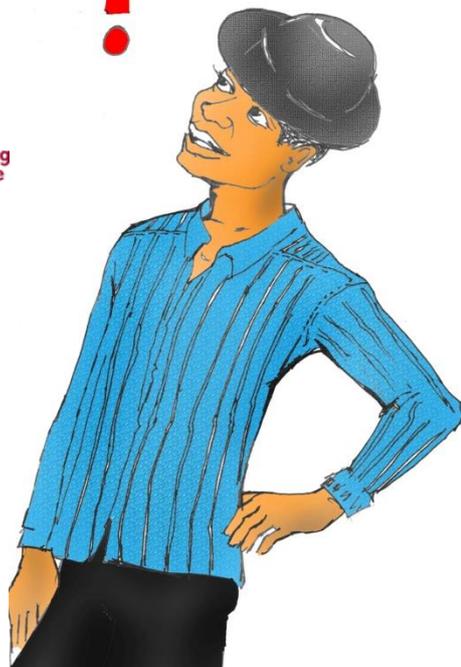


CCE Certification Capacity Enhancement

Sustainable Cocoa Trainers' Manual

- For Access to Certification and Increased Productivity -

Nigeria Version 2.1 – June 2016



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Synonyms & Acronyms

CB	Certification Body
CCE	Certification Capacity Enhancement
CLP	Cocoa Livelihood Programme
COCOBOD	Ghana Cocoa Board
CRIN	Cocoa Research Institute of Nigeria
FAO	Food and Agriculture Organisation
FBS	Farmer Business School
FFS	Farmer Field School
FLO	Fairtrade International
FLO-CERT	Independent certification body for Fairtrade
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Development Cooperation)
GMO	Genetically Modified Organism
ICPM	Integrated Crop and Pest Management
IMS	Internal Management System (also referred to as Internal Control System, ICS)
IDH	Sustainable Trade Initiative
IFOAM	International Federation of Organic Agriculture Movements
ILO	International Labour Organisation
IPARC	International Pesticide Application Research Centre
NGO	Non-Governmental Organisation
RA	Rainforest Alliance
SAN	Sustainable Agriculture Network
SAS	Sustainable Agricultural Standard
STCP	Sustainable Tree Crops Programme
SPO	Small Producers' Organisation
TCU	Tree Crop Unit
ToT	Training of Trainers
WCF	World Cocoa Foundation

About the Certification Capacity Enhancement Project

Sustainable production of cocoa has become an increasingly important driver for the development of the cocoa sector in West Africa. New initiatives have emerged, including commitments by cocoa importers and chocolate manufacturers to purchase sustainably certified cocoa and to provide services to producers. Because of these developments there is a growing market for sustainably produced and certified cocoa in consumer countries. This trend provides an opportunity for cocoa producers to improve their livelihoods, and for the cocoa sector to make its sustainability efforts more visible. To realise this opportunity, producers need support to access these emerging markets.

The Certification Capacity Enhancement project (CCE) is a multi-stakeholder initiative within the West-African cocoa sector that has been developed jointly by the voluntary standard initiatives Rainforest Alliance, UTZ and Fairtrade International (FLO), the development organisations Solidaridad, Dutch Sustainable Trade initiative (IDH) and German International Development Cooperation GIZ (formerly GTZ), in collaboration with the private sector (Mars, Barry Callebaut, ADM, Armajaro, Toms). CCE aims at contributing towards a sustainable cocoa sector by enhancing farmers' capacities to meet the agronomic, environmental and social requirements of the three voluntary standard initiatives and to improve productivity. The project is being implemented in Ghana, Ivory Coast and Nigeria.

About this Training Curriculum

The aim of this curriculum is to combine the efforts of standard initiatives, governmental extension services, and public and private training programmes to facilitate access to certification by providing training materials for certification trainers and cocoa producers. Whether the producer groups aim at multiple (several standards) or individual (one standard) certification – the same curriculum serves all needs as it covers the requirements of all three sustainability standards.

Beyond the preparation of cocoa farmers for certification, the curriculum also aims at enhancing productivity, quality and economic viability of cocoa production to support a sustainable development of the West African cocoa sector.

The training curriculum consists of three parts:

- Certification manual for training of trainers.
- Certification guide for farmers (separate document).
- IMS (Internal Management System) training manual (separate document).

The first version of the certification manual and guide was developed in May 2012 and has been updated in May 2014 incorporating feedback from the field. In version 2 the following changes were made:

- The key information was added for every topic.
- The order of topics was changed. All topics directly dealing with certification were put under Module 1 (Introduction to certification).

- The topic “Internal inspection, approval and sanction” was renamed into “Getting certified” (topic I.3) and completely rewritten.
- The topic “Risk assessment and conflict of interest” was renamed into “Risk assessment” (topic I.8) and the guidelines for the trainer were completely rewritten.
- The guidelines for the topic II.4 on fertilizer application were partly rewritten.
- The additional information and guidelines for the topic on Integrated Crop and Pest Management (topic II.5) were for large parts rewritten.
- The guidelines for the topic II.7 on Productivity enhancement were completely rewritten.
- The guidelines for the topic II.8 on Quality enhancement were completely rewritten.
- The guidelines for the topic IV.5 on Farmers’ organisation for successful were completely rewritten.
- The topic “Democracy, participation and transparency” was renamed into “Being a member of a farmers’ organisation” (topic IV.6) and the guidelines were completely rewritten.

The IMS training manual (version 2.1) was developed in November 2012.

Why this manual?

Although there is quite a lot of training material available to train cocoa farmers (see list of “further readings” at the end of this manual), no comprehensive material existed so far to prepare African small holder cocoa farmers for certification against the three leading voluntary standards. The common goal to facilitate certification access to meet the rapidly growing demand for sustainable cocoa has also led to a closer collaboration between the standard initiatives by contributing to this manual.

It is hoped that this manual also helps to increase the productivity of the West African cocoa sector, as certification alone is not a guarantee for sustainability. Only a productive cocoa farm will attract the younger farmer generation to carry on with cocoa production, which must be developed into a viable business.

Who should use it?

This manual is intended for professional cocoa extension agents, field supervisors, project officers and trainers who have a degree or diploma in agriculture (or are able to demonstrate their experience and knowledge) and who are involved in training of other trainers and/or farmers. Within the CCE project, this manual will mainly be used by the master trainers.

Who is the target group for this manual?

This manual will primarily be used to train trainers. These trainers can be facilitators, lead farmers or purchasing clerks. If used by master trainers, this manual can also serve to train farmers directly. Special guidelines have been developed for facilitators, lead farmers and purchasing clerks to train farmers.

How should this manual be used?

General remark: the user of this manual is advised to consult also other sources of information to attain a thorough knowledge of sustainable cocoa production. Concerning certification, it is of utmost importance to study the latest versions of the standards/codes/certification requirements and compliance criteria of Rainforest Alliance, UTZ and Fairtrade International and FLO-Cert (see the list of “further reading”).

Each topic of the CCE training manual is divided into three parts:

Key information. This is a summary of the most important information the farmer needs to know by the end of the session. The visuals in this summary are used in the poster that will be handed out to farmers.

Background information. This is additional information for the trainer to better understand the topic. This means that this information does not have to be transferred to the farmers. Further reading may be necessary, especially, if the trainer is not familiar with the topic.

Standard requirements. This text box summarises the common and the specific requirements of the three voluntary standards. Further reading of the current versions of the standards/codes is necessary to answer detailed questions from the participants. FLO does not have specific requirements for individual farmers; they only address farmers' organisations.

Guidelines for the trainer. The training model used in this manual helps the trainer to structure the training sessions and to transfer the technical information in the correct way to the audience. The training model is called SDF-model which consists of three phases:

- Set up
- Delivery
- Finish

Each phase consists of certain steps:

SET UP

- ☑ **Attention:** Get the attention of the audience, for example by asking a question, showing something, telling a story related to the topic, etc.
- ☑ **Title:** Give the title of the topic.
- ☑ **Objectives:** Explain what they will learn during this session.
- ☑ **Benefits:** Explain the advantages when applying the knowledge (what is in it for them?).
- ☑ **Direction:** Set the boundaries of your session by explaining what will be discussed and what not.

DELIVERY

- ☑ **Explanation:** Provide details on the topic by speaking.
- ☑ **Demonstration:** Show the topic to the audience (the visual aspect), you can use pictures, visuals, real materials but also examples.
- ☑ **Exercise:** Let the audience do an exercise to learn through practice (doing).
- ☑ **Guidance:** Guide the audience throughout the topic to ensure you stay within the topic.

FINISH

- ☑ **Summary:** Summarise the key information. Do not re-explain the whole topic, just mention the key points.
- ☑ **Questions:** Allow the audience to ask any question or provide additional comments.
- ☑ **Evaluation:** Test the understanding of the audience by asking questions about the key information.
- ☑ **Next step:** Mention how the learning can be put into practice.

The delivery of the farmers' trainings should be done according to the agricultural calendar. Where applicable, the training period is indicated on the first page of the training topic in this manual.

Visuals shown in this manual are for the trainer's reference. Printed versions of the visuals will be used during the trainings. An overview of visuals needed for sessions can be found in Annex 2.

What this manual cannot do

As mentioned above, this manual should be used in connection with other sources of information and training guides. It is not meant as a stand-alone training manual, especially not for trainers with limited knowledge of and experience in, sustainable cocoa production and certification. There are very good source books and training materials available, from CRIN, STCP, ACIDI-VOCA, to mention only a few, which should be consulted as well. This CCE training manual complements the other materials by adding the certification aspects.

MODULE I:

**INTRODUCTION TO
COCOA CERTIFICA-
TION**

Topic I.1: Introduction to Cocoa Certification

Key Information

Certification means growing cocoa according to certain **requirements**. Certification bodies may issue a certificate according to certain standards e.g. Fairtrade International (FLO), UTZ or Rainforest Alliance/Sustainable Agriculture Network (RA/SAN) if the cocoa is produced according to their standards.

Certification exists because consumers want to know how products have been produced and therefore they buy certified products.



The following aspects are important for certification:



Participate in **training programmes**.



Apply **Good Agricultural Practices** e.g. correct bean fermentation.



Apply **Good Social Practices**:
E.g. No child labour on the cocoa farm.



Apply **Good Environmental practices**: E.g. avoid using highly dangerous agrochemicals..

Background Information

What is certification?

Certification is a process by which an independent inspection body gives a certificate that a farm, farmers' group, processing facility, trader, importer or exporter has been assessed and is adhering to specific standards, including Fairtrade International (FLO), UTZ or Rainforest Alliance/Sustainable Agriculture Network (RA/SAN). The certification is intended to ensure that the cocoa sold under the seal of the standard organisation does actually originate from a farm or operation that produces according to the relevant standards. Certified producers and traders of cocoa must show documentary traceability, i.e. contracts, bills of lading, delivery notes, invoices, etc. that show where a product was sourced and to where it was sold. The independent inspection body checks the documentation to make sure equivalent amounts of sustainable cocoa were bought and sold, thus tracking the quantity of sustainable cocoa through the supply chain.

Increasing awareness of the environmental consequences of food production (deforestation, biodiversity loss, soil erosion, contamination with agrochemicals) results in a growing demand for environmentally-friendly produced cocoa products. Similarly, the cocoa sector's labour practices have received public attention, particularly since the international media began reporting on child labour in West Africa resulting in increased consumer demand for cocoa products originating from socially sustainable producers who respect international social standards.

Recognising that only a sustainable cocoa sector in the producing countries will be the guarantee for a thriving cocoa and chocolate industry abroad, multinational companies have engaged themselves in initiating projects to improve sustainability. In some, but not all cases, this is made visible by certification marks on the final products.

The standard initiatives described here foster best management practices across agricultural value chains by encouraging farmers to comply with the standards and by motivating traders and consumers to support sustainability. They do not certify the quality of the cocoa beans but the process how the cocoa is produced.

The Internal Management System, IMS

An Internal Management System (IMS), also referred to as Internal Control System (ICS) is a quality management system that indicates the necessary measures that producers take to improve their organisational skills, management, efficiency and overall performance. Moreover, it provides a template for better administration and continuous improvement.

A well established and implemented IMS would improve the performance of management, production, change and marketing processes, so that the organisation can achieve a better position and greater leverage in the market.

The objective of the IMS is to set out an overview of the system of policies and procedures in place within the group that are designed to:

- ensure the quality of communication and reporting, including design and implementation of processes to generate a flow of timely, relevant and reliable information;
- ensure compliance with laws and regulations applicable to the group, as well as with internal group policies; and
- enable the group to identify and respond to significant operational, and other compliance risks throughout the group.

The development of IMS is a requirement for group certification by UTZ and Rainforest Alliance. Fairtrade only requires some elements of a management system for production practices. For more information on IMS, please refer to the CCE IMS training manual.

The different Standard Initiatives

Fairtrade



Fairtrade's vision is a world in which all producers can enjoy secure, sustainable livelihoods, fulfil their potential and decide on their future. Fairtrade connects disadvantaged producers and consumers. It allows producers to reach export markets under fairer conditions, strengthen their position in international trade, gain better access to finance, take part in capacity-building programmes and generally take more control over their lives. For consumers, Fairtrade represents a powerful way to reduce poverty and instigate change through everyday shopping habits. In order to be part of the Fairtrade system, traders and producers have to meet certain criteria which are defined in the Fairtrade Standards set by Fairtrade International (FLO). Fairtrade's independent certification company FLO-CERT manages the process of auditing and certification to ensure compliance with the Fairtrade Standards. The Generic Fairtrade Standards for Small Producers' Organisations (current version: 01.05.2011) is the basic reference document for certification, along with the relevant product standards (www.fairtrade.net).

Fairtrade is about producers getting the best price possible. Most product categories, including cocoa, have a **Fairtrade Minimum Price**, which acts as a safety net should market prices fall below a sustainable level. The **Fairtrade Premium** is an additional amount paid directly to farmers' organisations. Small producers' organisations decide democratically and transparently how to use the Fairtrade Premium to best suit their needs. It can for example be invested in development or community projects, or business projects such as quality improvements or processing facilities.

Most importantly, producers are joint owners in Fairtrade. They are represented at the highest levels of the international Fairtrade organisation, Fairtrade International, and have 50 percent of the votes in the General Assembly.

Fairtrade producer networks in Africa, Asia and Latin America are full members of Fairtrade International. Regular stakeholder consultations on standards and policies allow producers to be actively engaged in decisions that affect their future.

There are currently 19 Fairtrade Labelling Initiatives and two marketing organisations covering 26 countries in Europe, North America, South Africa, Asia, Australia and New Zealand. These organisations license the use of the FAIRTRADE Mark on products in their country and actively promote Fairtrade through campaigning work and grassroots supporter networks, such as the Fair Trade Towns movement.

Rainforest Alliance



Rainforest Alliance (RA) works to conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices, business practices and consumer behaviour. It uses the power of markets to arrest the major drivers of deforestation and environmental destruction: timber extraction, agricultural

expansion, cattle ranching and tourism. RA works to ensure millions of acres of working forests, farms, ranchlands and hotel properties are managed according to rigorous sustainability standards. And by linking those businesses to conscientious consumers, who identify their goods and services through the Rainforest Alliance Certified™ seal and Rainforest Alliance Verified™ mark, RA demonstrates that sustainable practices can help businesses thrive in the modern economy.

In its agriculture programme the Rainforest Alliance certification is built on the three pillars of sustainability: environmental protection, social equity and economic viability. No single pillar can support long-term success on its own, so RA helps farmers succeed in all three areas. Since 1992, when it began in Costa Rica, the certification programme has spread to tropical countries around the world where the well-being of millions of farmers and workers and countless wildlife species is at stake. While Rainforest Alliance supports many initiatives dedicated to conservation and social justice, its experience, mission and grassroots strength are seen to distinguish Rainforest Alliance certification from other agricultural certifications.

Rainforest Alliance certification is based upon the Sustainable Agriculture Standard, which is owned by the Sustainable Agriculture Network (SAN). SAN is a coalition of leading conservation groups that links responsible farmers with conscientious consumers by means of the Rainforest Alliance Certified™ seal of approval. Their collective vision is based on the concept of sustainability, recognizing that the well-being of societies and ecosystems is intertwined and dependent on development that is environmentally sound, socially equitable and economically viable. For more information, visit www.rainforest-alliance.org and www.sanstandards.org.

