated fertilizers – Portfolio diversification (crops/live stock) – Livestock management e.g rational grazing	– Improved crop combination and harvesting e.g continuous harvesting e.g continuous cash with cover crop, intercropping,intercorporation of fungal or microbial inoculants or other soil probiotics – Irrigation system and water management practices – Agroforestry / shadow management (tree planting) – Switch to climate-resilient planting material, crops, varieties and/or breeds. – Construction activities e.g cisterns, terraces, water reservoirs – Improve land use management

Module 9: Added value from quality coffee

What is good quality coffee?

Good quality green coffee is a batch of coffee beans that is healthy, well dried, well winnowed, well sorted and free of broken beans. However, the accepted moisture content must be less than 13% and it must contain no more than 10% non-standard coffee, 5% waste and 1% foreign matter. It is odourless and has not undergone any alteration (mould, rot, etc.).

- Non-standard coffee: black beans, broken beans, undesirable beans (coffee with defects such as broken beans, malformed beans, white beans, mouldy beans, wrinkled beans, etc.).
- Waste: parchment, unhusked coffee, coffee husks or skins, etc.
- Foreign matter: stones, sack thread, plastic, etc.

Description of the types of defects in coffee cherries

What are the types of coffee defects?	What are the causes?	How can these defects be avoided?
Black beans	- Harvesting green cherries - Poor sorting - Stacking fresh cherries for more than a day before drying (fermented cherries) - Harvesting unripe cherries	- Harvest only ripe cherries - Sort them carefully - Dry the cherries immediately after harvesting
Glassy or earthy- coloured kernels	- Cherries laid out too thickly during drying - Insufficient stirring during drying - Fresh cherries piled up for more than a day before drying	- Spread the cherries in a thin layer during drying (3 to 4 cm deep, equivalent to the length of your index finger) - Stir the mass sufficiently during drying
Mouldy grains	- Poorly dried cherries - Grains exposed to moisture	- Dry the cherries thoroughly. - Store the grains in jute bags in a dry, non-humid place
Smelly grains	- Cherries fermented due to poor drying and exposure to moisture - Harvesting rotten and pierced cherries - Insufficient stirring of cherries during drying	- Dry the cherries thoroughly - Stir the cherries sufficiently during drying - Store the cherries in jute bags in a dry, non-humid place - Do not harvest rotten and pierced cherries

Broken cherries	- Excessive drying - Incorrect adjustment of the millstones (drums) of the shelling machine	- Stir the cherries carefully and frequently during drying - Avoid prolonged exposure of cherries to the sun - Adjust the millstones (drums) of the husker correctly
Hollow or worm-eaten grains	- Punctures and infestation of ripe cherries by insects (beetles, grain bark beetles)	- Pick ripe cherries every two weeks - Remove black cherries from coffee trees (sanitary harvest) - Treat coffee trees attacked by insects (if necessary) - Sort the beans
Presence of debris and foreign bodies in the coffee bean stock	- Poor coffee sorting Drying on an unpaved or poorly paved area	- Adjust the ventilator system of the hulling machine correctly - Choose a well-calibrated hulling machine - Sort properly
Shell or skin debris and parchment	- Incorrect setting of the hulling machine - Poor sorting	- Adjust the ventilator system of the hulling machine correctly - Choose a well-calibrated hulling machine - Sort properly

Why these problems?	Who can change this?
Coffee growers are not applying appropriate techniques!	The farmer!

How can these mistakes be avoided?

The following images show the best practices to adopt.

Recommended practices for preparing high-quality green coffee



Preparing the harvest

Frequently carry out sanitary harvesting (removing rotten cherries) and maintenance (removing dead branches) Clear the plantation to allow harvesters to move around easily

Prepare the necessary equipment:

- Harvesting tarpaulins
- Baskets - Bags
- Raised drying mats or clean the cement drying area

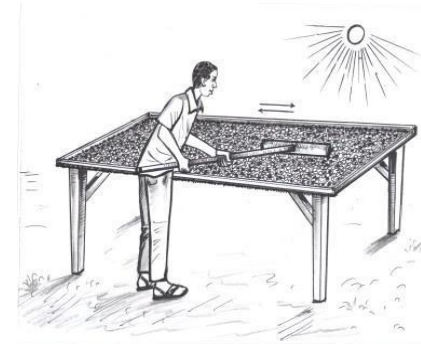


Harvest

Harvesting is done in 4 to 5 passes at 2-Week intervals.

Spread a tarpaulin under the coffee tree and pick the red or orange cherries. Avoid scraping and breaking the twigs during harvesting.

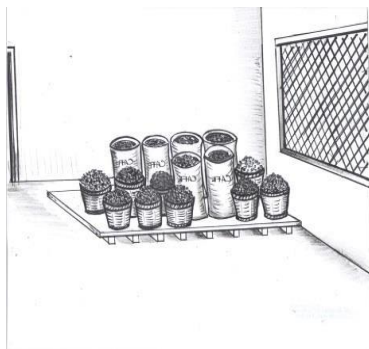
Harvest ripe cherries, i.e. bright red. Do not pick overripe cherries, cherries that have dried on the tree or fallen to the ground a long time ago. Leave unripe cherries; a proper harvest should not contain more than 15% green cherries.



Drying

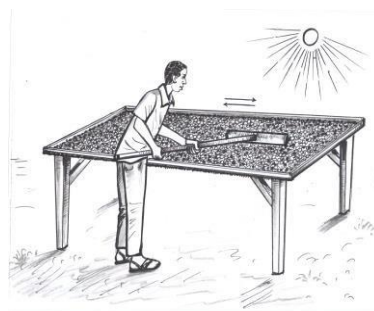
Sun drying takes 21 to 30 days and must be done immediately after picking. Spread the coffee cherries out to dry in a thin layer 3 to 4 centimetres thick on raised racks. To ensure good ventilation and avoid the presence of black, foul-smelling beans, the coffee must be stirred regularly, twice a day, using wooden rakes.

Recommended practices for preparing good quality coffee cherries



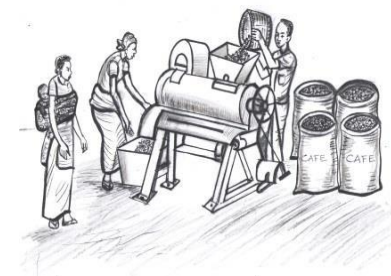
Storing dried cherries

Then place the dried coffee cherries in clean jute baskets or bags arranged on pallets in a clean, well-ventilated room to prevent them from absorbing moisture and odours.



