



TRAINING GUIDE FOR COFFEE FARMING IN RWANDA

-Introduction-





1. FARMER CAPACITY BUILDING OVERVIEW

1.1. The purpose of farmers capacity building

Capacity building of coffee farmer groups in cooperatives/private companies strengthens the knowledge, skills, structures, and systems of farmer organizations so they can operate efficiently, deliver better services, and compete in the coffee value chain. It helps farmers move from subsistence-oriented production to sustainable, market-driven, and profitable enterprises.

1.2. Objective of this Training Manual

The objective of this training manual is to provide a well-structured and practical guide that supports coffee farmers in strengthening their knowledge and skills in coffee production, thereby increasing coffee yield and quality through:

- Training farmers group leaders in effective training methodologies so that they can, in turn, train other coffee farmers on good practices and positive attitudes in coffee farming;
- Promoting compliance with Good Agricultural Practices (GAPs) and environmentally sustainable farming;
- Building the capacity of coffee farmers groups through training and knowledge sharing;
- Strengthening collective activities and cooperation among farmers groups in cooperatives/private companies.

1.3. Target Audience of this Training Manual

This training manual is intended for:

- Cooperative leaders



- Farmers groups leaders in private companies
- Youth groups and other farmers' organizations

From Topic 1 to Topic 13, this training module will equip extension officers, farmer group leaders with essential knowledge on sustainable coffee farming, from coffee seedlings production to harvesting and post-harvest handling of coffee cherries. The training emphasizes practices that increase productivity, improve quality, and protect the environment.

Good agricultural practices contribute to increased productivity, improved efficiency, and reduced costs in a sustainable manner: Good agricultural practices in coffee farming increase coffee yields and improve quality, leading to sustainable production. Higher production generates higher income for farmers. Farmers' groups build profitable and sustainable businesses.

1.4. Capacity-Building Approaches

1.4.1. Training of Trainers (ToT) Program

The Training of Trainers (ToT) is a structured approach designed to train selected trainers who will be responsible for sharing knowledge and skills with others. ToT training helps disseminate knowledge widely and reach a large number of lead farmers.

In this manual, farmers groups leaders are provided with knowledge on coffee production practices, as well as skills on how to train others.

After completing the training, the farmers groups leaders will train other farmers by teaching them good coffee production practices and training methods, enabling them to also become trainers for their fellow farmers (Peer-to-peer training).



1.4.2. Training of Trainers (ToT)

- **Building facilitation skills:** training trainers on how to effectively train others, including clear communication, use of visual aids, facilitation of discussions, and encouraging active participation from all participants.
- **Strengthening subject-matter knowledge:** ensuring that trainers have a clear and thorough understanding of all the training modules.
- **Group practice sessions:** each trainee practices delivering a short lesson to peers, followed by feedback and guidance from fellow trainees and the facilitator.
- **Training methods used:** applying participatory approaches and practical activities such as role plays, demonstrations, and hands-on training.
- **Time allocation:** ensuring sufficient time is planned for both acquiring technical knowledge and learning how to deliver it. Each coffee farming module is delivered over one day, with an additional day dedicated to training methodologies for delivering those modules

1.4.3. Peer to Peer (P2P) program

The farmer groups leaders who act as farmer trainers will further disseminate coffee farming knowledge and skills to the coffee farmers within the farmers groups/cooperative so that by the end of peer to peer (P2P) program, the coffee farmers will be able to identify the ideal conditions for growing coffee and apply Good agricultural practices for planting and managing coffee trees.

P2P training is done through monthly, crop cycle -based sessions, often conducted on the farmers' land, with a strong emphasis on incorporating local knowledge and addressing specific challenges faced by the community; this approach aims to significantly improve coffee yield and quality while promoting sustainable farming practices



1.4.4. Training period

According to the crop cycle, the training topics are delivered in 4 main crop seasons such as:

- Short rainy period of October to December is binding coffee seedling planting, coffee nutrition, shade management and the use of cover crop topics
- Short dry period of January to February enfolding integrated pest and disease management, safe use of pesticide application and weeds management erosion control topics
- Long rainy period of March to May, topics of proper harvesting and mulching
- Long dry period of June to September gripping the topics of Variety selection, canopy management and lime application.

Key aspects of coffee agronomy training are:

- Crop cycle aligned curriculum:

Training topics are designed to correspond with the coffee growing cycle, ensuring farmers learn relevant practices at the appropriate time throughout the year. The training materials are developed considering the 4 types agricultural seasons of Rwanda such as short rain season, short dry season, long rain season and long dry season.