UTZ



UTZ is a program and label for sustainable farming worldwide. Its mission is to create a world where sustainable farming is the norm. This means a world where farmers implement good agricultural practices and manage their farms profitably with respect for people and planet, industry invests in and rewards sustainable production, and consumers can enjoy and trust the products they buy. Achieving certification against the UTZ Code of Conduct involves commitment and effort from the farmer across a very wide range of topics, from farm (business and agricultural) practices and environmental care to social issues, and brings the farmer economic value. On the economic side, UTZ puts emphasis on teaching good agricultural practices, which leads to higher productivity, quality and efficiency and thus a better income. The UTZ Code of Conduct is the main standard document used for certification of cocoa producers. (www.utz.org)

Comparison of Fairtrade, Rainforest Alliance and UTZ

Fairtrade, Sustainable Agriculture Network (SAN)/Rainforest Alliance and UTZ share the goal of transforming the world's production systems and value chains to make them more sustainable. Our common concern is the urgent need to transform agriculture and we share the belief that certification by credible systems such as ours helps with that transformation.

We respect each other's missions and the unique focus each brings. We appreciate diversity in our approach, which enables producers, buyers and consumers to make a choice as to which certification best helps them meet their goals. We respect the complementary aspects of our work in moving towards sustainable agriculture and trade around the world. We believe we all have a task to fulfil and that together we work towards tackling unsustainable production and market practices, which we consider to be our main competition. We also share a commitment

to high standards in our work, which is why we are all members of ISEAL, the global association for social and environmental standards which works with companies, non-profit organisations and governments to support their use of voluntary standards.

A variety of complimentary approaches gives producers and buyers alternatives and the opportunity to select the system – or combination of systems – that best suits their interests and needs. The challenges faced by millions of farmers and their communities as they strive to improve their livelihoods while conserving the natural resources and the ecosystems upon which they depend are complex, diverse and ever-changing; there is no single solution.

Extract from Joint Statement

Fairtrade International puts farmers and workers at the centre of its work. Producers are represented in the highest decision-making body and farmers and workers are consulted on new standards and policies for Fairtrade. The Fairtrade concept is based on giving producers fairer terms of trade and the tools to determine their own development. Producers receive a fair price for their products and a fixed Fairtrade Premium to be used for group and community development. Producers decide democratically how to use the Fairtrade Premium. Typically they invest it in education, healthcare, farm improvements or processing facilities to increase income. The Fairtrade Standards enable producers to develop over time and to set their own development goals.

The SAN standard does not incorporate the concept of guaranteed and fixed premium. However, RA facilitates market-based premium agreed in a transparent way between producers and traders. Once a premium is offered for RA certified beans, RA encourages the group to typically invest in infrastructure to comply with the continuous improvement concept of the standard, run the IMS and pay an additional fee to the producer to motivate them to continue the implementation of best practices on their farm. RA is an international not-for-profit development and conservation organisation in which all stakeholders including academia, research, conservationist, producers and civil society are consulted on new standards and policies through a public consultation process.

The UTZ Code of Conduct covers the UTZ premium and the Group member premium. The UTZ premium is a cash amount paid by the first buyer to the certified producer group. The payment of premium is mandatory, but the amount depends on the negotiation between the buyer and the producer group. The producer group allocates the UTZ premium to pay for: group management costs (e.g. audits); products and services used for the group (e.g. training); and in-kind or cash payments to certified group members. The part of the UTZ premium that is forwarded to the certified group members is called the Group member premium. UTZ does not prescribe how the UTZ premium should be divided between management, group and group members. However, the Code requires that certified group members should clearly benefit from the UTZ premium.

All three standard initiatives promote good agricultural, environmental and social practices. The environmental aspects in all standards protect producers' health and safety, and ban the use of GMOs and dangerous chemicals.

Concerning small producer organisations, both RA and UTZ require an organised structure to run the group of producers; this structure is the ICS or IMS (for more information please consult the IMS guide). Fairtrade considered introducing this requirement as well, but extensive consulta-

tion with producers revealed that implementing a full IMS is both expensive and burdensome for most farmers. Therefore Fairtrade introduced elements of an internal quality management system to its standards. This helps farmers with little or no internal control to strengthen their practices, and also gives recognition to the good IMS work already taking place at larger and more established Fairtrade certified organisations.

Standards Requirements

Common requirements for group certification include:

The farmers' organisation should:

- Appoint an organisation or person responsible for the development, execution and maintenance of the Internal Management System, chain of custody system and for transferring information and training to the producers of the group.
- Designate a central body (cooperative, producer association, trader or LBC) that is responsible for buying, storing, (and marketing) of the cocoa.
- Hold one certificate per certified group that is linked to the list of approved producers of that group. This certificate covers producing activities; processing activities are addressed in the Chain of Custody.
- Operate under contractual membership requirements specifying:
 - The commitment to comply with applicable voluntary standards.
 - Provide the group administrator with required information.
 - Cooperate with internal inspections and external audits.
 - Report their intentional and unintentional non-compliances with voluntary standards and group administrator's internal requirements.
- Have an internal management system or elements of it (Fairtrade) operated by the responsible central body or an external body contracted by the central body. The IMS maintains files on all members of the group. A list of all individual member producers is available and a database of the farms is maintained.
- Have an internal inspection system that inspects each member's operation at least once a year (UTZ and Rainforest Alliance).
- Evaluate through the IMS mechanism the members' compliance with applicable standards. Non-compliances are dealt with according to the group's procedures and sanctions (UTZ and Rainforest Alliance).
- Set up correctives actions to ensure a continual improvement of the process.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand that certification is a procedure intended to ensure that the cocoa traded under the organisation's standard comes from a farmer who produces according to the relevant compliance criteria (exception: physical traceability is not required for cocoa in Fairtrade Standards).
- Know that more and more consumers become aware of the challenges in cocoa production and want to make sure the cocoa they consume does not have negative effects on the

environment (e.g. deforestation, overuse of chemicals) or social implications (e.g. child labour, workers' health).

- Understand that certification is not just about receiving premiums; certification offers many other benefits, such as strengthening farmers' organisations, group learning, improved production technology, higher yields, and better quality.
- Have enough information about the main differences between the three standard initiatives and be able to make an informed decision which one to choose.

Materials needed:

- Visual 1 to 8 in large print (see overview of visuals needed per topic)
- Masking tape
- Cocoa in a bag with a label that says "certified"
- Cocoa in a bag without a certification label

Time needed: 1 hour

Preparations: None

Note for the trainer: This session is only an introduction. This means that you will mention a lot of things but do not explain in detail. It is very important not to enter into long discussions, because this will be done in other sessions. If for example someone asks how much the premium is, tell the person that we will discuss this during the session on premiums (topic I.4).

Set up

Attention: Show participants the two bags of cocoa and ask what the difference is: one is produced in the conventional way while the other contains certified cocoa. Say that we will discuss during this session what exactly the difference between the cocoa in the two bags is.

Title: The title of this session is *Introduction to certification*.

Objectives: To discuss what certification is, the benefits of certification and the difference between the three standard initiatives Fairtrade, Rainforest Alliance and UTZ.

Benefits: Many farmers think that certification is all about getting a premium, but being certified is much more and has many benefits that are more important than premiums. If they know what certification is and what they need to do, they can apply for it and benefit from all advantages.

Direction: This session is an introduction. We will not discuss premiums or how to can get certified; that will be discussed in the next sessions.

Delivery

Explanation, **D**emonstration, **E**xercise, and **G**uidance:

1. **Show** clearly the bag with certified cocoa and ask: *These beans are **certified**. What does that mean?* Collect answers from several people.

2. Say that certification is a **procedure**, which means that farmers need to **follow certain steps**. The objective of this procedure is to ensure to customers who buy the end-product (for example chocolate) that the cocoa has been produced **respecting certain rules** (standards or requirements).
3. Ask if that means that I can go to an office and buy a certificate so I can get a Premium? No, it does not work like that. Certification is a **process** that each farmer needs to go through. There are certain things you have to do and there are certain things you cannot do anymore.
4. Ask if anyone can give an **example** of what a farmer **needs to do** when he/she wants to get certified. Collect several answers. When someone mentions an answer that is depicted on one of your visuals, **show the visual** and explain what it depicts. If at the end no one has mentioned a certain point, show the visual and ask what they see. If possible, pin/paste the visual on a tree or wall. Make sure the following is mentioned (don't go into detail by explaining what everything is: refer instead to future training sessions that will cover a certain topic):
 - a. Participate in **training programs** (visual 1).
 - b. Apply **Good Agricultural Practices**, including pruning, correct harvest and post-harvest handling, Integrated Pest Management, soil fertility management (visual 2).
 - c. Apply **Good Environmental Practices**, including water management, no excessive spraying of agrochemicals (visual 3), protecting the forest and ecosystem (no cutting of trees [visual 4] or burning of land), waste management, waste management, etc..
 - d. Apply **Good Social Practices**, including no use of child labour (visual 5).
5. Point to all the visuals. Ask: *what are the **benefits** if we are going to apply all these requirements?* Collect several answers. If farmers have problems mentioning benefits, point to specific visuals and ask what the benefits are. Benefits can include: less diseases on the farm and in the community (because of better environmental practices), better functioning farmers' groups, happy workers and healthy, well-educated children (because of better social practices), sustainable cocoa production and higher yields (combination of all), etc..
6. Ask participants **why** they think certification **exists**. Collect a few answers but do not tell participants the answers are correct or wrong. To explain why certification exists, ask participants what type of **final products** are made from cocoa. This is chocolate and many other products that use chocolate, such as chocolate cookies, cakes, chocolate bars, chocolate drink (Milo), etc. Explain that more and more consumers **become aware** of the negative effects of food production, such as deforestation, soil erosion and contamination with agrochemicals. Therefore, an increasing number of consumers want to buy products from farmers who respect environmental standards. Similarly, consumers don't want to buy products that have been produced through exploitation of workers or children and therefore demand cocoa products originating from producers who respect international social standards. In short: certification exists because of the many challenges in cocoa production and certification is one way of **addressing these challenges**.
7. Say that in Nigeria there are three **Standard Initiatives**, such as Fairtrade (FLO), UTZ, or Rainforest Alliance, who can give certificates to farmers that follow the requirements. **Show the logos** of Fairtrade (visual 6), Rainforest Alliance (visual 7) and UTZ (visual 8).
8. Tell participants that although all three standard initiatives **guarantee** that the cocoa is produced according to **comparable standards**, the standards are a bit **different** from each other.

Note for the trainer: If the groups have already selected a standard initiative, only mention the specifics of that standard initiative.

9. Explain that Fairtrade guarantees a **Fairtrade Minimum Price** for producers (which acts as safety net should market prices fall) and a **guaranteed and fixed Fairtrade Premium**. The Fairtrade Premium is not paid to the individual producer. Producers decide **collectively** and democratically how to use it. Typically they invest it in **education, healthcare, farm improvements or processing facilities** to increase income. The premium and the **democratic decision-making process** on its use is the core element of the Fairtrade certification to motivate producer organisations to comply with the standards but also to help improve their livelihoods. The fixed Premium is specific to Fairtrade. Add that we will discuss premiums in a later topic.

Note for the trainer: For a lot of farmers the Fairtrade Premium is one of the most important motivations and they are probably very eager to discuss it. However, in this session you should not discuss the premium. In session I.3 we will discuss in detail the premium system.

10. All standard initiatives cover **social and environmental standards**, although Rainforest Alliance places more emphasis on **protecting wildlife and biodiversity**, while UTZ stresses the importance of **traceability** in cocoa supply chains (say we will discuss this in a future session) and specifies how beans should be harvested and handled to produce a **high quality** crop. Fairtrade and UTZ also address **environmental aspects**: Environmental requirements should enable producers to face their environmental challenges, strengthen their livelihoods sustainably, contribute to a more sustainable planet and make sure future generations are able to use the land. All three standard initiatives promote **good agricultural, environmental and social practices**. The environmental aspects in all standards protect producers' health and safety, and ban the use of Genetically Modified Organism (GMOs) (UTZ has not made a decision on GMO yet) and dangerous chemicals.
11. Add that farmers' groups can apply to get certified against one, two, or all three of the standards, as long as they are **ready to follow the requirements** of them. The advantage of being certified by **several organisations** is **easier access to markets**, as the exporter can supply the same cocoa to different buyers. The inspection costs can also be reduced, if compliance of several standards is checked in one inspection as compared to individual inspections for each standard. However, Fairtrade has a specific audit, carried out by FLO-CERT. The choice of certification should be discussed with the group's buyers in order to make sure their efforts will be rewarded.

Finish

Summary: Summarise what certification is, why it exists, what farmers need to do to get certified, what the advantages are, and resume very briefly the differences between UTZ, Rainforest Alliance and Fairtrade.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants what certification is, what the benefits are and the main differences between UTZ, Rainforest Alliance and Fairtrade.

Next step: Now that the participants know what certification is, the group should discuss if it would like to get certified and which Standard it would prefer.

Topic I.2: Steps to Certification

Key Information



1. Raise awareness and get organised



2. Take part in training programmes



3. Join the Internal Management System (IMS)



4. Join with your group one or more certification scheme(s)



5. Have your farm inspected



Enjoy the benefits of certification!

Background Information

How to get certified?

There are certain steps to take before a farm, farmers' group or processing facility can be certified.

1. Raise awareness and get organised

The decision if a farmers' group would like to get certified may be taken by the group itself, but in most cases the process is initiated by processing or exporting companies who have buyers for certified cocoa. Certification is a tool to address the many challenges facing cocoa production. Consumers expect that the products were produced respecting people and the environment. Before the actual decision is made farmers need to be given clear information about the additional work required and also about the benefits (improved market access, increased negotiating power or an improved role in the value chain, technical assistance for building infrastructure to improve production, technical training and skill diversification for cooperative members and their families, and, where applicable, premium payments.) Each individual farmer should have a free choice whether or not to join a certification programme and also which programme to join. This is very important as certification of small farmers' groups only works if each individual member adheres to the standard requirements. Awareness campaigns will help the farmer groups to make an informed decision.

If the decision for certification has been taken, it also needs to be decided for which certification programme to apply. Some farmers' organisations or companies subscribe only to one programme, while others prefer multiple certifications, in order to be flexible in serving different markets. It is important to include the buyers in the discussions of which certification programme to choose so that the marketing of the certified cocoa is assured.

When there is an agreement among the farmers to go for certification, the organisational setup has to be planned. Who will be the certificate holder: the farmers' group, a cooperative, or the buying company? The body organising the producers' groups is also referred to as group administrator. There are different models, having their advantages and disadvantages. It is also possible that a company or NGO forms a producers' group, navigates them through the certification process and gives them the ownership of the certificate, allowing them to sell their certified cocoa to other buyers as well.

2. Organise training programmes

Before and during the certification process, farmers need to be trained on how to improve the farm management and production processes in order to comply with the sustainability standards and to increase productivity. Trainings also need to cover organisational, social and environmental aspects.

3. Develop an Internal Management System, IMS

Before any inspection is carried out, the farmers' organisation or company has to develop an Internal Management System (IMS) which is a prerequisite for smallholder group certification for UTZ and Rainforest Alliance. (refer to the training manual on IMS for more information).

4. Join (a) certification scheme(s)

As a next step, the group or company has to apply to the standard initiative(s) to join their programme(s) that in turn will send a set of documents to be considered and filled. These usually include:

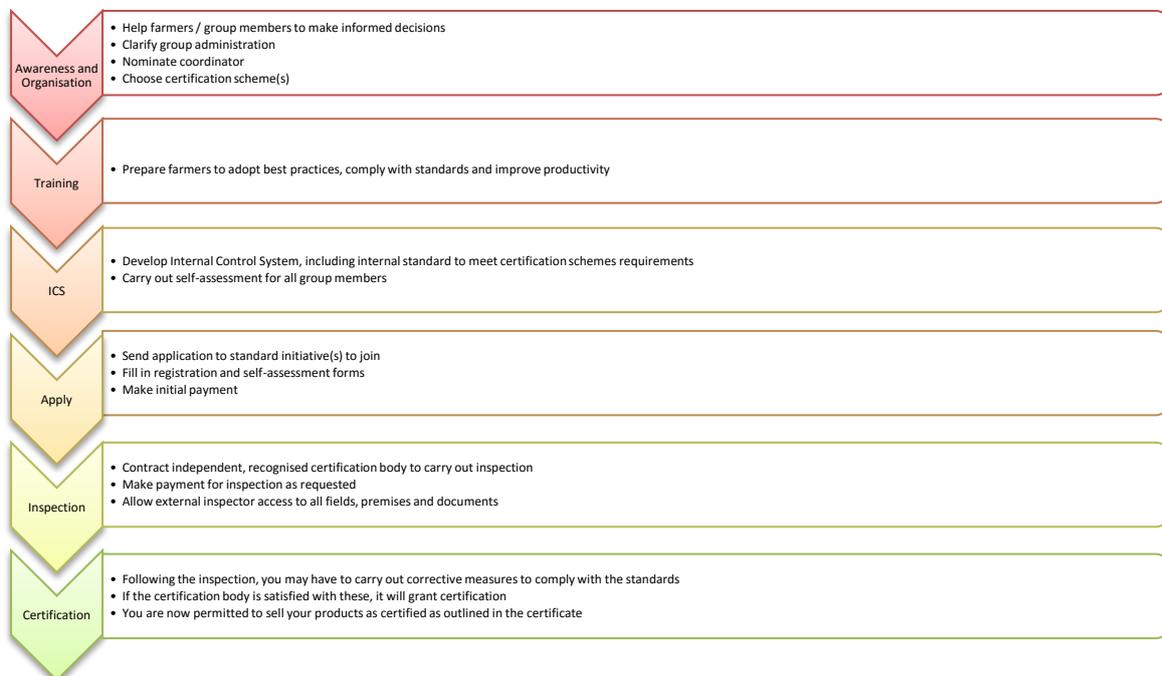
- Registration form with costs involved.
- Self-assessment checklist to describe the current situation of the group.
- Pre-audit if required.