Prepare the cherries for shelling

To facilitate hulling, dry the coffee again if necessary 1 or 2 days before hulling.



Hulling

Adjust the grinding wheels of the hulling machine before starting hulling so as not to crush the coffee beans. Or choose a machine operator whose hulling machine does not break the coffee beans. This ensures whole coffee beans and therefore high-quality coffee.

If a single pass through the hulling machine does not produce clean coffee, run the beans through twice if necessary.



Sorting

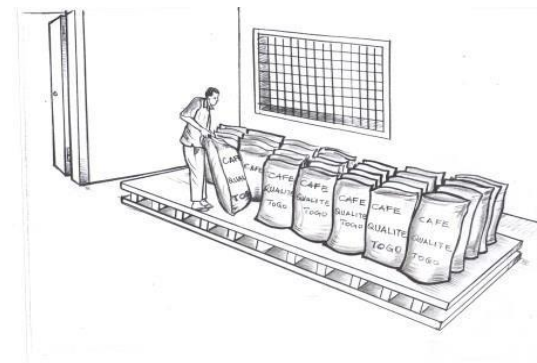
After husking, remove:

- Black grains,
- Beans seed with holes or insect damage
- Coffee fragments
- Unhusked cherries
- stones
- and foreign matter



Bagging and weighing

To protect the coffee from various sources of contamination and facilitate transport, it must be placed in clean 80 kg jute bags. The filled bags must then be weighed and their weight recorded before storage.



Store

Store the green coffee in 80 kg jute bags on pallets in a clean, well-ventilated warehouse away from moisture.

Benefits of good post-harvest practices

	Unity	<u>Poor post-harvest and storage techniques</u>			<u>Good post-harvest and storage techniques</u>		
Coffee Arabica	Kg			1 200			1 200
1. Cash outflow	FCFA			42 500			70 000
		Quantity	Amount	Total	Quantity	Amount	Total
Post-harvest treatment	HD	17	2 500	42 500	28	2500	70000
Supplementary irrigation	HD	0	2 500	0	0	2500	0
Results		Coffee Arabica with impurities, mould, black, broken or sandy cherries, bad taste, not brilliant			Coffee Arabica, clean, free from impurities or sand, well dried, good taste, brilliant		
Coffee damaged by insects or fungal infestation		Yes	Quantity remaining of the product (%)	80	No	Quantity remaining of the product (%)	95
Remaining coffee beans for sale	Kg			960			1 140
Price negotiated	FCFA/kg			1 500			1 500
Price received	FCFA/kg			1 200			1 500
2. Cash inflow = Quantity sold x price received	FCFA			1 152 000			1 710 000
3. Profit = Cash inflow MINUS Cash outflow	FCFA			1 109 500			1 640 000
Net benefit from good post-harvest and storage practices	FCFA						530 500

Main lessons

1. The quality of marketable coffee determines the income of producers, exporters and roasters.
2. Analysis of coffee quality defects has shown that good agricultural entrepreneurs (men or women) can avoid them.
3. Proper harvesting and post-harvest activities result in coffee of very good physical and organoleptic quality that is profitable on the market.
4. For this reason, agricultural, commercial and processing companies in the coffee sector have a common interest in ensuring that coffee is of good quality.
5. High-quality coffee helps to increase the income of agricultural entrepreneurs.

Module 10: Benefits for membership in farmer organizations

- What are the benefits of being a member of a farmer organization?
- What is the point of being in an organization?
- What are the problem/risk of an organization that you know?
- How can this problems be avoided?
- What is your conclusion?

How can we tell if a farmer organization is working well?

- Members pay annual membership fees without pressure
- Members accept deductions (levies) from their sales without complaint
- ☞ **This shows that the producer organization has the trust of its members and that it provides services that are appreciated**
- ☞ **It should be noted that a producer organization cannot provide services without the membership fee of its members**
- Existence and application of internal rules and regulations.
- Existence and application of rules on control and accounting.
- Regular report production
- The organization's activities are progressing well. For example: sales tonnages are increasing, and the volume of group purchases of inputs is increasing
- ☞ **This shows that the producer organization is functioning well.**

Let us look at some calculations to see what benefits can be gained from membership in a well-managed agricultural producer organization that is well managed.

Exercise 10.1: Group sales of products can lead to better selling prices

Example: For the bulk sale of all products, the producer organization has negotiated prices that are 10% higher.

To find out how much profit the entrepreneurs (men or women) who are members of this organization would make in this case, we perform the following calculation for the group sale of products obtained using improved techniques:

							
Group sales		Arabica Coffee improved		Improved Maize		Plantain improved	
	Unit	Individual sale	Group sale	Individual sale	Group sale	Individual sale	Group sale
Money in	CFA	3 000 000	3 300 000	875 000	962 500	4 000 000	4 400 000
Production	Kg	1 200	1 200	3 500	3 500	20 000	20 000
Price (Price increase)	CFA/kg	2 500	2 750	250	275	200	220
Profit from the group sale	CFA	0	300 000	0	87 500	0	400 000
Total profit from the group sales	CFA	787 500					

Exercise 10.2: Group purchasing of inputs and services can reduce prices.

In this example, the producer organization negotiated with service providers and suppliers to obtain costs that are only 10% lower for all inputs and services.

To find out how much profit the entrepreneurs (men or women) who are members of this organization would make in this case, we perform the following calculation for the group purchase of inputs and services for improved techniques.

							
Grouped purchase of inputs		Arabica coffee improved		Maize improved		Plantain improved	
	Unit	Individual purchase	Group purchase with 10% discount	Individual purchase	Group purchase with 10% discount	Individual purchase	Group purchase with 10% discount
Cost of inputs and external services	CFA	270 300	243 270	299 000	269 100	1 025 500	922 950
Benefit of buying in bulk	CFA	0	27 030	0	29 900	0	102 550
Total benefit of the group purchase		CFA	159 480				
Total profit from group commercial operations		CFA	946 980				

What lessons can you draw from these examples?

What are the risks faced by farmers' organizations?

(Parallel sales, misappropriation of inputs, non-repayment of loans, non-payment of contributions, consequences of financial education).

What are the consequences?

What can you do to avoid them?

Risks and rules to avoid them?