- Field demonstrations:

A large emphasis is placed on practical demonstrations on farmers' plots, allowing them to directly apply new techniques and observe results first-hand.

- Participatory learning:

Farmers are actively engaged in the learning process, including discussions, questions, and sharing experiences within their groups.



2. BASIC KNOWLEDGE OF COFFEE FARMING

2.1. Importance of growing and consuming coffee

The importance of growing and consuming coffee is significant at the economic, health, and social levels.

1. Importance of growing coffee

- **Economic benefits:** Coffee is a major cash crop that generates income for farmers and for the country through export of its produce.
- **Improving farmers' livelihoods:** Coffee helps farmers pay school fees and medical expenses and improve household welfare because, when properly managed, it produces high yields and is sold at a good price.
- **Job creation:** Coffee provides employment to many people in farming, processing, transportation, and marketing.
- **Environmental conservation:** Coffee is often grown in highland and sloping areas, thus playing an important role in controlling soil erosion and protecting the land.
- **Development of cooperatives:** Many coffee farmers are encouraged to work together, enabling them to gain knowledge, improve infrastructure, access better markets for their produce, and strengthen cooperation within cooperatives

2.1.2. The Importance of Drinking Coffee

- **Boosts energy and alertness:** The caffeine in coffee stimulates the brain and enhances the ability to think and concentrate.
- **Improves physical performance:** It helps reduce fatigue and increases energy for work and daily activities.
- **Helps prevent certain diseases:** When consumed in moderation, it can reduce the risk of some diseases such as type 2 diabetes.
- **Promotes social interaction:** Drinking coffee is a social practice that brings people

together for conversations and social activities.

- **A source of some nutrients:** It contains antioxidants that help the body fight diseases.

2.2. Suitable areas for coffee cultivation (climate, soil, altitude, rainfall, temperature, etc.)

Suitable areas for coffee cultivation are selected based on climate, altitude, and soil quality, and the farmer chooses according to the type of coffee to be planted: Arabica or Robusta.

2.3. Selection of coffee varieties to plant

<p>Main coffee varieties commonly grown in Rwanda</p> <ul style="list-style-type: none"> • The two main coffee species grown in Rwanda are Arabica and Robusta. • The highest-quality coffee is harvested from Arabica. 				
			<i>Arabica</i>	
			<i>Robusta</i>	
Coffee species:	Arabica		Robusta	
Varieties	Bourbon (Red Bourbon), Bourbon Mayaguez 139, BM 71, Jackson 2/1257, Caturra, Catuai, RAB C15, Mibirizi		Erecta, Nganda	
Favorable conditions	Temperature: 15–26°C; Rainfall: 1,000–1,800 mm per year; Altitude: 1,200–2,200 meters		Temperature: 24–30°C Rainfall: 2,000–3,000 mm per year	

		Altitude: 0– 1,400 meters
From flowering to harvesting	9 months	10-11 months

Among Arabica species the following varieties are cultivated in Rwanda

Jackson

- Yield and quality are moderate
- Highly susceptible to leaf rust
- Tolerates coffee berry disease



Bourbon Mayaguez - BM 139 & BM 71

- Good yield
- Excellent quality
- Resistant to coffee leaf rust



RABC 15: High yield, resistant to coffee berry borer, and Coffee leaf rust-tolerant



Choosing a Coffee Variety

- Select a variety suitable for the farm's altitude (1,200–2,200 m).
- Choose a variety that is resistant to diseases and pests.
- Choose a variety that yields well.
- Choose a variety that produces coffee with good flavor, according to the preferences of your usual customers.
- It is recommended to purchase seeds from a trusted center that provides high-quality coffee seeds/RAB.
- Planting low-quality seeds can cause losses for the farmer, as they produce weak seedlings that do not grow well and may carry diseases, resulting in low yields.

2.1. Coffee Planting Calendar in Rwanda

Due to the characteristics of the areas where coffee is grown, the time when coffee trees were planted, and the way farmers have managed their coffee; coffee trees do not ripen or mature at the same time across the country. Consequently, there is no fixed schedule for coffee tree management. Farmers determine the appropriate time to work on their coffee based on their own observation. Activities such as applying organic fertilizers, controlling pests and diseases are carried out whenever the farmer deems them necessary.



Coffee Growth Calendar

Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Flowering		Crop expanding and maturing					Plant recovery				
			Ripening								
<ul style="list-style-type: none"> - Coffee plantation - Fertilizer application - Shade management 			Harvesting & Soil erosion control				Weeds control & Mulching				
									Pruning & Rejuvenation		
									Nursery bed & Land preparation		
Integrated Pest and disease management							Lime application				