In general, the standard initiatives provide pre-certification and certification support, helping producers to get certified, to stay certified and to succeed in certification.

5. Organise external inspection (audit)

Now, and if the organisers feel that the group generally meets the standard requirements, an independent certification body, approved by the standard initiative(s), is contacted to plan the first inspection. The external inspector/auditor will have copies of all standards for which certification is sought and will make an assessment (audit) of the current situation and compares this with the standard requirements. In case of UTZ and RA, the external inspector will do random checks (i.e. the square root of the number of producers) and check the group and functioning of the internal management system. After the inspection, the inspector will send a report and recommendations to the certification committee of the certification body, which decides if the farmers' group complies with the standards. The results of the inspection are discussed with the group, which proposes corrective measures to the inspector who has to agree to the measures. The final decision will then be sent to the farmers' group. Only after having received the certificate(s), the farmers' group may offer their cocoa as certified.

The different steps to get certified are summarised in the following graph.



Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know the steps to get certified: awareness raising and getting organised in groups, training, setting up an IMS, applying to a standard organisation, organising external inspections.
- Understand that they need to be in line with the respective standards and that the process of certification means to take responsibility not only for the own farm but also for the group, as all members of the group are inspected and the group is treated as a single operator.

Materials needed:

- Visuals 9 to 14 in large print (see overview of visuals needed per topic)
- Masking tape (if there is anywhere to paste your visuals)

Time needed: 1 hour

Preparations: None

Set up

Attention: Show the logos of Fairtrade, Rainforest Alliance and UTZ. Say that we discussed in the previous session what they do.

Title: The title of this session is *Steps to certification*.

Objectives: During this session we will go over all steps to get certified as farmers' (group).

Benefits: Being certified has many benefits. If they know what certification is and what they need to do, they can apply for it and benefit from all its advantages.

Direction: We are not going to discuss premiums: that will be the topic of next session.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Ask participants to form a **semicircle** around the wall or pin board. Paste the **first visual** (visual no 9) about **awareness raising and group formation** (get organised) on the wall (or hold it up when you do not have a wall). Say that the first step towards certification is group formation. Ask the following **questions**:
 - a. *Can an individual be certified?* No, farmers need to be organised in groups before they can apply for certification.
 - b. *Why do you need to be in a group?* The process of certification means to take responsibility for the own farm but also for the group as such, as all members of a group are inspected and certified together. In addition, certification is not only meant to benefit individual farmers, but the whole community.

- c. Add that when farmers agree to go for certification, the organisational setup has to be planned. This is usually done by the farmers' organisation or the company organising the farmers. They will be the certificate holders.
2. Show the **second visual** (visual no 10) that depicts **training programmes**. Say that the second step is participation in training programmes. Ask:
 - a. *Has anyone already taken part in a training on cocoa production?* Let people raise their hands.
 - b. If someone raises his/her hand, ask *what did you learn?*
 - c. *Some farmers may say that they know already everything about cocoa production, why do they need to participate?* Cocoa certification is not just about cocoa production but includes much more, such as environmental and social aspects. In addition, we have just seen that certification is done by a group which means that everyone is responsible for its success. When a group has experienced members they can share their experiences with less experienced members during training programmes.
3. Show the **third visual** (visual no 11) that depicts the **Internal Management System (IMS)** and say this visual shows an Internal Management System (IMS). Ask:
 - a. *Has anyone ever heard of an Internal Management System (IMS) when we talk about cocoa certification?*
 - b. If someone has, ask if that person *can explain what it is?* If no one is familiar with IMS, explain that all three standard initiatives require the establishment of an Internal Management System (IMS) for group certification. An IMS is a system that gives more responsibility to the producers' group and allows the inspections (audits) of individual group members to be carried out by the group operator. The group of farmers is considered as one operator for the certification process. This reduces the costs of inspection and certification. The IMS will be put up by the certificate holder.
4. Show the **fourth visual** (visual no 12) on **joining a certification scheme** and say that the next step is to apply to a certification scheme. Ask:
 - a. *Did this group already select a certification scheme?* If yes, ask which scheme. You do not mention point 4b and 4c.
 - b. If no, ask *what is important to them when selecting a scheme?* If necessary, you can repeat a few differences between the schemes (see topic I.1 on introduction to certification).
 - c. Say that to join a certification scheme, the groups needs to:
 - Send application to standard initiative(s) to join.
 - Fill in registration and self-assessment forms.
 - Make initial payment.
 - Pre-audit if required.

Add that in general, the standard initiatives provide pre-certification and certification support, helping producers to get certified, to stay certified and to succeed in certification.

5. Show the **fifth visual** (visual no 13) that depicts the **organisation of the external inspection** and say this depicts external inspection. Ask:

- a. *Does anyone know what external inspection is?* Before getting certified, a recognised certification body needs to carry out an inspection.
 - b. *Why should this be done?* An external inspection is to see if the farms of the group members fulfil all requirements. After the inspection, the inspector will send a report and recommendations to the standard initiative(s), where certification committees decide if the farmers' group complies with the standards. The final decision will then be sent to the farmers' organisation. Only after having received the certificate(s), the farmers' organisation may offer their cocoa as certified.
6. Show the **last visual** (visual no 14) and say that all these steps are necessary to enjoy the **benefits of certification**.

Finish

Summary: Repeat the steps to certification using the visuals.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants what the steps of certification are after the farmers have implemented all the requirements.

Next Step: If farmers are able to implement the requirements on their farms, they are now ready to take the described steps toward certification. If the farmers need assistance, they will get it from the extension officer of the organisation or company.

Topic I.3: Getting Certified

Key Information

Inspection is done to assess if producers comply with the standard and to generate management information for the IMS.

Steps for inspection:

1. The farmer follows **training programs** and **applies** all requirements.
2. **Internal inspection:** every farmer is inspected at least once a year. During the internal inspection the list of requirements are checked. The farmer is then advised how to take corrective measure for those requirements that are not met (they are called **non-conformities**).
3. A **follow up visit** is made to see if all corrective measures are implemented..
4. If all corrective measures are implemented, an **external audit** by an external independent control body will be organised. The **inspection report** (containing explanation of any non-conformity, corrective measures, and check marks of the producer’s capacity to implement them) is given to the IMS manager. The results are **communicated to the farmer** including corrective measures to take and sanctions (if applicable).
5. A **follow up visit** is made to see if all corrective measures are implemented.

Examples of non-compliance	Examples of sanctions
i. Unfulfilled mandatory requirements. ii. Intentional obstruction of the inspection. iii. Undoubted fraud. iv. Refusal to respect contract.	i. New producers: they cannot be approved. ii. Already approved producers: they are suspended and their products are not sold as certified.



Permit inspections of your farm by the internal inspector and external auditor

Background Information

Inspection is done to **verify** that producers fulfil the requirements of the internal standard. The whole inspection process consists of a **few steps**:

1. Training programmes

The farmer needs to follow **training programmes** and apply all requirements.

2. Internal inspection

All registered farms are inspected **at least once a year** during the **internal inspection**. The inspection must cover the following aspects: verification of the cocoa fields and their management, harvest and post-harvest practices, interview with workers on working conditions, interview with producers on topics such as child labour, agrochemicals, storage (harvested produce and inputs), and available documentation. The inspection is organised by the farmers' group and can be done by the technical staff or lead farmers on the condition that farmers do not inspect their own farms or farms of group members, and technical staff should not inspect farms of farmers that were trained by them.

3. Follow up visit

A **follow up visit** is made to see if all corrective measures are implemented.

4. External audit

The final check to see if all requirements are implemented is called **external audit**. The main difference with a final exam for school or university is that this audit is for the **whole organisation**, so not the individual farmer. The external audit can only be done by an **external independent control body** (such as Africert Certification Company, Control Union Certifications and Binnenlloyd Maastricht B.V.) to ensure an independent audit. The farmers' organisation needs to pay for this.

5. Inspection report

The inspection is recorded in the **internal inspection form**. At the end of the inspection, the results are **summarised** for the producer. The results contain explanation of any non-conformity, corrective measures, check marks of the producer's capacity to implement them, and signatories to the internal inspection report. The **inspection reports** are given to the internal control manager (for some standard organisations) who will give them to the approval and sanction manager for evaluation. In case there are too many farmers with non-conformities, the farmers' organisation **will not get its certification**, the farmers will not be certified and will not get a premium. This means that even if you as an individual farmer has complied with all requirements but other members not, you **cannot** be certified.

The responsible person for the approval of the producers (or the approval committee) takes the decision regarding each producer's **conformity to the standard** and sanctions are documented. The decision must be clearly communicated to the producers. The person responsible for the sales must also be informed. The Internal Management System must contain specifications on how it can ensure that the producers put **corrective measures** in place.

See also the CCE IMS manual.

Standards Requirements

Specific standards requirements

UTZ

The farmers' organisation should:

- Set up an internal inspection system in which each registered producer is inspected at least once a year against the applicable requirements.
- Hire an approval and sanction manager or committee who assesses the certification status of each producer based on the findings of the internal inspection.
- Give the right to all producers to appeal any decisions made by the approval and sanction manager or committee.
- Inspect new applicants always by the IMS before they can be included in the certificate.

Rainforest Alliance

The farmers' organisation should:

- Implement an effective internal management system, including the following:
 - Organisational chart with details of committees, positions and job responsibilities, including those serving.
 - Responsibilities, required qualifications and competencies of personnel, elected persons, and committees.
 - Governance procedures for:
 - Approval of new group members and annual status of each member farm.
 - Group and group member record keeping requirements.
 - Internal inspections.
 - Sanctions and appeals.
- Manage conflicts of interest with impartiality and independence, including decision makers' absence of their own actual or potential conflicts of interest.
- Internally inspect all group member farms prior to an external audit. Inspect the farms no less than annually, preferably at different times of the year. Inspect new group member farms before being included in the group subject to certification.
- Put in place policies and procedures for sanctioning individual group members for non-compliance with Sustainable Agriculture Network standards or internal group administrator requirements.
 - Establish progressive sanctioning measures, concluding with the exclusion from sales of certified products.
 - Inform each group member of the sanctioning system.
 - Keep records for the easy identification of sanctioned group members.
 - Give each group member the right to appeal findings of non-compliance and its resulting sanctions.
- Keep accurate group member records, including:
 - A list of group members with their names, date of entry to the group, any assigned identification and certification status.
 - Information on certified member farms with location, total area, total production area, annual production volume, farm maps or sketches indicating location of natural ecosystems.
 - Regional maps or sketches of all the member farms' locations, including access roads and main natural ecosystems.
 - Volumes of certified products at the following stages: buying, handling, processing,

packaging and selling.

- External audits and internal inspection reports, dates, and any complaints received.

Fairtrade

- Audits vary in length and intensity depending on the size of the producer organisation, the complexity of the producer organisation and the number of certified products they are seeking to sell.

The farmers' organisation should:

- Define and implement a procedure to monitor and evaluate the performance of the members in relation to the requirements in the Production chapter of the Generic Standard for Small Producer Organisations.
- Audit farmers against two sets of requirements:
 - Core requirements which reflect Fairtrade principles and must be complied with. These are indicated with the term 'Core' found in the column on the left throughout the Standard.
 - Development requirements which refer to the continuous improvements that certified organisations must make on average against a scoring system (also defining the minimum average thresholds) defined by the certification body. These are indicated with the term 'Dev' found in the column on the left throughout the Standard.
- Ensure the auditor prepares the audit and sends a letter to the producers informing them of the most important points relevant to the visit.
- Discuss with the auditor the strengths and weaknesses of the organisations and get an explanation of all detected non-conformities with Fairtrade Standards.
- Suggest ways in which to correct the detected non-conformities with the Fairtrade Standards. Send a report to FLO-CERT for evaluation.

Rainforest Alliance

The farmers' organisation should:

- Implement an effective internal management system, including the following:
 - Organisational chart with details of committees, positions and job responsibilities, including those serving.
 - Responsibilities, required qualifications and competencies of personnel, elected persons, and committees.
 - Governance procedures for:
 - Approval of new group members and annual status of each member farm.
 - Group and group member record keeping requirements.
 - Internal inspections.
 - Sanctions and appeals.
- Manage conflicts of interest with impartiality and independence, including decision makers' absence of their own actual or potential conflicts of interest.
- Internally inspect all group member farms prior to an external audit. Inspect the farms no less than annually, preferably at different times of the year. Inspect new group member farms before being included in the group subject to certification.
- Put in place policies and procedures for sanctioning individual group members for non-compliance with Sustainable Agriculture Network standards or internal group administrator requirements.
 - Establish progressive sanctioning measures, concluding with the exclusion from sales of certified products.
 - Inform each group member of the sanctioning system.
 - Keep records for the easy identification of sanctioned group members.
 - Give each group member the right to appeal findings of non-compliance and its resulting sanctions.
- Keep accurate group member records, including:
 - A list of group members with their names, date of entry to the group, any assigned identification and certification status.
 - Information on certified member farms with location, total area, total production area, annual production volume, farm maps or sketches indicating location of natural ecosystems.
 - Regional maps or sketches of all the member farms' locations, including access roads and main natural ecosystems.
 - Volumes of certified products at the following stages: buying, handling, processing, packaging and selling.
 - External audits and internal inspection reports, dates, and any complaints received.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand the internal inspection, approval and sanction processes.
- Know the four common types of non-compliance.

- Know the sanction for these types of non-compliance for new entrants and for approved farmers.

Materials needed: None

Time needed: 45 minutes

Preparations: None

Note for the trainer: We compare the final steps to certification with making an exam for school. We have added on purpose university to the comparison to avoid that the farmers get the feeling that they are compared to small children.

Set up

Attention: Ask what children or students need to take before they can get a certificate from school or university. They need to take an exam. When you want to get certified, you also need to take several exams to see if you qualify.

Title: The title of this session is *Getting Certified*.

Objectives: We will discuss what the final steps are to get certified, including internal inspection, external audit and sanctions.

Benefits: The better you understand what final steps to be taken, the better you can prepare yourself for successful certification.

Direction: We will not discuss the detailed requirements for certification.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Ask who of them has children that have **taken exams in school or university**. Let them raise their hands. We saw that children need to take exams in school or university when they want to get a **certificate**. Ask: *what do children or students need to do before they can take the exam?* They need to follow classes. Say that that is exactly what farmers need to do as well when they want to get certified: they need to **follow training programs**.
2. Just as in school and university, farmers who want to get certified need to take a kind of exam to check if they have followed all the **requirements**. Ask: *how can someone check if a farmer has followed all requirements?* By going to farm and observe what has been done, and talk to the farmer and labourers.
3. Often in school children or university students do not just follow classes and then write an exam: school want to be sure that their pupils will get good results in their test. Ask: *how do schools or universities prepare their pupils?* Let several people answer: sometimes there are extra classes to practise with old exams or there is a pre-exam. Also for certification farmers are being assisted to pass the final inspection of their farm; this is call **internal inspection**.
4. Explain that every farmer is inspected at least **once a year**. During the internal inspection the list of requirements are checked. The farmer is then advised how to take corrective measure for those requirements that have not been met (they are called **non-conformities**).