Main lessons

1. Agriculture entrepreneurs (men or women) from groups or associations to do things they cannot do alone.
2. Groups or associations of agricultural entrepreneurs (men or women) have the common goal of doing business. To achieve this common goal, members learn together, from each other, and support each other.
3. For service providers, it is easier to work with groups or associations. A group of agricultural entrepreneurs (men or women) can more easily seek financial services or information on production techniques.
4. For input suppliers, it is easier to work with groups or associations. A group of agricultural entrepreneurs (men or women) can organize bulk purchases of agricultural inputs and obtain better prices from suppliers.
5. For buyers of agricultural products, it is easier and cheaper to work with groups or associations. A group of agricultural entrepreneurs (men or women) can organize group sales of agricultural products. The group can obtain a better price from the buyer if the product quality is good.
6. Well-functioning associations or groups of agricultural entrepreneurs have clear rules that are respected by all members. When rules are not respected by members, sanctions are applied.
7. Good leaders of producer associations follow the rules and play their part in improving the business of all members.
8. Agricultural entrepreneurs (men or women) who are members

of reliable associations or groups improve their business.

9. Agricultural entrepreneurs who do better business with the support of their association pay their (membership) fees without hesitation.

Contract Farming

In the second part of this module, we will discuss:

- What is a contract/what is contract farming?
- How can contract farming help agricultural entrepreneurs and farmers' organizations do good business?
- What are the costs and benefits (advantages and disadvantages) of contract farming agreements?



Some processors and large buyers offer contract agreements to farmers

Processors and other buyers are interested in large, regular volumes of good quality produce. To obtain this, they may offer contracts and services to agricultural entrepreneurs who agree to grow for them. Buyers and sellers can enter into a contractual relationship, where an agreement specifies the obligations of buyers and farmers as trading partners.

What is a contract/what is contract farming?

A contract is a legally binding written (formal) or verbal agreement that recognizes and oversees the rights and duties of the parties involved.

Contract farming aims to guarantee farmers the sale of their crops and commercial enterprises a regular supply of agricultural products required by the market. Contract farming is a farmer's commitment to supply a known buyer with a specific agricultural product at a given time, price and quantity.

Exercise 10.3: Negotiation cycle between the buyer (ESUDEV) and the Bushman Cooperative

ESUDEV offers the Bushman Cooperative a contract farming opportunity. Let us carefully examine the terms proposed by ESUDEV to determine whether the roles and responsibilities are clear, whether the contract is fair, and whether all important areas are covered.

Sample contract farming agreement proposed by ESUDEV	
1. Contract period	April 2023 to March 2024
2. Purchaser	ESUDEV
3. Seller	Bushman Cooperative
4. Product	Plantain
5. Quantity	2,500 tonnes of plantain
6. Quality	– Medium-sized plantains, undamaged (no bruises), firm, dry and clean – Healthy plantains (no rot, no mould) – Well-ripened plantains
7. Agricultural practices	Follow regenerative agricultural practices recommended by extension agents
8. Input package, cost	To cultivate 100 hectares, the cooperative will receive the following inputs on a loan basis: – 1,020,000 plantain seedlings – 100 trips for transporting the plants – 100 litres of insecticide – 300 kg of fungicide – 400 litres of total herbicide The costs for 1 hectare are as follows: – Plants at 200 CFA francs/plant – Transport of plants at 30,000/trip for 1,200 plants – Insecticide at 8,000 CFA francs/litre – Fungicide at 3,500 CFA francs/litre – Total herbicide at 5,000 CFA francs/litre
9. Responsibility of the buyer, ESUDEV	The buyer undertakes to: – Provide high-quality inputs before mid-May; – Set up a demonstration plot to showcase good agricultural practices; – Provide extension support throughout the season; – Mobilise transport to collect aggregated products; – Verify quality and provide feedback to the farmer group detailing deductions; – Calculate the final payment; and – Make the final payment no later than two weeks after the harvest has been collected.

10. Responsibility of the seller, Bushman	The farmer group is responsible for: – Selecting members who will participate in contract farming; – Identifying suitable plots of land; – Distributing inputs among members; – Following the agricultural practices recommended by the buyer's extension service; – Keeping records; – Monitor members' performance; – Gather the required products in the required quality at the designated location; – Notify the buyer once aggregation is complete.
11. Price	The buyer will offer a minimum price of 250 CFA francs/kg. If market prices at the time of sale are higher, the price will be negotiated.
12. Delivery	The agricultural organisation will gather the required volume at the designated location by April 2026 at the latest and will contact the buyer's field agent to arrange collection. The buyer shall collect the products at the designated location no later than two weeks after the volume has been assembled at the designated location.
13. Payment terms	The farmers' group will receive payment into its bank account two weeks after the buyer has collected the products.
14. Dispute resolution	In the event of a dispute, the parties agree to appoint an independent arbitrator to resolve the conflict.

Advantages and disadvantages of contract farming

Let us discuss contract farming in terms of advantages, opportunities, disadvantages, costs and risks:

Advantages		Disadvantages
Inputs	Buyers can pre-finance inputs and give them to farmers who grow crops in the form of a loan. This provides easy access to quality inputs.	Farmers must ensure that they grow and sell enough produce to repay the loan. The loan amount must be realistic. Some buyers may also charge interest on this loan.
Market	Having a guaranteed market reduces the risk for the agricultural business, as well as the amount of work and effort required to find a market.	If a better opportunity to sell elsewhere arises, the agricultural entrepreneur cannot accept it.
Price	The buyer may commit to paying a minimum or fixed price for the crops. This allows the farmer to know what they can expect to earn at the end of the season.	Prices change throughout the season. The buyer and seller may be tempted to break the contract if they find a more attractive offer.
Services	The buyer often organizes transport to collect the harvested crops at the end of the season.	Transport is not free. The rates offered by the buyer are not always competitive.
	Contract farming programmes may also provide extension support to help farmers organize their activities and increase their productivity.	Farmers must comply with the agricultural practices required by the buyer to ensure quality production.

Main lessons

1. Contract farming has advantages and disadvantages. A good agricultural entrepreneur (man or woman) carefully considers all the advantages and disadvantages before entering into a contract.
2. Contract farming can have advantages for both farmers and buyers. For farmers, contract farming can facilitate access to inputs, extension services, transport services and markets. Serious buyers are interested in establishing business

relationships with well-organised groups to ensure a steady supply of large quantities of good quality crops for their businesses.

3. Contract farming is a business partnership. It can only work if both farmers and buyers benefit and make money.
4. A good agricultural entrepreneur (man or woman) understands the requirements, benefits, costs and risks of different marketing channels before choosing the best option. They do not just consider the immediate benefits; they think about establishing business partnerships that can be beneficial in the medium term.
5. Agricultural entrepreneurs can discuss and negotiate the terms of the contract to ensure that the roles and responsibilities of the business are clear and fair.
6. It is important to understand all elements of the contract in order to negotiate properly and before making a decision. The agricultural entrepreneur only accepts a contract if they understand it and believe they have the capacity to fulfil it. Buyers must carefully explain the contract and be transparent in order to build trust.

Access to group climate finance

To reduce monitoring and certification costs while meeting climate finance access requirements, agripreneurs (women and men) can organize themselves professionally and partner with others to:



- Launch climate-smart collective projects;
- Apply for bulk loans or insurance and make larger, more cost-effective adaptation/mitigation claims that they own and share equitably among themselves;
- Engage in contract farming.

Producer organizations can also invest in specific climate-smart inputs and equipment and provide them to their members as a service.

Module 11: Earning more money: investing in coffee tree replanting

We know that it is possible to make money from agriculture with good planning, crop diversification, improved techniques and calculations that help us make the right decisions. To diversify your crops, you can intercrop your coffee with food crops and fruit trees, while helping your soil to support all these crops. All these practices for conserving soil, biodiversity and water are regenerative agriculture practices and will help you to better manage your plantation to improve your yield and, consequently, your income.

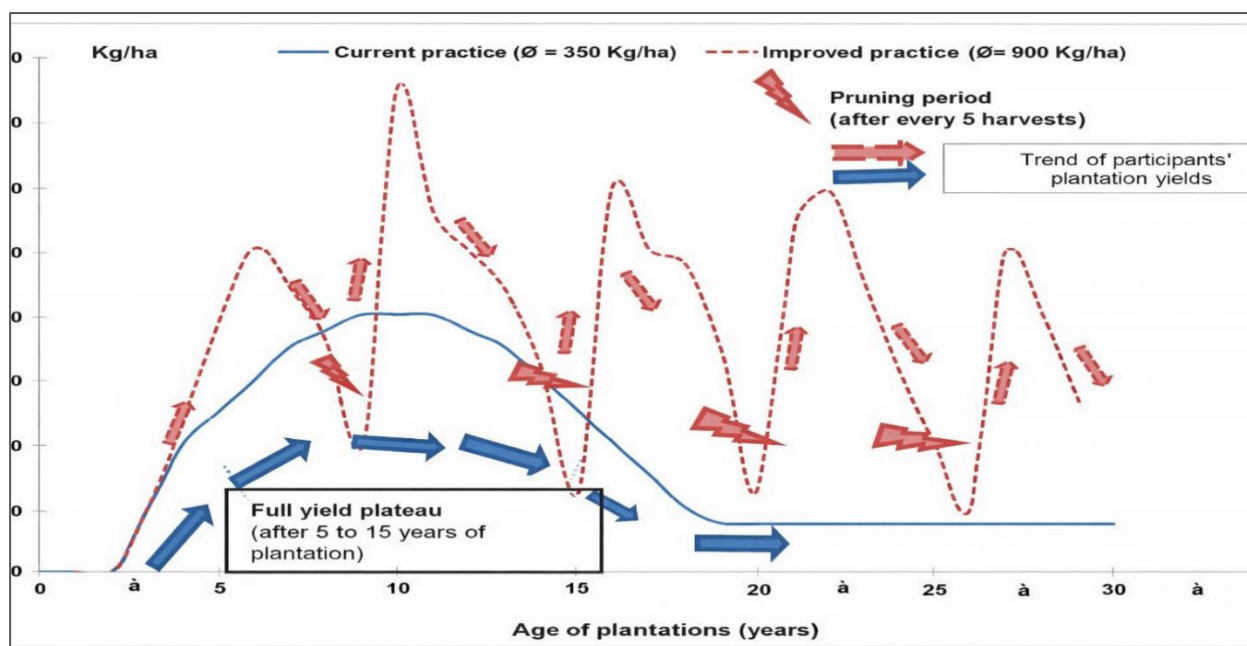
In addition to reducing erosion and controlling weeds, cover crops and trees improve the soil's ability to withstand heat and very cold temperatures and not only help improve water retention in the soil, but also fertilize the soil just like compost.

For coffee, let's look at the subject of replanting and regeneration of plantations.

First, let's do a quick check on the age of your plantations and their yield.

- How old is your coffee plantation?
- What has been the trend in your production over the last five years?

Comparison of yield trends for three coffee plantation management practices: Current practice - Improved practice without pruning - Improved practice with pruning.



When your coffee trees have been producing for 5 to 6 years and production starts to decline, it is worth planning for pruning. Without

Missing plants should be replaced as they are lost

When your coffee trees are old (over 25 years old), it is best to plan for replanting or grafting. The decision to replant should be based on criteria related to yield and density. Replanting is preferred when the density of productive trees is less than 700 and/or the yield is less than 500 kg/ha

Pruning

1. Complete re-grafting with sap extraction

- Prepare the plot for coppicing by removing suckers, weeding, pruning and fertilizing in August.
- Cut the stems in December after harvesting.
- Apply fertilizer, replace dead plants and adjust the shade.

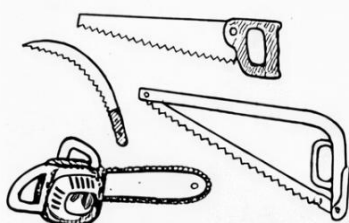
Advantages:

- Maintains income despite pruning (income from coffee plantations drops to almost zero for two years).
- Increased yield (after two years);
- Rejuvenation of the entire plantation;
- Suitable for small-scale growers.

Disadvantages:

- Decrease in income for two years;
- Additional labour required.

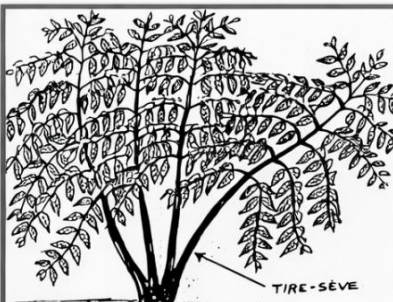
Recommended practices for rejuvenating an old coffee tree



Use appropriate tools

To obtain a clean cut, ideally use a carpenter's saw, a bow saw or a small chainsaw.

During cutting, avoid pulling up the coffee tree stump.



Select the sap-flow sucker

To avoid hindering the development of new shoots, select an inclined sucker which is simultaneously sly woody at the base and has strong potential for future harvests.

By doing so, the sap-flow sucker will minimise the shock of cutback and ensure a regrowth for farmer the following year.



Cut back

To prevent water stagnation on the stumps, cut them back to 30 cm from the ground. Cut cleanly and at an angle with an appropriate tool.