5. Ask *what will happen with pupils or students that get only Ds⁻ for all tests they have to take before the final exam?* Those pupils will not even be allowed for the final exam. It is the same for certification: when during the internal inspection too many non-conformities are found, you can be **suspended** or even **expelled**.
6. Ask: *does anyone know **who** can do this internal inspection?* The inspection is organized by the **farmers' group** and can be done by the technical staff or lead farmers on the condition that farmers cannot inspect their own farms or farms of group members, and technical staff cannot inspect farms of farmers that were trained by them. This means that any of them can become an **internal inspector** to inspect farms of other groups.
7. Say that a **follow up visit** is made to see if all corrective measures are implemented.
8. Just as in school or university pupils need to take a final exam to get their certificate: in certification this final exam is called **external audit**. The main difference with a final exam for school or university is that this audit is for the **whole organisation**, so not the individual farmer. Ask: *who do you think can do this external audit?* If no responses come, ask: *can the farmers' group do the external audit?* No, the external audit can only be done by an **external independent control body** to ensure an independent audit. However, the farmers' organisation needs to pay for this.
9. Say that just as with the internal inspection farmers will get some time to improve the non-compliances. We saw that when during the internal inspection too many non-conformities are found, a farmer can be **suspended** or even **expelled** from the farmers' group. Ask: *What do you think can happen when during the external **audit too many farmers have too many non-conformities?*** In that case the farmers' organisation **will not get its certification**, the farmers will not be certified and they will not get a premium. This means that even if you as an individual farmer has complied with all requirements but other members not, you **cannot** be certified.
10. Let this sink in for a few seconds. Then add that in previous sessions we already saw that you cannot get certified as an individual and that you need to get **organized in groups**. Now we know the final steps towards certification, we can add that certification is not just about being organized in a group but also **working together as a group** to ensure that **everyone** can comply with all requirements.
11. Say that to avoid that the whole farmers' organisation cannot be certified because of you, it is important to:
 - Comply with all mandatory requirements.
 - Not intentionally obstruct the inspection.
 - Not commit any fraud.
 - Respect the contract you have signed with your group with your farmers' organisation.
12. Add the specific requirements depending on what standard organisation has been selected by the farmer group.

Finish

Summary: Summarise the final steps for certification as listed in the key information. Repeat what sanctions can be given to members who have too many non-conformities.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants to repeat the final steps to certification. Ask them to explain the four types of non-conformities and the sanctions for approved farmers and newcomers, respectively.

Next Step: The better the farmer is prepared for his/her internal inspection and external audit, the higher the chance that his/her cocoa will be certified. Remember that it all starts with following training programs.

Topic I.4 Premiums

Key Information

Premiums are a **reward** for the **extra work** farmers do and to **cover all costs** to produce cocoa according to all certification requirements. A premium is **only paid** when:

- The group complies with all applicable requirements.
- The external audit has approved the cocoa as being certified.
- The cocoa is sold to a buyer as certified cocoa from that specific certification standard.

Use certification premiums for instance for:



Planting/replanting



Education



Health Insurance

Background Information

Premiums are payments that are made for certified cocoa **in addition to the market price** or to the price agreed between buyer and seller. The purpose of price premiums is to **cover the additional costs** incurred by the certification process: organising farmers' groups, developing and maintaining the internal Management system, maintaining a documentation system as well as the actual costs for inspections and certification. In the Fairtrade system, the premium is for the small producers' organisations. It is meant for **investment** in the social, economic and environmentally sustainable development of the organisation and its members, and through them, their families, their workers and the surrounding community.

Improved farm performance through the implementation of the standard requirements often leads to an **increased income** of farmers due to various factors such as improved productivity, higher bean quality, lower costs, better organised producer groups and/or price premiums.

Premiums are paid by the buyer / importer of certified cocoa to the farmers' organisation or certificate holder but **not directly** to the producer. Under Fairtrade the premium is paid directly to the producer organisation's account, which is also inspected and audited. It is up to the producer organisation / certificate holder and the members of the producer organisation / farmers to negotiate a premium. Under **Fairtrade** the premium is a **fixed amount** and protected by the standard.

If the cocoa has to be sold on the "conventional" (non-certified) market because there is not enough demand for certified cocoa, it is sold without the certificate and the buyer will not pay a premium, although the cocoa is actually certified. It is therefore advisable for the farmers' organisation or company to **negotiate as early as possible** with potential buyers about quantities and prices of certified cocoa, so that they are not obliged to sell their certified cocoa on the conventional market.

Not all certification schemes have included premiums in their standards. **Rainforest Alliance**, for instance, does not specify price premiums in its standard but in practice, it facilitates dialogue between trading partners to negotiate premiums according to the market trends. Currently the premiums paid for Rainforest Alliance Certified follow the level of premiums paid by other certification schemes.

Some certification schemes leave it up to the trading partners to negotiate premiums freely. For **UTZ**, the premium is explicitly determined in a negotiation process between the buyer and seller. UTZ does not interfere in these price negotiations but provides its members with market information to strengthen them in the negotiation process and enable them to make informed contract decisions.

The Fairtrade system is distinct from other initiatives as it provides producers two major monetary benefits: the Fairtrade Minimum Price and the Fairtrade Premium. The **Fairtrade Minimum Price** is a **guaranteed price** that is said to cover the costs of sustainable production. It acts as a safety net for farmers at times when world markets fall below a sustainable level. Without this, farmers are completely at the mercy of the market. When the market price is higher than the Fairtrade minimum, the buyer must pay the higher price. Producers and traders can also negotiate higher prices on the basis of quality and other attributes.

The **Fairtrade Premium** is a separate payment designated for **social and economic development** in the producing communities. This money goes into a communal fund for workers and farmers to use to improve their social, economic and environmental conditions. The producers themselves decide how these funds are to be spent. The use of this additional income is decided upon democratically by producers within the farmers' organisation, or by workers on a plantation. The premium can be invested in education and healthcare, farm improvements to increase yield and quality, or processing facilities to increase income. As many projects funded by the premium are communal, the broader community, outside the producers' organisation often also benefits from Fairtrade.

Some areas where to invest profits from cocoa certification

- **Income generation activities:** Premium can be re-invested into cocoa production through the purchases of farm inputs. For instance, improved cocoa planting materials can be purchased with part of the premium to refurbish old cocoa plantations. Farm labour can be hired instead of using child labour. More so, equipment such as agrochemical sprayers, protective clothing and materials can be purchased to maintain the health of the operators. Using premiums in such ways will increase farmers' productivity and income as well as improve their livelihoods.
- **Education:** Children's education is one of the best areas to invest premiums from cocoa production. It is decisive for children's future opportunities by letting them acquire knowledge and new skills. Education makes a worthy contribution to children's development to become responsible citizens. It enables individuals to understand their duties as citizens and live by them. Therefore enrol both boys and girls in schools. Motivate them to go to schools by providing them with the necessary materials and partaking in Parent Teacher Associations. Be willing to use some profit from the cocoa production to pay the due educational costs as proposed by the government. Support the effort by the government to improve education. Education is for everyone: farmers can also invest in their personal education through joining farmer business schools, farmer field schools, adult literacy programmes, distance learning academic programmes, etc.
- **Health:** Farmers should also invest in their health by using part of the proceeds from their cocoa to purchase protective materials to reduce the risks associated with intensive farming. The protective materials include long dresses, hats, gloves, boots, face masks, etc. First aid kits can be purchased to treat accidents immediately on the spot. Another way to invest in health is to apply for health insurance. Farmers can apply for health insurance by either registering with private health insurance companies or the National Health Insurance Scheme. The national health insurance scheme is established by the government of Nigeria to provide basic health care services to all persons resident in Nigeria. Farmers can register by paying their contribution to the National Health Insurance Service (NHIS) agent in the district capital. Having health insurance is important, because a good coverage helps people to get access to the more expensive forms of medical care if necessary.

Standards Requirements

Common standards requirements

- Clearly understand all the terms associated with the premiums you receive from the certification.

- Use the premium you receive from certification in ways which are beneficial to you and your community.

Specific standards requirements

UTZ

- A “Use of UTZ premium” procedure is in place and is communicated to the group members.
- The UTZ premium clearly benefits group members in cash and/or in kind. Seek information from the certificate holder about the spending of UTZ premium in a transparent way.
- Receive premium from the certificate holder in a manner convenient to you.
- Prices, height of premiums, and timing of premium payment are negotiated and clearly communicated and transparent to group members

Fairtrade

The farmers’ organisation:

- Must decide via the General Assembly on the use of the Fairtrade Premium and properly document the decision. All activities that are planned to be funded with the Fairtrade Premium must be included in the Fairtrade Development Plan.
- Must have an accounting system that accurately tracks the Fairtrade Development Plan expenses, and in particular identifies the Fairtrade Premium transparently.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know what premiums are and why they are paid.
- Understand that premiums are not guaranteed.
- Know how the different standard initiatives deal with premiums.
- Understand how premiums can be used (reinvestment in farm, education and health, or community activities).

Materials needed: Visual 15 to 18 in large print (see overview of visuals needed per topic)

Time needed: 45 minutes

Preparations: None

Set up

Attention: Tell participants that during this topic we will discuss money.

Title: The title of this session is *Premiums*.

Objectives: We will discuss what premiums are, how different certifiers deal with premiums and how premiums can be used to benefit the community. In addition, we will see

what needs to be done to get the premium because you not automatically get a premium when you are certified.

Benefits: If farmers know how premiums can be spent, they and their community can benefit a lot.

Direction: We will not discuss in detail how premiums are paid to farmers; we will only discuss what they are and how they can be used.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Ask why day labourers are getting paid: because they work. Ask if they will get paid when they do not work: no, they won't. Say that a **premium** is like a **fee for work**: it is paid by the cocoa buyers for the **extra work** farmers do to produce cocoa according to all certification requirements in addition to the market price or to the price agreed between buyer and seller.
2. Ask when a labourer is paid to apply agrochemicals and he is buying the products, who will often pay for the agrochemicals: the farmer. Say that a **premium** is also paid to **cover the additional costs** to produce cocoa according to all certification requirements for example organising farmers' groups, developing and maintaining the Internal Management System, maintaining a documentation system as well as the actual costs for inspections and certification.
3. Explain that premiums are **paid by the buyer/importer of certified cocoa** to the farmers' organisation or certificate holder but not directly to the producer. This is because you are not certified as an individual but as a group.

Note for the trainer: Depending on the standard initiative, you should explain the following:

- a. **Rainforest Alliance** does not specify price premiums in its standard, but in practice the buyers pay the same premiums paid by other certification schemes.
 - b. For **UTZ**, the premium is explicitly determined in a negotiation process between the buyer and seller. UTZ does not interfere in these price negotiations but provides its members with market information to strengthen them in the negotiation process and enable them to make informed contract decisions.
 - c. The **Fairtrade** system is distinct from other initiatives as it provides producers two monetary benefits: the Fairtrade Minimum Price and the Fairtrade Premium. The Fairtrade Minimum Price is a guaranteed price that is said to cover the costs of sustainable production. Whenever the market price is higher than this minimum price, the market price must be paid. The Fairtrade Premium is a separate payment designated for social and economic development in the producing communities. The producers themselves decide how these funds are to be spent. As part of the Fairtrade criteria, registered producers are accountable to FLO-CERT for the use of this money.
4. Tell participants that the cocoa premiums can be **used in different ways**. The idea of premiums is that they are used to **benefit the cocoa farmer, his family and the community for the improvement of their livelihoods**. Ask everyone to stand up and form a circle. Tell everyone to think for a few moments how they would spend the extra money. They have to keep in mind that it should be spent in a way that it will benefit them, their family or their

community, so it means they cannot waste it in the local bar. Give everyone some time to think about how they would spend the premiums.

5. Ask if everyone has an idea but do not let them tell their ideas yet. Tell participants that they should try to find other people who have a **similar idea**. This means they have to walk around and talk to other people to find out what their idea is. Tell them **to group according to similar ideas**.
6. When everyone has grouped or at least found another person with a similar idea, ask which groups had the idea to **reinvest the money in their farms**. If people raise their hand, give them the visual (visual no 15) showing Mensah with the seedlings. Ask them to hold the visual in front of them and ask them to present their idea. If necessary, add the following information: Premium can be re-invested into cocoa production through the purchases of farm inputs. For instance, improved cocoa planting materials can be purchased with part of the premium to refurbish old cocoa plantations. Farm labour can be hired instead of using child labour. More so, equipment such as agrochemical sprayers, protective clothing and materials can be purchased to maintain the health of farmers and workers.
7. Then ask who of them would spend the money on **education** of themselves or their children. If people raise their hand, give them the visual (visual no 16) of children going to school and ask them about their idea. If necessary, add the following information: Children's education is one of the best areas to invest premiums from cocoa production. It is decisive for children's future opportunities by letting them acquire knowledge and new skills. Therefore enrol both boys and girls in schools. Farmers can also invest in their personal education through joining farmer business schools, farmer field schools, adult literacy programmes, distance learning academic programmes, etc.
8. Then ask who of them would spend the money on **health**. If people raise their hand, give them the visual (visual no 17) of Mensah applying for health insurance and ask about their ideas. If necessary, add the following information: Farmers should invest in their health by using part of the proceeds from their cocoa to purchase protective materials to reduce the risks associated with intensive farming. The protective materials include long dresses, hats, gloves, boots, face masks, etc. First aid kits can be purchased and used on farms to treat accidents immediately on the spot. Another way to invest in health is to apply for health insurance. Farmers can apply for health insurance by either registering with private health insurance companies or the National Health Insurance Scheme.
9. Then ask who of them would spend the money on **community activities**. If people raise their hand, give them the visual (visual no 18) and ask for activities that can be done in their communities.
10. Finally ask those who did not **share their ideas** with the group yet to explain how they would like to spend the money.
11. Say that there are plenty ways how the premium can be spent but farmers often forget that premiums are **not guaranteed**: premiums are only paid under **certain conditions**. Say that premiums are only paid when:
 - a. **ALL requirements** are applied by the farmer.
 - b. The **external audit has approved** the cocoa as being certified (refer to topic 1.2 on steps to certification).
 - c. The cocoa is sold to a buyer **as certified cocoa**. This means that if there is no demand for certified cocoa and you sell your cocoa as conventional cocoa, you will not get a premi-

um. It is therefore advisable for the farmers' organisation or company to **negotiate as early as possible** with potential buyers about quantities and prices of certified cocoa, so that they are not obliged to sell their certified cocoa on the conventional market.

12. Say that you know a lot of farmers who are always very **disappointed** when they hear this because they always assume that premiums are paid **automatically**. But they forget that if they apply all the requirements, their **yields will increase** so in the end they will **sell more cocoa**; irrespective it is conventional or certified.

Finish

Summary: Summarise what premiums are, why they exist and how they can be used. Repeat that premiums are not guaranteed but only paid under certain conditions.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants what premiums are. Ask what the conditions are before premiums are paid.

Next Step: Within the farmers' group it is useful to discuss how they can ensure that the premium will be paid to the group and how premiums can be best spent.

Topic I.5: Traceability

Key Information

To monitor and provide feedback on quality issues, it is necessary to be able to know where cocoa beans were produced. This is called **traceability**.



Keep records of all activities.



Keep certified cocoa beans separate from non-certified beans and do not accept beans from neighbours, relatives, friends or anyone else.



Ensure separation of beans during transport.



Use marks or codes to allow traceability.

Background Information

To monitor and provide feedback on quality issues, it is necessary to be able to know where cocoa beans were produced. Ideally, it should be possible to trace a lot of beans from the end user back to the farmer or farmers' group who produced it. However, the smallholder nature of the crop, and the mixing and blending export systems make traceability a difficult task.

Consumer expectation means that cocoa and cocoa products have to be of the highest quality. Governments, consumer organisations, health experts, and the media are taking an increased interest in food safety, and in residue and contaminant issues which might cause damage to health. Therefore, in a sustainable cocoa economy, cocoa quality with respect to food safety is of paramount importance, exceeding even physical and flavour quality needs. The cocoa supply chain has several features which make the implementation of quality and food safety standards difficult.

Notwithstanding the challenges involved, farmers should engage in cocoa production in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment. This will guarantee consumers of cocoa products that cocoa beans were produced under good agricultural and environmental practices. In addition, they will be satisfied that human rights with respect to good working conditions and avoidance of child labour were respected by farmers. Therefore, it is a step in the right direction when placing great responsibility on the part of farmers regarding the traceability of their cocoa beans.

Standards Requirements

Common standards requirements

- Maintain appropriate farmer records (invoices, receipts, packing or contents lists, products volume, information about the transport or embarkation, etc.).
- Avoid mixing and blending of certified and non-certified beans.
- Use clear marks such as the UTZ, RA, or FLO logos to allow traceability to and from the collector / cooperative.