2. Blank pruning by plot section

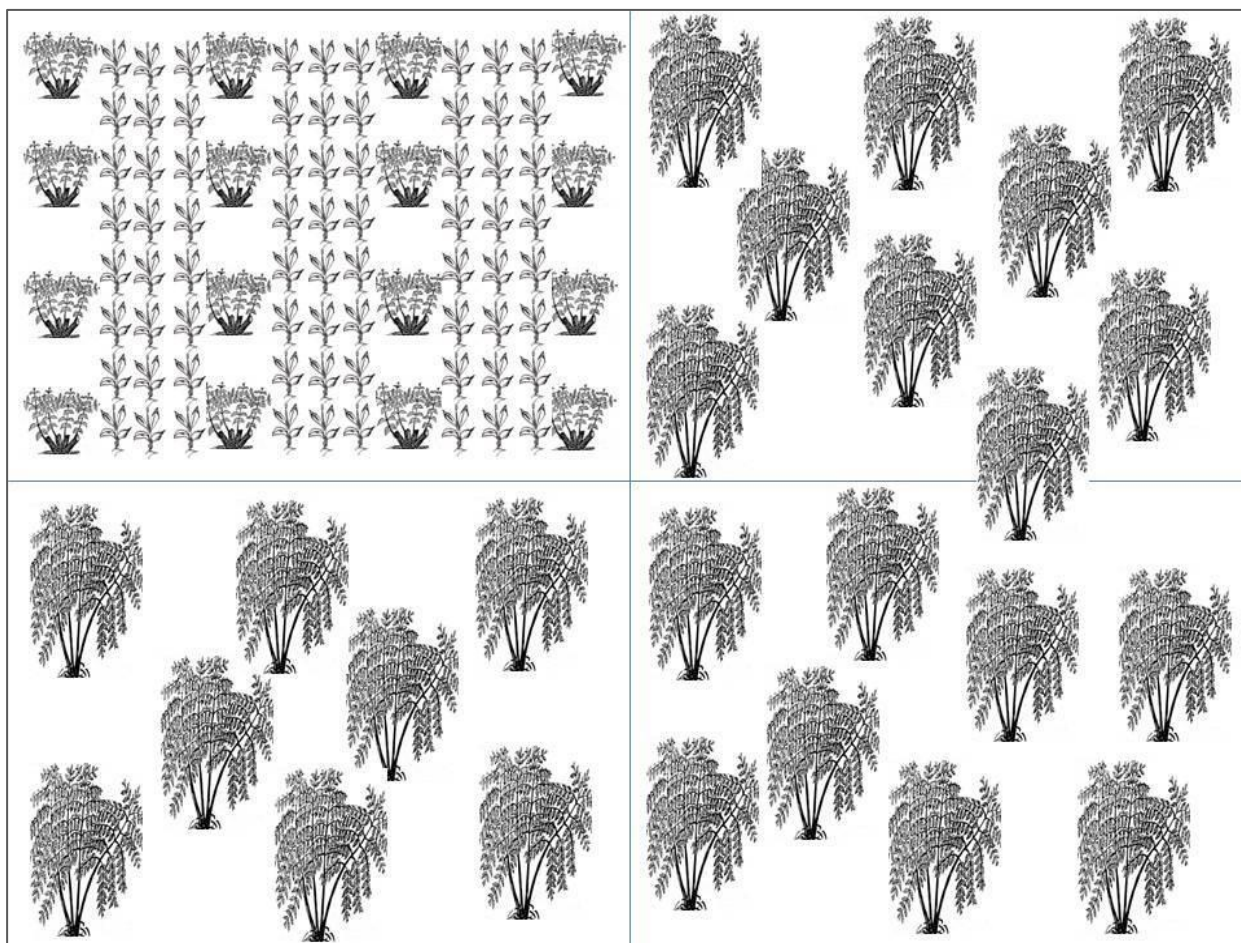
- Thinning out a quarter of the plot gradually over four years;
- Prepare the plot for pruning by removing suckers, weeding, pruning and fertilizing in August;
- Cut the stems in December after the harvest;
- Carefully select the stems (two to three maximum) after pruning
- Sow food crops between the rows;
- Apply fertilizer, replace dead plants and adjust the shade.

Advantages:

- Maintains income on the non-pruned part
- Increased yield
- Gradual and continuous rejuvenation of the plantation by maintaining young, productive stems,
- Suitable for small growers.

Disadvantages:

- Decrease in income for four years
- Additional labour required



Replantation

1. Replanting technique by plot section

Preparation of the land and planting equipment (in N-1)

- Characterize the site (soil diagnosis) and measure the plantation;
- Divide the coffee plantation into 4 plots of equal size. You can use fewer plots if you want to replant more quickly. With 4 plots, replanting will be complete after 4 years;
- Start with plot 1; Cut down and remove all the old coffee trees in this plot;
- Plant shade trees (legumes) in May/June
- Sow food crops between the rows.
- Set up a nursery in November-December so that you have 6- to 8-month-old seedlings in May-June (N-0).

Planting

- Replant 17 rows of coffee trees in a 3m x 3m between the lines
- Combine food crops to obtain better soil cover and protection.

Reminder

Use a clonal mixture (3 to 4 clones) of improved coffee trees suited to your area

The planting distance between coffee trees is 3 m in by 3 m

- For one hectare, 1,284 plants are required
- For half a hectare, 642 plants are required
- For a quarter of a hectare, 321 plants are required

Planting row orientation:

Intercropping	Orient rows east-west to maximize sunlight throughout the day
Coffee tree rows	Orient rows perpendicular to the steepest slope

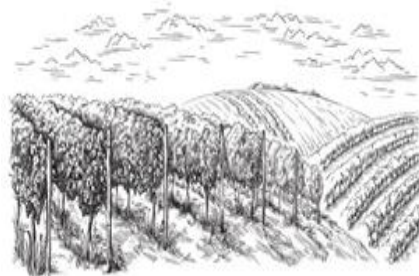
To find out how much a new one-hectare coffee plantation costs and how much money it brings in, we look at the financial calendar, which covers 25 years (the economic lifespan of an ordinary coffee plantation without the adoption of good regenerative agriculture practices). In this calendar, you will see:

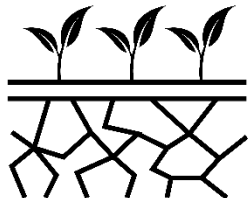
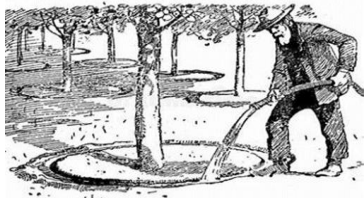
- The quantities of inputs and labour required, as well as the variable costs for each year (Money out)
- The production of new coffee trees and associated crops (maize, peanuts, beans, soya beans, etc.) as well as money in