Specific standards requirements

UTZ

- Separate UTZ cocoa from other produce as long as you are the owner of the produce.
- Show on sign boards the name and code of the producer as well as the logo of the standard.
- Calibrate the weighing scales to weigh the harvest at least once a year.
- Estimate a credible total production volume of both certified and non-certified producers. The harvest estimation is done per producer.
- Keep all records, including traceability records for at least 2 years (or longer if legally required).

Rainforest Alliance

- Separate Rainforest Alliance certified cocoa from other produce in its facilities, including harvesting, handling, processing and packaging of products, as well as transportation.
- Record all transactions involving certified products.

- Use identification systems such as tags, colours, etc. to identify Rainforest Alliance Certified cocoa.
- Trade certified products only through the group administrator or his/her designated buying point or LBC and keep all records for at least 3 years.

Fairtrade

- The organisation shall record in writing the flow of members' products for the first buyer organisation.
- Keep records of all Fairtrade sales. Those records must indicate the volume sold, the name of the buyer and its Fairtrade International (FLO) ID number, the date of the transaction and a reference to sales documents in such a way that the certification body is able to link these records with the corresponding sales documents.
- If Fairtrade cocoa is processed by the organisation, they must keep records that specify the amount of product before and after processing.
- If the organisation produces, processes and sells cocoa to operators without physical traceability, they do not need to physically separate the cocoa from its members and non-members at the processing stage. The following rules must be fulfilled:
 - The volumes sold as Fairtrade must not exceed the equivalent volumes produced by members.
 - The product must be produced by members before it is sold.
 - The product from members must be delivered and processed in the same site where the Fairtrade product is processed.
 - The product from members must be of the same kind and quality as the input used to process the Fairtrade product (like for like).
- If the organisation wants to sell cocoa to operators that have physical traceability in place then they must physically separate the product during processing.
- When a Fairtrade product is sold, it must be identified clearly in the related documents (e.g., invoices, delivery notes) that this product is Fairtrade.
- Separate Fairtrade certified cocoa from other produce.
- Use identification systems containing labels such as “FLO ID” or “FLO Fairtrade” to identify Fairtrade certified cocoa.

Rainforest Alliance

- Separate Rainforest Alliance certified cocoa from other produce in its facilities, including harvesting, handling, processing and packaging of products, as well as transportation.
- Record all transactions involving certified products.
- Use identification systems such as tags, colours, etc. to identify Rainforest Alliance Certified cocoa.
- Trade certified products only through the group administrator or his/her designated buying point or buying company and keep all records for at least 3 years.

Fairtrade

- The organisation shall record in writing the flow of members' products for the first buyer organisation.
- Keep records of all Fairtrade sales. Those records must indicate the volume sold, the name of the buyer and its Fairtrade International (FLO) ID number, the date of the transaction and a reference to sales documents in such a way that the certification body is able to link these records with the corresponding sales documents.
- If Fairtrade cocoa is processed by the organisation, they must keep records that specify the amount of product before and after processing.
- If the organisation produces, processes and sells cocoa to operators without physical traceability, they do not need to physically separate the cocoa from its members and non-members at the processing stage. The following rules must be fulfilled:
 - The volumes sold as Fairtrade must not exceed the equivalent volumes produced by members.
 - The product must be produced by members before it is sold.
 - The product from members must be delivered and processed in the same site where the Fairtrade product is processed.
 - The product from members must be of the same kind and quality as the input used to process the Fairtrade product (like for like).
- If the organisation wants to sell cocoa to operators that have physical traceability in place then they must physically separate the product during processing.
- When a Fairtrade product is sold, it must be identified clearly in the related documents (e.g., invoices, delivery notes) that this product is Fairtrade.
- Separate Fairtrade certified cocoa from other produce.
- Use identification systems containing labels such as “FLO ID” or “FLO Fairtrade” to identify Fairtrade certified cocoa.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand the need to ensure traceability.
- Not mix certified cocoa beans with non-certified.
- Strictly adhere to the physical separation, labelling and documentation requirements according to the standard initiative they deal with.

Materials needed:

- Visuals 19 to 21 in large print (see overview of visuals per topic)
- Some cocoa beans in a small transparent plastic bag
- A piece of paper with the letters buying company written on it
- A piece of paper with a simple drawing of a large ship
- Marks, codes or labels used for marking certified cocoa. If the groups have already selected a certain standard, make sure you have the labels used by that standard initiative.

Time needed: 45 minutes

Preparations: None

Set up

Attention: Ask participants if they ever send any money, goods or letters to family or friends. Most of them will say yes. Ask them how their relatives or friends know the package came from them. They know because it is indicated on the package or it is told to them when they collect it. Tell participants that we call this traceability: you know where the package has come from.

Title: The title of this session is *Traceability*.

Objectives: We are going to discuss what traceability in cocoa farming means, why it is important and what we need to do as certified cocoa farmers.

Benefits: Traceability is a very important aspect of certification. When farmers cannot ensure the traceability of the cocoa, the cocoa cannot be certified.

Direction: During this session, we will discuss traceability of cocoa throughout the cocoa chain, although you are only responsible for the traceability as long as you are the owner of the cocoa.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Tell participants that someone receiving a package would like to know **where it comes from**. The same is valid for buyers of cocoa and consumers of cocoa products; they would like to know where the cocoa comes from. The reason is that they would like to **monitor the quality of the cocoa** and provide feedback if necessary. Add that governments, consumer organisations, health experts, and the media are taking an increased interest in food safety, and in residue and contaminant issues which might cause damage to health. Therefore, in a sustainable cocoa economy, cocoa quality with respect to food safety is of great importance, exceeding even physical and flavour quality needs.
2. Ask for **4 volunteers**. **Show** the participants the transparent small **bag with cocoa beans**. Ask them where these beans are coming from. They are coming from a farm upon harvesting. Give the **visual** of cocoa on the farm (visual 19) and the cocoa bag to the first volunteer to hold so everyone can see it.

3. Ask where the beans go **after fermentation and drying**. After fermentation and drying the beans will be **stored**. Give the visual (visual 20) which shows storage to the second volunteer and ask the first volunteer to **give the bag with beans** to the second volunteer.
4. Ask where the beans go next: they will be bought by a **buying company**. Give the third volunteer the sheet with the letter buying company and ask the second volunteer to give the bag with beans to the third volunteer.
5. Ask what will happen after a buying company has bought the beans: they will be **stored** in the harbour, **shipped to Europe** or another continent, **manufactured**, placed in a store to be sold, and finally bought by consumers. Give the drawing of the boy buying the chocolate (visual 21) to the fourth volunteer and ask the third volunteer to give the bag with cocoa beans to the fourth volunteer. Ask if they will be involved in any of these steps. The answer is “no”, therefore we will focus only on the first steps as depicted in the visuals: harvesting, storage and selling to a buying company.
6. Take your cocoa bag from the fourth volunteer and give it to the first volunteer (with the visual of harvesting). Ask **what they should and can do** as cocoa farmer to ensure that the consumer knows that the cocoa in the end product is coming from them (point to the visual with the cocoa farm). Collect several answers. Make sure the following has been mentioned (if no one mentions the points, add them):
 - a. Avoid mixing of certified and non-certified cocoa.
 - b. Separate cocoa beans according to the rules of the standard initiative they deal with.
 - c. Use marks or codes to allow traceability.
 - d. Keep records to know on which farm certified cocoa is grown and on which field conventional cocoa.
 - e. Do not accept any beans from relatives, friends, neighbours or anyone else to sell on their behalf.
7. **Show** participants, by **moving the bag** from the volunteer “harvesting” to the volunteer “storage” and to the volunteer “sale to buying company”, that they have to avoid mixing of certified and non-certified cocoa. Specifically, they must **separate the cocoa beans** according to the rules of the standard initiative they deal with, and use marks or codes to allow traceability throughout the chain.

Note for the trainer: depending on the standard initiative, show participants the mark they have to use.

Finish

Summary: Summarise by saying that traceability is important to show that the certified produce actually comes from a farmer who is implementing good agricultural, social and environmental practices. Repeat what cocoa farmers need to do to avoid mixing of certified and non-certified cocoa.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants why traceability is so important. Ask what they as cocoa farmers need to do to ensure traceability.

Next Step: Now you know what to do to keep your beans separate. If you do not have any marks for your cocoa bags, please ask your farmers’ organisation.

Topic I.6: What is Record Keeping and Why Should You Do It?

Key Information



Keep records of all farm activities

Background Information

Record keeping is important to the management of farms. If proper records are kept, farmers can make informed conclusions regarding the past and plan for the future. It can be time consuming and take valuable time away from fieldwork. However, it is becoming a critical task in certification of cocoa production.

Why keeping records?

- Record keeping is required to achieve cocoa certification.
- Records serve as documentation of the farm's standards and practices.
- Records enable future planning (numbers of trees planted, yield expected).
- Records enable comparison and tracking of farm's progress (yields, soil fertility, inputs used).
- It helps to know what the farmer has sold, what expenditures has been made, how much was earned so the cash-flow can be monitored.
- It is a proof of transactions/communications, etc.
- Keeping records helps to monitor market prices, prices for inputs and income over time.
- Records are important, if the farmer seeks loans or advance payments.

Where to store records

With so many other important jobs to balance, farm record keeping is often overlooked. It must be added to the list of necessary farm chores. Farmers who cannot read and write can seek the assistance from community facilitators, family members, or somebody else capable and responsible to help in record keeping. Farmers in farmers' groups and associations can consult their group leaders to help in writing records. Different records should be kept in their own binders, in a safe place. Forms should be easy to use.

Tips on how to keep good records

- Keep copies of every letter/document sent out (duplicate book/carbon, etc.).
- Ensure to receive all necessary documentation from suppliers and traders.
- Update all records regularly.
- Keep written records in clearly marked files, and put records in these files at once, so that they are not lost.
- Keep detailed records, including names, dates, amounts, descriptions of transactions and goods, and signatures.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand what record keeping is
- Understand the importance of farm records
- Decide to keep farm records

Materials needed:

- Examples of records (to be used in session I.7 on types of records)

Time needed: 45 minutes

Preparations: None

Note for the trainer: For most participants this will be a completely new topic and sometimes you will not get much response when you ask a question. In that case, do not wait too long before someone will finally give a response but just give the answer.

Set up

Attention: Show some examples of the records and ask if anyone knows what this is. Allow a few answers and agree that these are records.

Title: The title of this session is: *What is record keeping and why should you do it?*

Objectives: We are going to discuss what record keeping is and why it is important to keep records of your cocoa farm.

Benefits: Record keeping is one of the requirements of certification. Even if you cannot read and write, it is still a requirement. So even if you are not going to keep the records yourself, but someone else will do it for you, you should pay attention to what follows.

Direction: During this session, we will not discuss how you actually do record keeping. That will be discussed in the next session.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Ask if anyone is keeping records of his farm activities. Let people raise their hands. Ask if anyone can explain **what record keeping is**. Guide the answer to: record keeping is the **process of writing down all activities** related to their cocoa farming, for example harvest, or application of fertilisers. All of these activities are written down in several **documents**. Ask if anyone can give an **example** of such a document. It can be an activity record, harvest record, pest management record, etc. Tell participants that in the next session we will discuss these different documents.
2. Ask **how often** you should keep records? Is it something you do every day, every week, every month, or just once a year? It is important to keep your records on a **regular basis**, ideally each time a transaction or an important activity has taken place. If you do not do it on a regular basis, you might **forget** what happened.
3. Tell participants that we are going to look at **what information** you can actually retrieve from records. Ask participant what type of information you know when you keep records. Start collecting ideas.
 - a. When you were planting.
 - b. When you were weeding.
 - c. When you were harvesting.
 - d. How many kilo of cocoa or bags you have harvested.
 - e. What type of pests or diseases you had on your field and how you have controlled them and whether the treatment was successful.

- f. What you added to a compost pile.
- g. How often the compost pile was turned.
- h. To whom the cocoa was sold.
- i. The price per kilo.
- j. How much you have received when selling your cocoa.
- k. What fertiliser you used and when you applied it.
- l. When you maintained your knapsack sprayer.
- m. What type of complaints came in from neighbours or other people.
- n. Etc.

Note for the trainer: For most participants it will be difficult to come up with ideas on what can actually be retrieved from records. If no answers will come, ask questions, such as “what do you do when you are on your cocoa farm?” Any answers can be turned into a record. For example: I check if there are any pests or I prune my trees. All of these are activities that can be recorded under farm activities.

4. Tell participants that you can divide all the things that you have listed in a **few categories**. These are:
 - a. Activities on the farm.
 - b. Inputs used, including fertilisers and agrochemicals.
 - c. Harvest and sales.
 - d. Equipment use and maintenance.
 - e. Complaints.
5. Tell participants that keeping records on any of these categories has **advantages**. Ask what the advantages are of record keeping. If no response come, ask leading questions to come to the following answers:
 - a. Activities on the farm:**
 - You know what has been done, so you can plan what still needs to be done.
 - You can check what you did last year or the year before to see if a change in activities results in higher yields.
 - b. Inputs used, including fertilisers and agrochemicals:**
 - You can see if a certain treatment for a pest and disease was successful.
 - You can easier calculate the costs and benefits of using fertilisers.
 - You know how much you have spent on inputs so you can calculate your profit.
 - Certification auditors (inspectors) need to know what chemicals you use and if these are in line with the standard.
 - c. Harvest and sales:**
 - You can compare yields over the years.
 - You can calculate how much money you have made with your cocoa farm.
 - d. Equipment use and maintenance:**
 - You know when you have maintained your equipment so you can plan for the next maintenance round.
 - You know what type of equipment you have used to do certain activities on the farm.
 - Certification auditors (inspectors) need to know what type of equipment you have on your farm.
 - e. Complaints:**
 - You know who has put in a complaint.
 - You know how you have handled the complaint for future handling of complaints.

6. Tell participants that there is even a bigger advantage of keeping all these records: when you keep records, **you can become certified**. If you do not keep records, you cannot become certified.
7. Ask participants how to keep records if **you cannot read or write**. Allow a few answers. Repeat that farmers who cannot read and write can seek the assistance from community facilitators, a family member or somebody else capable and responsible to help in record keeping. Farmers in farmers' groups and associations can consult their group leaders to help in writing records.

Finish

Summary: Summarise that record keeping is necessary to be certified. It is necessary to keep records on farm activities, inputs used, harvest and sales, equipment use and maintenance, and complaints. The advantages are that activities can be better planned; you can learn from your mistakes, you can compare results over the years and track the progress on your farm, and above all, you can enjoy the benefits of certification.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants why record keeping is so important. Ask what can be recorded. Ask what the advantages of record keeping are.

Next Step: Record keeping is something in which group members should assist each other because it is a requirement and it is not always easy for all members to do.

Topic I.7: Types of Records

Background Information

Which records to keep?

(The trainer should decide, which of the records listed are relevant for the farmers trained)

- **Production details** (mainly on farmer level): Source and quantity of seed, fertiliser, agro-chemicals used and dates of application. Yields (per tree/per acre), number of cocoa pods harvested and kg of dried beans produced.
- **Invoices from suppliers to producers and from producers to customers** (mainly on group level). An invoice is a document sent by a seller to a buyer to provide the buyer with details of what is being supplied and how much the buyer owes the seller. Providing detailed invoices can avoid disagreement with customers and traders, and it helps to easily check what produce has been sold, how much money is owed to the farmer and to keep detailed sales records. An invoice should include the following details: Name and address of both supplier and buyer, date of sale, order reference numbers, quantity and quality supplied, prices, details of any part payments or deposits, terms of payment, and where appropriate a delivery address, an estimated delivery date, and signature of customer.
- **Receipts.**
- **Stock book:** what is in the stock, what comes in, what goes out.
- **Staff records:** wages, contracts, holidays, behaviour of staff, etc..
- **Sales:** total sales, sales of each produce, quantities, and monthly/weekly sales.
- **Purchases/expenditure:** paid and unpaid.
- **Other income.**
- **Creditors/debtors:** to know how much money the farmer owes and is owed to him.
- **Delivery notes** (to and from the farmer). These should be checked against goods and on delivery and signed for by an authorised person. A delivery note should include suppliers' name and address, customers' name and address, suppliers' and customers' invoice and purchase numbers, date, quantity of goods and description, delivery address.
- **Order forms:** to confirm orders and to avoid confusion. Order forms should include the same things as a delivery note, as well as the price of the goods, terms of payment and the signature of the person authorising the order.
- **Quotations/estimates given and received:** these can be used to prove the prices given and the materials priced for. Often, quotations are put in the form of a letter, thanking the customer for making the enquiry. It is wise to state the period of time that the prices are valid for, and necessary to give a detailed description of the goods, quantities and prices. Terms of payment are also included.
- **Inventory:** tools and equipment, buildings, etc. List all of these and number them, and where possible mark them with their number to avoid theft.
- **Letters** concerning the farm.
- **Telephone bills.**
- **Bank** transactions and statements.
- **Minutes of meetings.**
- **Buyers' details:** names, addresses, when they bought what.
- **Statements of account:** to customers and from suppliers. These show all transactions between buyer and seller during usually a one month period, and show payments and the balance of the account.

- **Complaints:** can tell how to improve, and must be kept for legal reasons.
- **Cash book,** cash flow charts.

Common standard requirements

There are several types of records a cocoa farmer can use. A simple ledger can be used to keep the records.

1. Farming activities and practice record

It details any farm activity. It provides a basis for the year's master plan. The details of this record include:

- What was done – planting, harvesting, weeding, marketing.
- Where work was done.
- Who did the work.
- How long did the task take to complete.
- May also include weather, general observations, any farm related topic.

FARMING ACTIVITIES AND PRACTICE RECORD

Farm/location: (Name of the village)

Year:

<i>Date</i>	<i>Activities</i>	<i>Duration</i>

Example

A farmer in Akure did the following work in a few days:

- 14 March 2016: Scouting farms for pests during the whole morning. 5 pods removed with black stains.
- On that same day there was a heavy shower in the afternoon so the farmer did not go the farm.
- 15 and 16 March 2016: Pruning of trees with three neighbour farmers during the whole day.
- 18 March 2016: Application of agrochemicals during the morning.

The information will be recorded as follows:

EXAMPLE OF COMPLETED FARMING ACTIVITIES AND PRACTICE RECORD

Farm/location: Akure

Year: 2016

<i>Date</i>	<i>Activities</i>	<i>Duration</i>
14 March	Scouting farms for pests/diseases: 5 pods removed with black stains	Whole morning
14 March	Very heavy shower	Afternoon
15 March	Pruning of trees with 3 neighbour farmers	Whole day
16 March	Pruning of trees with 3 neighbour farmers	Whole day

18 March	Application of agrochemicals (for details see pest management records)	Whole morning
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2. Agro-inputs use records

This record is used to track agro-inputs used. For instance, fertilisers used (product specification, application rate, plot/field code). If compost is used, this record can give details of what is added to the compost pile, how often the pile is turned, etc. It can also track pest control and give details of the pest problem, control method and rate of application and degree of success. Keep purchase and delivery information on inputs in one place to provide a convenient way to track invoices, locate filed receipts or other information. This makes auditing for certification easy.

AGRO-INPUTS USE RECORD

<i>Date</i>	<i>Name of agro-chemical</i>	<i>Active ingredient</i>	<i>Target pest</i>	<i>Dosage</i>	<i>Field code</i>	<i>Applied by (name)</i>	<i>Re-entry time</i>	<i>Equipment used</i>

Example

The farmer in Mangoase applied the following agro-input: Ridomil Gold. The information will be recorded as follows:

EXAMPLE OF COMPLETED AGRO-INPUTS USE RECORD

<i>Date</i>	<i>Name of agro-chemical</i>	<i>Active ingredient</i>	<i>Target pest</i>	<i>Dosage</i>	<i>Field code</i>	<i>Applied by (name)</i>	<i>Re-entry time</i>	<i>Equipment used</i>
18 Mar 2016	Ridomil Gold	Cuprous Oxide and Mefonam	Black pod disease	250 g/ha	Plot A	Mensah	5 days	Knapsack sprayer

3. Harvest and sales record

This tracks the cocoa harvested. It gives details of amount of harvest in kilogram, bags or another unit. If a farmer has many plots or has partitioned plots, this record can show which plot was harvested. It can also track post-harvest handling. It is also important to keep invoices. The invoices must include the farmer's name / farm code and standard certification details, date, to whom sold, quantity of cocoa beans sold, price per unit, and total price.

.HARVEST AND SALES RECORD

<i>Date</i>	<i>Quantity</i>	<i>Unit price (Naira)</i>	<i>Total sales (Naira)</i>	<i>Name of buying company</i>

4. Equipment use and maintenance record

This record captures the frequency at which the equipment and tools used in cocoa production are maintained. Knapsack sprayers, machetes, harvesting sickles, nose masks, etc. need regular maintenance and this record helps planning the maintenance.

EQUIPMENT USE AND MAINTENANCE RECORD

<i>Date</i>	<i>Equipment</i>	<i>Methods and materials used</i>	<i>Responsible party</i>	<i>Date of next maintenance</i>

Example

The farmer in Akure did the following maintenance: Cleaning all parts of the knapsack sprayer. The information will be recorded as follows:

EXAMPLE OF COMPLETED EQUIPMENT USE AND MAINTENANCE RECORD

<i>Date</i>	<i>Equipment</i>	<i>Methods and materials used</i>	<i>Responsible party</i>	<i>Date of next maintenance</i>
11/03/16	Knapsack sprayer	Cleaning all parts	Iron Boy Services Ltd, Akure	11/06/16

5. Complaint record

If there is a complaint about the farm, this record captures the nature of that complaint and what action was taken by the concerned farmer. Complaints may come from the members of the community in which the farming takes place or from neighbour farmers. Reasons for complaints can be: encroachment on protected areas, pollution of water bodies, bush fires, etc.

COMPLAINT RECORD

Date	
Nature of complaint	
Complaint submitted by	
Action taken in response	

The farmer received the following complaint:

Smoke from the farm on 11/02/16. Kofi, a neighbour farmer, complained about excessive smoke and risk of bush fire - but it was just stemming from fire for soap making from cocoa pods. The farmer promised to inform the neighbours next time beforehand, and apologised for the inconvenience caused.

The information will be recorded as follows:

EXAMPLE OF COMPLETED COMPLAINT RECORD

Date	11/02/16
Nature of complaint	Excessive smoke from my farm. Neighbours fear bush fire will spread to their farm.
Complaint submitted by	Kofi, a neighbour farmer
Action taken in response	Explanation that it is the burning of infested cocoa pods meant for soap making. It is under control, and neighbours will be informed next time soap is prepared. Apology for the inconvenience caused.

For examples of major documents required under SPO standards, please refer to the CCE common IMS training guide.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know the types of records required for the certification to the given standard and how to use the formats.
- Have access to the sample record formats and make effective use of them.

Materials needed: Examples of all records (see at the end of this session)

Time needed: 1 hour

Preparations: None

Note for the trainer: Most of your participants will not keep their own records, but will leave it to someone else to do it for them. Therefore this session might not be so interesting for them. Try to keep it short and simple and do not give too many details.

Note for the trainer: In this session we discuss five types of records in detail. In the additional information, you will find more types of records that can be kept by farmers. It is up to you to decide which records to explain to your participants.

Set up

Attention: Show participants the empty records (see key information). Tell participants that these are different types of records.

Title: The title of this session is *Types of records*.

Objectives: During this session we are going to see different types of records we should use for our cocoa farms.

Benefits: Record keeping is mandatory for certification, so even if farmers are illiterate, they need to keep records on their cocoa farms.

Direction: During this session, we will show 5 different types of records. We will not explain in detail how to complete each form but at the end of the session everyone will receive a separate handout with detailed instructions on how to complete each form.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Refer to the previous session. Ask again **why they should keep records?** Record keeping is necessary in order to get certified. Add that the advantages are that activities can be better **planned**, you can **learn from your mistakes**, you can **compare results** over the years and **track the progress** on your farm.
2. Repeat that during the previous session we saw that you can keep track of many things when you keep records and we listed them in **five categories**. Ask if anyone can remember any of the categories. They are:
 - a. Activities on the farm (not required by UTZ).
 - b. Inputs used, including fertilisers and agrochemicals.
 - c. Harvest and sales.
 - d. Equipment use and maintenance.
 - e. Complaints.
3. Tell participant that for each of these categories you are going to **show** them **forms** they can use. Add that you are **not** going to explain **how to complete these forms**. After the session you will distribute detailed instructions on how to complete each form. If they are not going to do the record keeping themselves, they should give the instructions to the person who will assist them. Anyone who is interested, can **come after the session** for a detailed explanation on how to complete the forms.
4. Show the **farming activities and practice record**. Tell participants that this is a record to **list activities on the farm**. Ask for examples of farm activities (in other words: what do they do on their farms?). Allow a few answers. Tell participants that on the form you have to write down the date of the activity, you have to describe the activity and how much time the activity took (how many hours or parts of a day). You can give the example as described in the handout.
5. Show the **agro-inputs use record**. Tell participants that this record is used to track agro-inputs use. Ask if anyone can give an example of how it can be filled in. Allow a few answers. Mention the following things: fertilisers or agrochemicals used (product specification, application rate, where it is being applied). If compost is used, this record can give details of what is added to the compost pile, how often the pile is turned, etc. It can also track pest control and give details of the pest problem, control method and rate of application and degree of success. Keep purchase and delivery information on inputs in one place to provide a convenient way to track invoices, locate filed receipts or other information. Tell participants that on the form you have to write down the date, name of the agro-input, target pest, dosage, field code, re-entry time and equipment used. If you insert information on fertilisers, you do not need to add information on pests.
6. Show the **harvest and sales record**. Tell participants that this record tracks the cocoa harvested. It gives details of the amount of harvest in kilogram, bags or another unit. If a farmer has many plots or has partitioned plots, this record can show what plot was harvested. It can also track **post-harvest handling**. Tell participants that on the form you have to write down date of sales, quantity you sold, unit price in Naira, total sales in naira and the name of the buying company.

7. Show the **equipment use and maintenance record**. This record captures the frequency at which the equipment and tools used in cocoa production are maintained. Knapsack sprayers, machetes, harvesting sickles, nose masks, etc. need regular maintenance and this record helps planning the maintenance. Tell participants that on the form you have to write down date, equipment, methods and materials used, and the responsible party (the person who maintained the equipment).
8. Show the **complaint record**. If there is a complaint about the farm, this record captures the nature of that complaint and what action was taken by the concerned farmer. Complaints may come from the members of the community in which farming takes place or the neighbour farmers. Reasons for complaints can be: encroachment on protected areas, pollution of water bodies, bush fires, etc. Tell participants that on the form you have to write down for each complaint the date, the nature of the complaint, who complained, and the action that were taken in response.
9. Finalise by saying that farmers need to keep their records in a **safe place** so they can easily take them out for the inspections of their farms.

Finish

Summary: Show all five records one by one and mention the name of the record. Repeat why record keeping is so important and what the advantages are.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants what types of forms we have discussed. Ask why record keeping is so important.

Next step: As was mentioned before, we will distribute a handout that can be given to the person who is going to maintain the records. This document describes step by step how to complete all records. Add that if anyone has questions on how to complete the forms, they can come to you after the session.

FARMING ACTIVITIES AND PRACTICE RECORD (not required by UTZ)

Farm/location: (Name of the village)

Year:

<i>Date</i>	<i>Activities</i>	<i>Duration</i>

AGROINPUTS USE RECORD

<i>Date</i>	<i>Name of agrochemical</i>	<i>Active ingredient</i>	<i>Target pest</i>	<i>Dosage and total volume applied</i>	<i>Field size applied</i>	<i>Applied by (name)</i>	<i>Re-entry time</i>	<i>Equipment used</i>

HARVEST AND SALES RECORD

<i>Date</i>	<i>Quantity</i>	<i>Unit price (Naira)</i>	<i>Total sales (Naira)</i>	<i>Name of buying company</i>

EQUIPMENT USE AND MAINTENANCE RECORD

<i>Date</i>	<i>Equipment</i>	<i>Methods and materials used</i>	<i>Responsible party</i>	<i>Date of next maintenance</i>

COMPLAINT RECORD

Date	
Nature of complaint	
Complaint submitted by	
Action taken in response	

Topic I.8: Risks Assessment

Key Information



Educate your family and employees about risks for the people and for the environment and that these risks may also affect certification

Risks and possible measures against risks for individual farmers:

- **Pests and diseases:** scouting (monitoring your field and take action when necessary), sanitation, cultural maintenance.
- **Drought:** soil fertility management.
- **Too much rain or rain at the wrong time of the season:** soil fertility management.
- **Flooding:** measures against erosion.
- **Fake agrochemicals and/or fertilizers:** only buy licenced agrochemicals and from a reliable source.
- **Wrong application of agrochemicals and/or fertilizers:** only apply licenced agrochemicals and fertilizers when you are well trained.
- **Low yields** because of lack of maintenance: prune, remove mistletoe, remove infected pods.
- **Post-harvest losses:** follow all good agricultural practices.
- **Low cocoa price:** this is something a farmer or a farmers' organisation cannot influence. The only thing a farmer can do is to ensure to produce as much as possible from his/she field so that even when prices are low, he/she can still earn a decent income. Growing other crops in addition to cocoa will also spread the risk.

Risks and possible measures against risks for farmers' groups:

- **Child labour by one of the members:** raise awareness among all members and discuss with the person and the group when child labour is observed and implement an improvement plan.
- **Not following the requirements:** assist members that have problems implementing all requirements.
- **Pollution of water bodies because of dumping waste:** raise awareness among all members and discuss with the person and the group when this is observed.
- **Mixing of certified and conventional cocoa:** label all bags and inform the purchasing clerks.
- **No demand for certified cocoa:** the farmers' organisation should start in time finding a buyer.

Background Information

Risks are factors that could endanger conformity to the standard and the successful cocoa certification. An evaluation of the risks must be done at the individual farmer level and at the group level. Risks assessment should begin with comparing the actual situation on the farms and at the farmers' group level with the criteria in the code of conduct of the standard.

Examples of risks

- Farmers or their workers spray their cocoa with insufficient knowledge of the agrochemicals and/or apply fake products.
- Children engage in hazardous work on the cocoa farm.
- Certified and non-certified cocoa is mixed.
- Certified farmers sell the beans of their non-certified neighbours.
- A purchasing clerk records cocoa purchase from a non-certified producer as part of the certified cocoa.
- The purchasing clerk accepts produce from sanctioned producers of a farmers' group.
- Storage and transport of produce under humid conditions.

Measures to reduce identified risks

- Inform family members about certification issues.
- Seek training on good agricultural, environmental and social practices relevant for certification.
- Estimate the quantities of beans to harvest and carefully check that the estimated quantities are not highly exceeded.
- Make physical harvest checks by labelling bags of certified beans.
- Keep appropriate records.
- Ensure that all producers know all practices that are strictly forbidden and may compromise the certification status of the whole group.

Conflicts of interest

In farmer groups, individual farmers may hold leadership positions such as internal inspectors, purchasing clerks, chairpersons, etc. Conflicts of interest are situations in which a leader's (e.g. internal inspector's) judgement could be seen to be compromised by his/her personal interests. Conflicts of interest undermine the integrity of the entire Internal Management System (IMS). Potential conflicts of interests must be identified and declared.

Examples of conflicts of interest:

- An inspector who inspects a close friend or relative.
- Those responsible for the approval decide on the conformity of a close friend or relative.
- If technical advisers play an important role in a certification project both as extension agents or trainers, and as internal inspectors, there may be a risk that they are not 100% neutral during the inspection, when they inspect close friends or relatives, or if they live in the same village as the inspected farmer.

How to avoid conflicts of interest

Farmers who are internal inspectors must perform the inspection duties away from their home village or areas. In certain cases for some standard organisations, one may have to accept that a

single person will do two jobs: inspector and advisor. But the two tasks must be carried out separately. This is only possible if the advisor is sufficiently detached from the producers, so that the inspection is done in an impartial manner. Declare to the relevant authorities of farmers' groups or standard organisations when confronted with conflict of interest situations such as auditing of farms of family and friends.

Standards Requirements

Specific standards requirements

UTZ

- Conduct a participative risk assessment on group management, farming practices, working conditions and environment
- Make and implement an action plan to address these risks. Implemented actions are documented.
- Receive training on all topics relevant for implementation of the code of conduct.
- Keep up-to-date training records indicating training dates and content.
- Make a credible total estimate of production volumes of the certified cocoa.

Rainforest Alliance

- The group administrator must create an annual risk identification and assessment for compliance with Sustainable Agriculture Network standards aiming for continuous improvement considering no less than internal inspections, external audits, new group members, farm production, chain-of-custody, compliance costs and performance of the internal management system.
- The group administrator must implement measures to prevent or minimize risks identified in the assessment.
- Have a system for avoiding the mixing of certified products with non-certified products in its facilities, including harvesting, handling, processing and packaging of products, as well as transportation. Record all transactions involving certified products. Products leaving the group as certified must be identified and accompanied with the relevant documentation.