Replanting of an old coffee plantation covering one hectare (over 4 years, 0.25 ha each year from year 1) with organic fertilizer, pruning and coppicing in combination with beans and fruit trees. Maximum coffee yield in year 10: 1,500 kg/ha

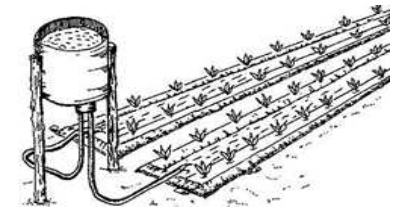
Analysis of Cash Outflows and Inflows				Years																			
Outflows	Unit	Qty.	Price	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Works				(in thous ands)																			
Land Clearing	PD	5	2	-	10	10	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cleaning and Staking	PD	15	2	-	30	30	30	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee and Fruit Tree Holing	PD	20	2	-	40	40	40	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coffee Planting	PD	10	2	-	20	20	20	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planting Fruit Trees	PD	10	2	-	20	20	20	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Weeding (3x per year)	PD	25	2	50	38	38	38	38	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Pruning + Suckering	PD	4	2	8	6	4	2	2	4	6	8	8	8	8	8	8	8	8	8	8	8	8	8
Application of Organic Fertilizer	PD	5	2	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Coffee Harvesting (per boro)	PD	40	2	80	60	40	20	-	4	11	35	55	75	80	80	80	80	80	80	80	80	80	80
Coffee Plant Purchase	FCFA/plant	350		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of 80kg Sacks for Coffee	sacks of 80kg	26	1	13	10	7	3	-	1	2	6	9	12	13	13	13	13	13	13	13	13	13	13
Coffee Hulling Service	FCFA/kg	2000	0	50	38	25	13	-	3	7	22	34	47	50	50	50	50	50	50	50	50	50	50
Coffee Winnowing Service	FCFA/bags of 100kg	10	0	3	2	2	1	-	0	0	1	2	3	3	3	3	3	3	3	3	3	3	3
Purchase of Fruit Sacks	FCFA/bags of 50kg	100	0	-	-	-	-	-	3	6	8	15	23	30	30	30	30	30	30	30	30	30	30
Bean Seed Purchase	kg	120	1	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
Purchase of 50kg Sacks for Beans	Bags of 50kg	40	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Bean Transport	Bags of 50kg	40	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Total Inputs				226	215	198	182	165	166	175	196	220	244	256	256	256	256	256	256	256	256	256	256
Total Outflows	CFA			444	510	463	416	371	276	300	360	422	485	514	514	514	514	514	514	514	514	514	514
Inflows																							
Coffee Production	kg	1000	1	1000	750	500	250	-	50	133	433	683	933	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Coffee Sales (thousands)	FCFA/kg	1000	1	750	563	375	188	-	38	100	325	513	700	750	750	750	750	750	750	750	750	750	750
Fruit Sales (thousands)	FCFA/kg	1000	0	-	-	-	-	-	20	40	50	100	150	200	200	200	200	200	200	200	200	200	200
Bean Sales (thousands)	FCFA/kg	2000	0	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
Total Inflows (thousands)	CFA			1350	1163	975	788	600	658	740	975	1213	1450	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550

Let us now look at some practices in regenerative agriculture

Best practices related to soil management and fertility	Mulching Mulching involves spreading organic matter from rehabilitation, renovation and even weeding between coffee plants on bare soil. The mulching material must be relatively resistant to degradation. This ensures good water and air quality and remains as ground cover for at least a year. Mulching retains water and moisture in the soil. It improves soil health, pH and the amount of organic matter in the soil.	
	Composting Discuss implementation methods with the participants	
	Cover crops and intercropping Cover crops generally need sunlight to grow. Intercropping may be more suitable than mulching. However, cover crops are generally beneficial to coffee production. They improve the availability of water and nutrients, but they can also compete with coffee plants for water and nutrients to a certain extent, which could lead to a loss of yield. It is therefore important to carefully select the species of cover crops to be associated with coffee, favouring legumes (e.g. peanuts, beans) where possible. Another alternative for intercropping is to plant fruit trees such as pear, akpi, petit cola, guava and orange trees in association with coffee trees. These intercrops help to maintain moisture and improve soil cover while generating additional food and income. The ability of intercrops to adequately protect the soil depends heavily on the species selected and how they are managed.	

	Erosion control In addition to trees and cover crops, physical structures such as scions, stones and vegetative barriers can help control erosion and runoff. Hedges such as grasses (vetiver) can be used to stabilize slopes and provide mulch. Erosion barriers can also lead to the formation of natural terraces. Drainage channels and the installation of scions can also allow water to infiltrate the soil during heavy rainfall.	
Good practices related to biodiversity (agroforestry)	The integration of mixed trees into the production system offers a number of advantages, including soil protection through litter accumulation, a windbreak provided by the vegetation cover that mitigates the force of raindrops, and improved root structure that prevents soil erosion. Agroforestry also protects coffee during the dry season and against heat stress. It provides more firewood, diversifies income and improves soil health and water retention. Biodiversity also helps to preserve wildlife habitat within the plantation and in the surrounding landscape. To preserve biodiversity, it is important to reduce the use of agrochemicals (pesticides, herbicides).	
Good practices for integrated weed and pest management	Conduct practical discussions with participants.	
Good practices related to water management	The availability, quality and management of water resources are crucial to ensuring that humans have safe access to clean water for domestic, agricultural and industrial uses. The use of fertilizers, pesticides or other contaminants can lead to the pollution of groundwater and surface water, causing the depletion of natural resources and the destruction of ecosystems. The consequences of this are climate	

change, the unavailability of water in sufficient quantity and quality, severe droughts, frequent and extreme flooding, and a considerable reduction in yields. It is therefore important to adopt good climate-smart practices, including the conservation and rational management of water.

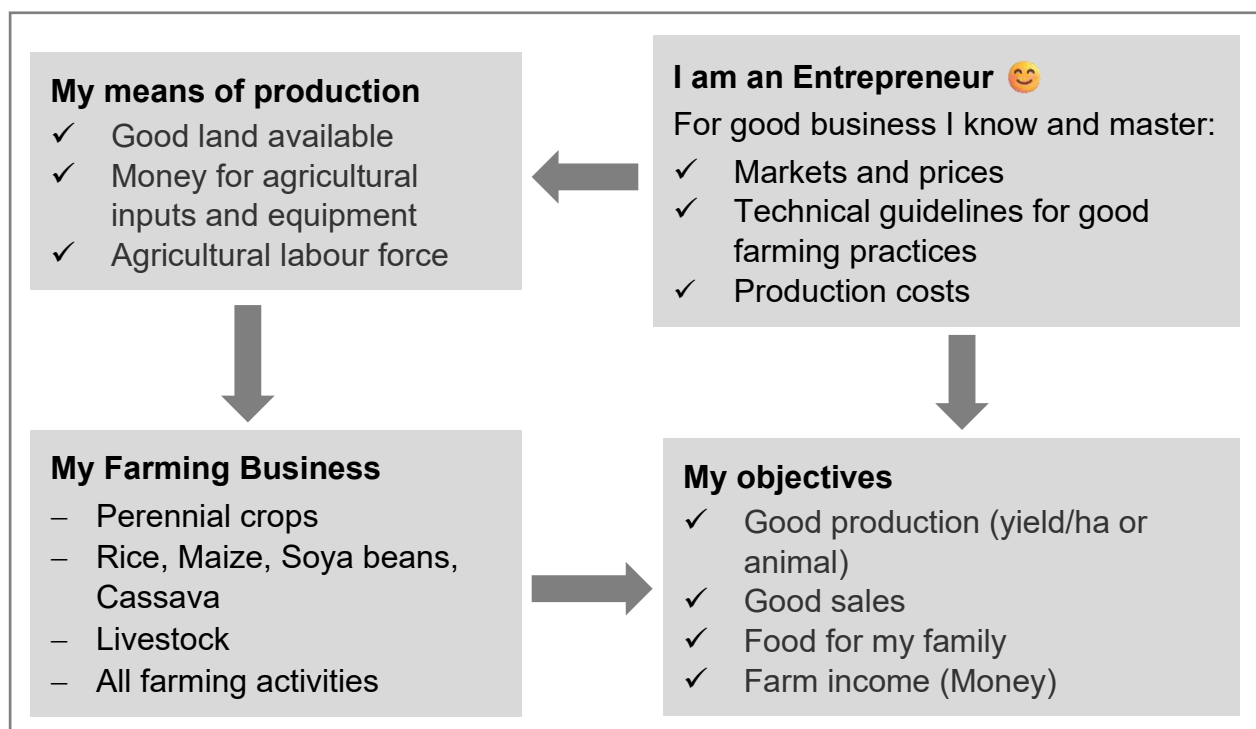


Main lessons

1. If the yield of coffee trees decreases, a good entrepreneur prepares for replanting.
2. Replanting coffee trees means a short-term drop in income for the entrepreneur, but they'll make it back with the increased production from the second harvest. In the long run, pruning means higher productivity and income. Pruning and selecting stems are important practices and need to be done regularly to get the best results. A good agricultural entrepreneur (man or woman) seeks and follows technical and financial advice to plan and succeed in this investment.
3. If the yield and density of a coffee plantation are low despite the adoption of good practices, a good agricultural entrepreneur (man or woman) will prepare to replant. Grafting with selected material may also be considered.
4. Replanting coffee trees is a long-term investment. Good agricultural entrepreneurs (men or women) seek and follow technical and financial advice to plan and succeed in this investment.
5. Mulching and intercropping are good techniques for conservation, soil fertilization, soil water retention and erosion control. Good agricultural entrepreneurs (men or women) must carefully select the crops associated with their coffee plantation.
6. Fruit trees and timber contribute to crop and income diversification for producers, thereby helping to manage the risks associated with price and yield variability and stabilize producers' incomes. The presence of these trees on the plantation also helps to protect the coffee trees from various stress factors (heat, drought, heavy rain, strong winds, etc.) and maintain satisfactory yields throughout the production cycle. In addition, the presence of trees helps to improve soil quality through nitrogen fixation and contributes to improving biodiversity on the plantation. A good entrepreneur (man or woman) should therefore keep the existing trees on their plantation and add more if necessary.

7. The proper management and use of water are fundamental to the successful operation of a coffee plantation. A good entrepreneur (man or woman) must avoid polluting water sources.
8. A good agricultural entrepreneur (man or woman) plants or replants or, after pruning, combines young coffee plants with intercrops (cover crops, fruit trees, timber).
9. The financial calendar for a coffee plot shows money out and inflows for 20 years. Money out in the early years are greater than money in. A good agricultural entrepreneur knows that this is normal because young coffee trees do not yield their full potential from the outset.
10. The cumulative total at the bottom of the investment schedule shows the year in which the agricultural entrepreneur recouped all the outflows through inflows. A good agricultural entrepreneur (man or woman) recognizes this from the figures at the bottom that no longer have a small line in front of them.
11. The financial schedule is useful for preparing the financing of (re)planting and, if necessary, for preparing to obtain a loan.
12. If the entrepreneur takes out a loan, they must take into account the interest to be paid. Rural bank or microfinance advisers help them complete the calculations and make the right decisions.

Module 12: Becoming an entrepreneur in practice



What have you learnt?

What are you going to change?

What do you need to succeed and do good business?

This module focuses on an essential question: How can I assess myself as a trained producer to certify that I have acquired the skills to become an agricultural entrepreneur in practice?

First step:

Have I understood the value of the FBS training, the explanations of the modules and the lessons learned?

The group and the trainer review the entire training programme. The entrepreneurs highlight the objectives of the modules, the lessons learned, and, above all, how these lessons will be applied in practice.

Second step:

How will I organize myself after this training to make the changes needed to become an agricultural entrepreneur in practice?

The trainer gives an overview of the contents of the Application Workbook. This workbook is the entrepreneur's best resource. It provides guidance for their work, which is based on:

- Planning campaign activities,
 - Implementing planned activities based on profitability decisions,
 - Evaluation of the activities implemented,

- Reviewing activities for the next campaign.

The trainer also goes into detail on how to use the Application Workbook.

Main lessons

The Application Notebook is an essential tool for agricultural entrepreneurs to plan and monitor their farm activities by recording all technical and economic data.

Third step:

Producers must clearly state how they will now act to succeed and do good business as agricultural entrepreneurs.

Using the training Notebook, the entrepreneur plans their crop season based on their annual needs.

For example, he has 600,000 CFA francs for household needs, including schooling, and 500,000 CFA francs for farm needs (fertilizer, labour, improved varieties, packaging for sale, etc.). These needs guide his production decisions.