Fairtrade

- The organisation must inform and explain to members the environmental and labour requirements related to production.
- The organisation must identify which requirements in the Production chapter members may be at risk of not complying with.
- The identification of risks must be repeated periodically, at a minimum every 3 years.

Guidelines for the trainer

Learning objectives

By the end of this training, participants will:

- Understand risks and conflicts of interest relevant to certification
- Know measures to reduce identified risks and conflicts of interests

Materials needed: None (flip-sheets and markers when you want to write down what has been listed during discussions)

Time needed: 45 minutes

Preparations: None

Set up

Attention: Ask if someone can describe what a **risk** is. A risk is a harmful situation that can occur. Ask what risks are in their daily lives: they can get sick, their husband or wife can leave them, they can get into a fight with their friend, they can even die, etc.

Title: The topic of this session is *Risks assessment*.

Objectives: We will discuss some risks and measures to reduce them.

Benefits: It is not possible to avoid all risks but if we manage them well, we can reduce the damage that will be done on our farms.

Direction: We are only going to focus on risks when producing cocoa; not risks in our daily lives.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. We saw that there are many risks in our daily live, but also when producing cocoa a lot of things can go wrong that will **reduce their income from cocoa**. Ask what those **risks** are (you can ask **leading questions** including: What can destroy or harm your cocoa? What can happen so you do not get a premium?). Collect as many answers as possible. Every time a risk is mentioned, ask what we can do to **reduce the risks** that we have just mentioned. Make sure the following is mentioned:
 - a. **Pests and diseases:** scouting (monitoring your field and take action when necessary), sanitation, cultural maintenance.
 - b. **Drought:** soil fertility management.
 - c. **Too much rain or rain at the wrong time of the season:** soil fertility management.
 - d. **Flooding:** measures again erosion.
 - e. **Fake agrochemicals and/or fertilizers:** only buy from a reliable source.
 - f. **Wrong application of agrochemicals and/or fertilizers:** only apply agrochemicals and fertilizers when you are well trained.
 - g. **Low yields** because of lack of cultural maintenance: prune, remove mistletoe, remove infected pods.
 - h. **Post harvest losses:** follow all good agricultural practices.
 - i. **Low cocoa price:** this is something a farmer or a farmers' organisation cannot influence. The only thing a farmer can do is to ensure to produce as much as possible from his/she field so that even when prices are low, he/she can still earn a decent income.

2. Say that we have looked now at the **individual risks**, but there are also **risks as a group** with regards to losing their certificate. Ask for **risks** and **how to avoid** them. Make sure the following has been mentioned:
 - a. **Child labour by one of the members**: raise awareness among all members and discuss with the person and the group when child labour is observed.
 - b. **Not following the requirements**: assist members that have problems implementing all requirements.
 - c. **Pollution of water bodies because of dumping waste**: raise awareness among all members and discuss with the person and the group when this is observed.
 - d. **Mixing of certified and conventional cocoa**: label all bags and inform the purchasing clerks.
 - e. **No demand for certified cocoa**: the farmers' organisation should start in time finding a buyer.
3. Say that the last risk you would like to mention is **conflict of interest**. In farmer groups, individual farmers may hold leadership positions such as internal inspectors, purchasing clerks, chairpersons, etc. Conflicts of interest are situations in which any of these persons judgement could be seen to be compromised by his/her personal interests. Ask if anyone can mention **examples** of conflicts of interest. Let a few people answer and add the following:
 - a. An inspector who inspects a close friend or relative.
 - b. Those responsible for the approval decide on the conformity of a close friend or relative.
 - c. If technical advisers play an important role in a certification project both as extension agents or trainers, and as internal inspectors, there may be a risk that they are not 100% neutral during the inspection, when they inspect close friends or relatives, or if they live in the same village as the inspected farmer.
4. Ask how this can be **avoided**. Let a few people give ideas. Add ideas if necessary. Farmers who are internal inspectors must perform the inspection duties **away from their home village** or areas. In certain cases for some standard organisations, one may have to accept that a single person will do two jobs: inspector and advisor. But the two tasks must be carried out **separately**. This is only possible if the advisor is sufficiently detached from the producers, so that the inspection is done in an impartial manner.

Finish

Summary: Summarise what risks exist for individual farmers and farmers' organisations and how to avoid them.

Questions: Ask if anyone has a question or comment.

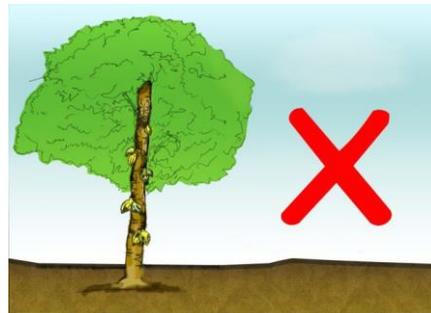
Evaluation: Mention a few risks and ask participants what they can do to avoid it.

Next Step: Avoiding risks is much easier when members in a group assist each other. Therefore they should collaborate to avoid that anyone in the group will endanger the certification.

MODULE II:
GOOD AGRICULTURAL
PRACTICES

Topic II.1: (Re)planting

Key Information



Replant or graft when cocoa trees yield less than 10 pods per year or when the tree is older than 30 years.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Basic criteria for selecting seedlings

Select seedlings which:

- are between three and six months old.
- are in two-leaf-stage.
- have rigid stems.
- have no signs of pests and disease.

Note: The standards do not allow the use of Genetically Modified Organisms (GMO) or planting material that has been produced with GMOs.

Use CRIN/ Tree Crop Unit seedlings



Planting seedlings in the main field

1. Dig planting holes of 40cm x 40cm x 40cm deep at a spacing of 3m x 3m. This gives approximately 445 seedlings per acre (1,100 per hectare).
2. Cut the bottom of each plastic bag by using a sharp knife. Loosen the roots carefully. Do not shake off any of the soil because it can damage the root system.
3. Place the seedling in the hole (ensure upright placing of roots) and gradually pull out the plastic bag.
4. Gently firm the soil around the base of the seedling.
5. Water the seedlings after planting.
6. Use organic matter to mulch the surface. Leave a space of approximately one hand between the stem and mulch to avoid that the stem will rot.

Plantain, cassava, and maize can be planted as temporary **shade crops** prior to planting the cocoa plants if permanent shade trees are not fully matured.

Background Information

If a cocoa farm is old and has low yields, the farmer may have to decide to renew or regenerate his plantation. As a rule of the thumb a healthy cocoa tree produces a minimum of 25 pods per year which yield at least one kg of dry cocoa beans per tree. Trees producing ten or less pods a year are unproductive and should be replaced. Also when trees have reached an age of over 30 years, they should be replaced.

Variety and sources of cocoa planting materials

When replanting or establishing a new plantation it is very important to do a proper planning especially with regard to the source of the planting material. The farmer has to make a living from his plantation for most of his life. So, the selection of the planting material will affect the farmer's income and the well-being of his family for many years to come. Using unknown seeds or planting material (from own farm) are likely to lead to higher expenditures on agrochemicals, lower yields and hence lower income.

Cocoa pods on farms may have been produced from natural or uncontrolled pollination. The sources of the pollen are not known. Using seeds from such pods as planting material may lead to poor quality and reduced yield of the cocoa plants. It is better to obtain cocoa planting materials from accredited seed producers or CRIN and its substations as well as seed gardens of the Tree Crop Unit (TCU). Planting materials from accredited institutions guarantee a high rate of quality fruits and yield.

In Nigeria, CRIN has developed eight new cocoa hybrid varieties that have all the good traits from the local varieties. They are available as seedlings or pods at CRIN and its substations as well as ADPs seed gardens. The hybrid seeds have advantages over the native varieties because:

- They establish easily.
- They are early bearing (two years after transplanting).
- They are high yielding.
- They have better resistance to black pod and cocoa swollen shoot virus disease.
- They are highly resistant to capsid bugs (leaf bugs).

Shading of seedlings in the field

The leaves of cocoa seedlings are tender. They can be scorched when exposed to direct sunlight for a long time. It is necessary to plant shade trees to protect the seedlings. Plantain, cassava, and maize can be planted as temporary shade crops if permanent shade trees are not fully matured. Newly planted cocoa seedlings need at least 70% shade during their first few years.

Grafting

Grafting is an important regeneration method, by which a shoot from a healthy, high-yielding tree or from improved material is taken and grafted onto a chupon of a non-productive tree. Grafting should be practised by trained and experienced people.

Standards Requirements

Specific Standards requirements

UTZ

- Use only planting materials from an accredited source such as CRIG.
- Use only planting materials which are free from pests and diseases.
- Plant new cocoa trees according to recommendation of CRIG. Plant trees at least 5m from water sources.
- No production or processing occurs within 2 km of a protected area unless it is allowed under the management of the area.
- Do not plant cocoa in protected areas like forests.
- Do not degrade or deforest forest that has not been used for agriculture since 2008.
-

Rainforest Alliance

- Only establish new cocoa farms on land with soil and slope conditions suitable for intensive level of agricultural production.
- Establish new cocoa farms based on land use capacity studies that demonstrate long-term production capacity.
- Do not cut natural or secondary forest cover and do not burn to prepare new farms.
- Do not destroy any natural ecosystem to establish a farm.
- Do not destroy any high value ecosystems for the purpose of farm establishment or management activities.
- Use fallow for new production areas.

Fairtrade

- Adapt practices to avoid GMO contamination in seed stocks.
- Avoid negative impacts on protected areas and areas with high conservation value within or outside the farm or production areas from the date of application for certification. The areas that are used or converted to production of the Fairtrade crop must comply with national legislation in relation to agricultural land use.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know the criteria for replacing old or unproductive trees.
- Adopt a cocoa planting distance of 3m x 3m (10ft x 10ft) for pure stands.
- Use improved planting or grafting materials free from GMO from a professional supplier, such as CRIN.

Materials needed:

- Coloured cards
- Ten cocoa seeds
- A seedling from CRIN
- Sharp knife
- Measurement tape

Time needed: 1 hour 15 minutes

Preparations:

- Identify an area where you can demonstrate the planting of a seedling
- Prepare 10 cards with the logo of CRIN (you can copy the logo of CRIN and paste it on a coloured card)

Set up

Attention: Ask participants how many eggs a chicken can lay per day. Collect a few answers. Ask them what they would do with the chicken if it only lays one egg per week or one egg per month. The chicken would probably end up as chicken soup. Tell participants that farmers would replace a chicken immediately when it is not productive anymore but when the **production** of a cocoa tree is going **down**, farmers are very reluctant to replace the tree.

Title: The title of this session is *(re)planting*.

Objectives: We are going to discuss the importance of replanting, when to replace old cocoa trees with new ones and how to select and plant new seedlings correctly.

Benefits: Knowing when to replace old non-productive trees with the best seedlings will boost production and increase their yields in the future. In addition, the correct planting of seedling will increase their yields.

Direction: During this session we will focus on replanting, not on how to grow seedlings.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Ask the following questions:
 - a. *How many pods we can expect from a healthy cocoa tree per year?* At least 25 pods.
 - b. *What will happen to your yield when the number of pods decreases to ten pods per year and per tree?* The yield of the plantation will be less than half of the normal yield.

- c. *What do you do with cocoa pods you harvest from the trees? They are sold.*
 - d. *What does it mean for your income if your yields are cut in half? Also your income will be reduced by half.*
 - e. *So what should you do with trees that produce less than 10 pods per year? We should replace them.*
 - f. *It is also recommended to replace or graft trees when they are older than 30 years. Why is that so? They do not contribute much to the yield anymore and will only cost money to maintain.*
2. Say that to replace an old cocoa tree we should plant new **seedlings**. Ask where they can get seedlings:
 - a. Seedlings from naturally pollinated seeds. This is what most farmers use.
 - b. Seedlings from certified CRIN hybrid seeds (can be bought at the CRIN headquarter, its sub-stations and seed gardens of the Tree Crop Unit)
 3. Say that we are going to **compare** the two types of seedlings. Let the participants form ten groups (groups will be of two to three participants each) and give each group one cocoa seed and one card with the logo of CRIN. Tell the participants that you are going to mention some **characteristics of seedlings**. They have to decide if this characteristic is valid for the seedlings from naturally pollinated seeds (reflected by the cocoa seed) or for the CRIN seedling (reflected by the CRIN logo). When you say: “go”, each group has to raise either the seed (if they think the characteristic belongs to the seedlings from naturally pollinated seeds) or the CRIN logo (if they think the characteristic belongs to the CRIN seedling).

Note for the trainer: It is very important that you give the groups enough time to reflect on the question. This will force everyone to think about the answer. It is also important that everyone will raise either the seed or the CRIN logo when you say “go”. This will avoid that groups just do what all other groups are doing.
 4. Ask which seedling is **early bearing**: the naturally pollinated seedling or the CRIN seedlings? Tell participants to discuss the answer in their group for half a minute. Tell that you are going to count to three and on the count of three every group has to raise either the seed or the CRIN logo. Count to three. Ask a group that has raised the seed, why they have raised the seed. Ask a group that has raised the CRIN logo, why they have raised the CRIN logo. Tell that all groups that raised the CRIN logo were right.
 5. Continue with good **quality flavour**. Add that you are not talking about the taste of the cocoa bean but the taste of the final product (Milo, chocolate). Follow the same procedure. Continue with **high yielding** and **better resistance**.
 6. Finally ask them **which seedling is better**: the naturally pollinated seedling or the improved seedling. Give the group time to think and let them raise the seed or CRIN logo again when you say “go”. Ask again why people have raised the seed or CRIN logo. Try to agree that the CRIN seeds are the best to use.
 7. Ask them to join you in a **semicircle**. Show them the CRIN seedling. Tell them that a good cocoa seedling needs to be:
 - a. Between three and six months old.
 - b. Is at the two-leaf stage.
 - c. Has rigid stems.
 - d. Is free of visible signs of pests and diseases.
 8. Tell the participants that selecting good seedlings is not enough to ensure optimum results. The **planting of seedlings** is equally as important. Ask who of them has ever planted a seed-

ling. Ask two of them to demonstrate to the others how to plant a seedling correctly. Give them the measuring tape.

9. Ask the following questions while the volunteers are planting:
 - a. *How large should the planting hole be?* 40cm x 40cm x 40cm.
 - b. *It is recommended to separate the top and bottom soil when digging the hole and put back first the top soil and then the bottom soil. Why is that?* The roots will benefit from the most fertile part of the soil.
 - c. Let the volunteers cut the bottom of each plastic bag by using a sharp knife.
 - d. Make sure they place the seedling in the hole gradually pull out the plastic bag and gently firm the soil around the base of the seedling.
 - e. *How we ensure the moisture will stay in the soil?* We can use disease free organic matter to mulch the surface. Ask to volunteers to add the mulch.
 - f. *The mulch should not touch the stem of the seedling. Why?* Otherwise the stem can start rotting.
 - g. *It is recommended to plant trees in rows. Why?* To ensure that all trees will get enough nutrients from the soil and that enough wind can blow through the farm against pests and diseases.
 - h. *What should be the planting distance between trees and between rows?* It should be 3 meters between trees and 3 meters between rows.
10. Ask if any of them can explain what **grafting** is. With grafting a shoot is taken from a healthy, high-yielding tree or from improved material and grafted onto a chupon of a non-productive tree. Grafting should be practised by trained and experienced people. Grafting is not allowed at the moment in Nigeria.
11. Depending on the standard initiative, add the following specifics as described under Requirements.
12. Add: The standards do not allow the use of genetically modified organisms (GMO) or planting material that has been produced with GMOs. Get clarification on this from the supplier.

Finish

Summary: Summarise using the visuals in the handouts. Tell them about the need for replanting and the criteria for replacements. Stress the importance of good quality seeds and explain the steps on how to plant seedlings.

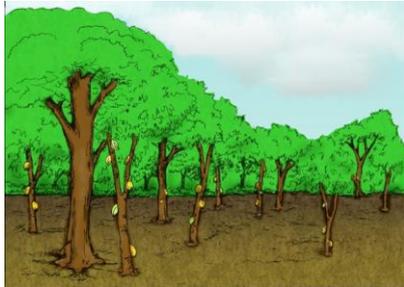
Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants how we know if a cocoa tree is unproductive. Ask how we can ensure that we replace the old trees with high-quality seedlings. Ask what the correct spacing is between seedlings.