On this basis, the entrepreneur must answer the following questions, taking into account his production environment, including the market and risks, and his minimum needs in view of his savings and/or investments:

- How can I maintain my coffee field for maximum yield?
- What other crops should I grow?
- How much land should be allocated to other crops?
- Which varieties should I adopt and where can I obtain them?
- What farming techniques (BPA) should I consider?
- What other types of activities should I consider for additional income throughout the year?
- What labour is needed?
- How much do I have available to cover my campaign?
- Do I need external support (credit) to cover my needs for the year?

Step four:

Concluding resolutions of the training

The trainer supports the entrepreneurs in:

- Formulating the producers' commitments for the campaign, which will result in a work programme.
- Setting up working groups according to the Entrepreneurs' groupings;
- The designation of focal points;
- Adopting campaign plans between the Entrepreneurs, focal points and Project monitoring staff;
- Adopting a system for monitoring and evaluating the practical progress of the Entrepreneurs' activities based on FBS standards;
- Evaluation of the training session by the entrepreneurs;
- Issuing of training certificates;
- Closing of the training session.

Use the following forms to

Plan production,

record money in and money out,

calculate whether you are making a profit or a loss,

plan expenses and income and

control the reimbursement of loans.

Appendix 1: Side-by-side crop calendar for planning coffee, maize and plantain production

[illegible]

II APPLICATION LOG

PLOT 1

Area _____

		Pre-production forecast			Post-harvest assessment		
Area	Unity	Quantity	Price (CFA)	Total (CFA)	Quantity	Price (CFA)	Total (CFA)
1. Money out							
Inputs and services							
Cost of inputs (A)							
Work (Labour)							
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
Labour costs (B)							
Variable costs (C) (C=A+B)							
Fixed costs							
Fixed cost (F)							
2. Money in (D) = Production x selling price			CFA				
3a. Gross margin (E) (E = D – C)							
3b. Money in MINUS Money out (G = E – F)			CFA				
Total cost (A+B+F)							
Unit cost: Money out (total cost A+B+F) ÷ Production (P)			CFA/kg				
Human labour requirement in person-days							

Tracking money out for plot 1

[illegible]

Tracking money in for plot 1

[illegible]

PLOT 2

Area _____

		Pre-production forecast			Post-harvest assessment		
Area	Unity	Quantity	Price (CFA)	Total (CFA)	Quantity	Price (CFA)	Total (CFA)
1. Money out							
Inputs and services							
Cost of inputs (A)							
Work (Labour)							
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
Labour costs (B)							
Variable costs (C) (C=A+B)							
Fixed costs							
Fixed cost (F)							
2. Money in (D) = Production x selling price			CFA				
3a. Gross margin (E) (E = D – C)							
3b. Money in MINUS Money out (G = E – F)			CFA				
Total cost (A+B+F)							
Unit cost: Money out (total cost A+B+F) ÷ Production (P)			CFA/kg				
Human labour requirement in person-days							

Tracking money out for plot 2

[illegible]

Tracking money in for plot 2

[illegible]

Planning and evaluation for plot 3

Cropping calendar for plot 3

Size of plot	Main crop	Variety
Member of the cooperative since	Associated crop 1	Associated crop 2

Work planned	Jan	Feb.	March	April.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.

PLOT 3

Area _____

		Pre-production forecast			Post-harvest assessment		
Area	Unity	Quantity	Price (CFA)	Total (CFA)	Quantity	Price (CFA)	Total (CFA)
1. Money out							
Inputs and services							
Cost of inputs (A)							
Work (Labour)							
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
	PD						
Labour costs (B)							
Variable costs (C) (C=A+B)							
Fixed costs							
Fixed cost (F)							
2. Money in (D) = Production x selling price			CFA				
3a. Gross margin (E) (E = D – C)							
3b. Money in MINUS Money out (G = E – F)			CFA				
Total cost (A+B+F)							
Unit cost: Money out (total cost A+B+F) ÷ Production (P)			CFA/kg				
Human labour requirement in person-days							

Tracking money out for plot 3

[illegible]

Tracking income for plot 3

[illegible]

Evaluation of the production year

Plot	Main crop	Area (ha)	Money out (CFA)	Sales per unit (CFA)	Production	Money in	Revenue MINUS expenditure (CFA)	Very good deal / good deal / bad deal?
1								
2								
3								
	Total							

Analyse et vision d'amélioration de mes productions

	Plot 1	Plot 2	Plot 3
Have I achieved my objectives?			
Am I satisfied with the results for the year?			
What is the most important change to make for next year			
What is the objective of this change?			
How will I make this change? How much will it cost?			
How much money can I raise?			
Do I need credit?			

Managing money well throughout the year

Planning household expenses

Money needs	Expenditure (FCFA)	Frequency
Matches		Every month
Salt		Every month
Soap		Every month
Water and electricity		Every month
Food shopping		Every month
Mobile phone top-up		Every month
Health insurance (CMU)		Every month
Subtotal Household		Every month
School		Once a year
Clothing		Once a year
Financial needs	Expenditure (FCFA)	Period?
Happy events		
Reserves for unforeseen expenses		

My financial planning calendar

Year

Money out

Production		Jan.	Feb.	Mar	April	May	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Plot 1	Inputs												
	Labour												
Plot 2	Inputs												
	Labour												
Plot 3	Inputs												
	Labour												
Plot 4	Inputs												
	Labour												
Plot 5	Inputs												
	Labour												
Plot 6	Inputs												
	Labour												
Equipment and tools													
Household													
Schooling													
Clothing													
Happy events													
Emergencies													
Total per month													

Money in

Crop	Jan.	Feb.	March	April	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.
Other income												
Total money in												
Balance (money in – money out)												
Cumulative												

Credits

Credit objective	
Interest rate	
Date granted	
Repayment date	
Amount received	
Total amount to be repaid	
Date	Amount repaid

ABC of Agricultural Business Community

A	A griculture A sset
B	B usiness B ank
C	C redit C alculate
D	D iversification D ebt
E	E nterprise E quipment
F	F arm F ood
G	G ain G ross margin
H	H arvest H ectare
I	I ncome I nvestment I nterest
J	J ob
K	K ilogram K ilocalorie
L	L oss L abor
M	M anagement M arket

N	N utrition N egotiation
O	O rganization O wner
P	P lan P rofit
Q	Q uality Q uantity
R	R ecord keeping R ice
S	S avings S chool fees
T	T on T rial
U	U nit U nion of producers
V	V alue V ariable cost
W	W ork W arrant
X	E xport crop E xpenditure
Y	Y ield
Z	Z ero Z one

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GIZ is responsible for the content of this publication