Next step: When you go back to your farm and you see that trees are producing less than 10 pods, you know it is time to replace them to increase your yields.

Topic II.2: Soil Erosion

Key Information



No erosion because of shade trees and ground cover



Signs of erosion



Inspect, prevent

- Plant trees around your field and in areas susceptible to erosion.
- Plant other crops between the cocoa trees to cover the soil and protect it against water or wind damage.
- Build wooden or stone barriers, or make bunds in places where rainwater is likely to cause erosion damage.
- Weed by hand and minimize the use of herbicides to keep the soil covered and protected.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

Soil erosion is one of the most serious and irreversible threats to soil fertility. It carries away the most fertile parts of the soil: the top soil and the finer clay fractions which are rich in humus and nutrients. Even low erosion rates which are almost invisible can over the years have a severe impact on soils. It is therefore of vital importance to protect the soil from erosion.

Causes of soil erosion

During the dry season, ground vegetation usually thins out and leaves the soil uncovered. As a result, when the rains arrive, large amount of precious topsoil can be washed away, leaving a soil of low fertility. Not only sloping land is prone to soil erosion but also flat fields which can be severely affected if not protected by any soil cover. Factors affecting soil erosion include soil types (silt, sand loam) and soil structure, soil cover, slope and severity of rainfall. Fine tilted soils that have no vegetative cover, situated on a slope are the ones with highest risks of erosion. A risk assessment should be made to find out which parts of the farm are most prone to erosion. Based on this assessment, a management plan to reduce soil erosion should be made. Some elements of such a plan can be found in this chapter and in the chapter on soil fertility.

How to minimise soil erosion?

1. Increase soil fertility

Soil with higher organic matter can store water for a longer period of time. Soil composition determines if this water will be available for the roots of the plants. At the same time it will increase soil life which opens the soil and water runoff will be reduced.

2. Plant (shade) trees

In natural forests, several layers of dense canopy break the speed of the rain drops falling on the ground. Large drops formed on leaves of the tree-tops are caught by the canopy of shrubs and ground vegetation. The water drops reach the soil at less speed and thus have a smaller splashing effect on soil particles. Hence, natural forests are less susceptible to erosion. This characteristic of natural forests can be recreated on cocoa farms to reduce erosion. It can be achieved through leaving or planting shade trees on farms during land preparation. Soil erosion control is especially important in areas near water sources and in steep areas. Even when you don't farm in those areas, you should still plant trees against soil erosion.

3. Plant dense vegetation protecting the soil

Dense vegetation can be created by growing legumes, fodder grass or creepers between the trees. In new tree plantations, arable crops (such as cocoyam, plantain, beans, etc.) can be grown until the trees develop a dense canopy. Leguminous crops can fix nitrogen and grow even in very poor soils. Not only crops but also grass and weeds can provide a protecting cover for the soil. If it is necessary to slash the weeds because the competition with the crops is getting too strong, the straw should be kept on the spot as a protecting mulch layer. The vegetative ground cover and mechanical weeding are used to reduce herbicide and other agrochemical use whenever possible.

4. Build constructions against soil erosion caused by run-off

- **Wooden barriers and stone walls:** Simple barriers can be constructed using tree trunks and branches. They accumulate eroded soil behind them, thus preventing it from being

washed away. The construction of stone walls needs more time, but they last longer and the maintenance work is reduced. They are suitable on steep slopes and in areas where plenty of stones are available.

- **Bunds and trenches:** Earth or mud bunds are comparatively easy to build, but need more efforts for maintaining them. In addition, fodder grass, hedges, pineapple or other crops can be planted on them. The bunds can be combined with contour trenches. They help to keep back eroded soil and increase the infiltration of water.
- **Bench terraces:** Constructing bench terraces requires time and energy, but the terraces are very efficient in erosion control and help to build up soil fertility. When digging the terraces, it is important that the fertile top soil is kept aside and later spread on top of the finished terrace.

Standards Requirements

Common Standards requirements (mainly UTZ and RA)

- Keep the soil covered with vegetative material when planting cocoa trees.
- Don't use fire to clear the plantation.
- Recognise the risk of soil erosion.
- Undertake adequate measures to prevent soil erosion when required.
- Prevent erosion through leaving or planting shade trees and by maintaining a vegetative cover.
- Maintain and enhance the fertility and structure of the soil by adding plant material/organic matter.
- Use vegetative ground covers on the banks and bottoms of drainage canals to reduce erosion and runoff towards water bodies.
- Allow a strip of native vegetation (at least 5m wide) to grow along water streams and sources.

Specific Standards requirements

UTZ

- Soil fertility and crop nutrient status is monitored every year
- Maintain or plant at least 12 mature shade trees per hectare.

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- Maintain 20 trees per hectare (representing spacing between trees of 22 m x 22 m on the ground) at all times.
- Maintain at least 12 different native tree species per hectare (see preferred native tree species in cocoa in Ghana.)
- Make a shade tree plan and continue planting shade trees in the new areas at a pace that guarantees that there will be shade in all production areas within five years.
- Ensure that there is no evidence of indiscriminate removal of shade trees that does not correspond to a sustainable management or renewal plan.
- Establish new cocoa farms on lands that are suitable for cocoa and never by cutting forest.

Fairtrade

- Identify land at risk of soil erosion and land that is already eroded in fields where farmers plant Fairtrade crops.
- Provide training on practices that reduce and/or prevent soil erosion to those members of the organisation where risk of soil erosion or already eroded land has been identified.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know at least three different soil erosion control techniques.
- Apply soil erosion prevention measures in their own farm correctly.
- Detect, monitor, prevent and document erosion risks.

Materials needed:

- Small rocks and pieces of wood
- Bucket with water

Time needed: 1 hour 30 minutes

Preparations:

- Identify a farm where erosion is clearly visible to do your session.
- Clear an area 1 meter x 1 meter from all the grass, loosen the soil and flatten it. Mark another 1 meter x 1 meter area next to the cleared site and cover it with mulch.

Set up

Attention: Ask participants what they do to protect themselves against rain and wind. Let a few people answer. They can mention that they use clothes, an umbrella, and rain coats, etc. Agree with their answers and conclude by saying that being exposed to the elements can be very uncomfortable.

Title: The title of the session is *Soil erosion*.

Objectives: We are going to discuss the importance of soil erosion prevention measures, how to scout for erosion risks on the farm and how to take measures to minimise the risk of soil erosion.

Benefits: Knowing the causes of erosion and how to counter erosion will increase your yields and maintain the good condition and quality of their farms' soil because the precious topsoil will be protected.

Direction: During this session we will focus on soil erosion and not any other measures to maintain the quality of the soil.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Ask if anyone can explain what **erosion** is. Let a few people answer. Say that erosion is the **washing away** of (top)soil by water (do not go into detail, that will be done later).
2. Split participants in **pairs** and ask them to **look around** for traces of erosion or areas where there is a risk of erosion. Note for the trainer: During this exercise do not include your site with the 1 meter x 1 meter clearing.
3. Let the groups **walk around** and **observe** for a few minutes. Then ask everyone to pay attention again and ask what they have seen. Look together **where erosion is visible** and where there is a **risk** of erosion.
4. Tell the participants that you will demonstrate now **how water can destroy soil**. Take them to the two marked areas. **Sprinkle** (like rain) half of the bucket of water on the area covered with mulch. Then sprinkle (like rain) the remaining of the bucket of water on the cleared site. Let them observe the different **effects**. On the site without cover, the water will run down washing away the top layer and erosion will be visible, puddles will be formed and the water will hit the soil directly.
5. Explain to the participants that soil consists of **different layers**. The **top layer** is very important and contains a lot of **plant nutrients**. During dry periods the soil cover is reduced. When the rain starts, the water starts to flow, loosens the topsoil and moves it away to other places. This process is called **erosion**. Organic matter and important soil organisms and plant nutrients get lost with the running water. Without nutrients, crops will not grow.
6. Ask participants what we can do to **prevent** erosion damage like the erosion we've just observed. Allow some answers and guide their answers to:
 - a. Leave grass, weeds, leaves and other residues on the field. Point to your area covered with mulch.
 - b. Build barriers from wood or stone.
 - c. Use bunds or trenches to stop water from running too fast.
7. Tell participants that you will **demonstrate** how to prevent erosion damage. Let them form a semicircle around the demonstration sites. Repair the damaged areas on the cleared site by putting grass and weeds on the field. Build a barrier of wood or stone, and use of bunds or trenches.
8. Ask what will happen if the field is on a **steep slope**. The water can easily run off causing erosion. The steeper the slope the faster water will run. Therefore it is better **to farm** on slopes that are **not so steep**.
9. Add the following:
 - a. The **responsibility** for erosion control and prevention is with you.
 - b. The situation may **change** from season to season. Therefore it is necessary to **inspect** your field on a regular basis.
 - c. **Prevention** is better than cure.
10. Tell participants that the standards have specific requirements. Mention these requirements listed in the box above.
11. Go back to the area with the two plots where you have poured the water. **Compare** the two sites: they will see that the site with mulch is moister than the site without cover.

Finish

Summary: Say that erosion risks are a reality on our farms. The good news is that we can do something about it. Farmers can protect their soil by: proper inspection of the farms to identify erosion risks, planting trees or grow other crops like cassava between cocoa trees, protecting or repairing areas damaged by erosion with wooden barriers, stone walls or bunds, and maintaining these constructions.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants: What are the main causes of erosion? How can we estimate the risk of erosion on our farms? What can we do to reduce the risk of erosion on our farms?

Next Step: The first thing they should do next time they go to the farm is to check if they can see any erosion. If they see, they should take action.

Topic II.3: Soil Fertility

Key Information



Healthy soil:

- Leave residues from cocoa trees in the field
- Use mulch (any organic matter) to protect the soil
- Plant shade trees
- Plant leguminous crops



Poor soil fertility results in low productivity.

DO NOT:

- Cut shade trees
- Apply herbicides
- Remove residues (leaves, pods, branches)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

Soil is among the most important production factor for crops including cocoa. The soil is a living organism, because it is a habitat for plants, animals and micro-organisms which are all inter-linked with each other and play an important role for the productivity of the farm. Microscopically small and also some larger organisms (e.g. earthworms) perform the vital function to convert dead and decaying organic matter to humus and to mineral plant nutrients. The conservation of soils is therefore of utmost importance to the farmer. Soil fertility refers to the capacity of the soil to supply nutrients to the plant.

Besides mineral particles, soil contains organic matter or humus, resulting from the decomposition of biomass. Although soils usually contain only a small amount of it, organic matter is of great importance for the soil fertility. A healthy soil that is rich in organic matter is the foundation of the food system. It produces healthy crops that in turn nourish people. Intensive cultivation methods, deforestation and excessive use of synthetic agrochemicals, including herbicides, can lead to a reduction of soil fertility and to soil degradation. Maintaining a healthy soil demands care and effort from farmers.

Leguminous plants (plants of the bean family) can be used to increase the content of nitrogen in the soil. This is especially important when the cocoa trees are still young. Through a symbiosis with beneficial nodule bacteria, these plants are capable of fixing atmospheric nitrogen and making it available to other plants. The active bacteria can be seen, if a leguminous plant is carefully dug out of the soil and its roots examined for nodules (small knots). The more nodules are found, the more nitrogen is produced.

The natural habitat of cocoa trees is rainforest which provides the best environment for the crop. For cocoa plantations, it is important to mix a sufficient number of other trees and shrubs, using plantains, (leguminous) shade trees and other trees to imitate the natural environment (creating an agroforestry system), hereby producing more biomass (organic matter) at the same time and protecting the soil and beneficial insects, birds and other animals.

A healthy soil for cocoa cultivation is soil that is well aerated, well drained and structured. It has a pH of 6 to 7.5 and contains a high amount of organic matter. It also contains soil organisms that play a vital role in soil fertility. Some of these organisms are visible with the naked eye such as earthworms, mites, spring-tails or termites. Most of them, however, are so small that they can only be seen with a microscope, therefore called micro-organisms. The most important micro-organisms are bacteria, fungi and protozoa. Many farmers consider all living organisms in the soil as pests and try to eliminate them by spraying agrochemicals. In reality, however, most of these organisms are of great importance for soil fertility and only a small number can be considered as pests. Soil organisms convert organic matter into plant nutrients, loosen the soil which encourages plant root growth, and control pest and diseases by keeping a healthy biological balance in the soil. A large variety and number of soil organisms is vital to the growth of healthy and productive plants. Excessive use of agrochemicals has a negative effect on the soil life.

A good example for a beneficial organism is the earthworm. The presence of earthworms is a sign for a fertile soil. Earthworms are very important for soil fertility as they contribute to the decomposition of biomass by removing dead plant material from the soil surface, mix organic and mineral soil particles and build stable crumbs, which help improve the soil structure. Their

excrements contain five times more nitrogen, seven times more phosphate, eleven times more potash and two times more magnesium and calcium than normal earth. Their tunnels promote water infiltration and drainage of rainwater and thus prevent soil erosion and water logging. Earthworms need sufficient supply of biomass, moderate temperatures and sufficient humidity.

Soil nutrients are divided into macronutrients which are the major plant nutrients required: N (nitrogen), P (phosphorus), K (potassium), Mg (magnesium), Ca (calcium), S (sulphur). Micronutrients on the other hand are required in only very small quantities: Zn (zinc), Cu (copper), Mn (manganese), Fe (iron), Bo (boron).

Soil fertility decreases with crop production, because with the harvest large amounts of nutrients are removed from the farm. Dry beans, including the seed coat, contain large amounts of N, P and K. Cocoa pods are rich in K. If the crop residues, such as coco pods, are not returned to the soil, nutrients from other sources have to be added.

A healthy, fertile soil, rich in organic matter, will assure sustainable cocoa yields even during times when prices of mineral fertilisers are high and farmers are reluctant to use these. The promotion of natural soil fertility is therefore important to maintain acceptable yield levels. In order to increase the yields, additional nutrients in form of recommended mineral fertilisers may be added according to soil characteristics and properties or based on recommendation of an authority like CRIN.

Standards Requirements

Common Standards requirements

- Use natural techniques, such as application of organic matter (mulch) and planting of trees and leguminous crops to maintain and optimize soil fertility and structure.
- Leave disease-free organic waste such as pruning debris, cocoa pods and leaf litter in the field or use it for composting.
- Minimise the use of herbicides to keep a vegetative cover.

Specific Standards requirements

UTZ

- Do not burn vegetation to prepare land.
- Use organic fertilizers and by-products available at farm level and supplement by inorganic fertilizer if nutrients are still lacking.
- Soil fertility and crop nutrient status are monitored every year.

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- Develop a plan or map that indicates the areas with existing ground cover, as well as areas where cover will be established in the future.
- Prepare a soil or crop fertilization programme based on soil characteristics and analysis and advice from competent authorities like CRIN in Nigeria.
- Do not burn vegetation to prepare land.

Fairtrade

- Report on measures that the organisation and members have implemented to improve soil fertility.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know to recognize healthy soil.
- Practice soil conservation methods, such as mulching and green manure.

Materials needed:

- Living earthworm(s)

Time needed: 1 hour 30 minutes

Preparations:

- Identify a farm where you can show the difference between a poor soil and one that is rich in organic matter.
- On the farm, identify a spot that contains: a mulch cover, a leguminous plant (a bean plant from a house garden) with lot of soil around the roots and some living organism (earthworms). Mark the spot so you can find it back during your session.

Set up

Attention: Show the participants the living earthworm and ask them what it is. Ask if they have earthworms in their cocoa fields. Ask what they do when they discover earthworms on their farms. Tell participants that we will come back to this earthworm during this session.

Title: The title of this session is *Soil fertility*.

Objectives: We are going to discuss why soil is so important for growing cocoa and how we can maintain the fertility of the soils.

Benefits: If they know how to maintain the fertility of the soil, their cocoa trees will grow better and produce better and more pods. Just like a mother who needs to eat healthy food to feed her child and make it grow strong and healthy, we need to feed (fertilise) the soil so that the soil in turn can feed the plants (Mother Earth) and make them healthy and productive.

Direction: During this session, we will discuss good and bad practices of soil management. We are not going to talk about soil erosion; that will be done during another session.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Show participants a **handful of soil**. Tell them that this is soil from a cocoa farm. Ask them what is in the soil. In other words: what does soil **contain**? Guide the answer to: minerals, organic matter, soil organisms, air and water. Ask if someone can give **examples of minerals**. Guide the answer to: sand, silt, clay, stones, metals, diamonds, etc. Ask if someone can explain what **organic matter** is. Guide the answer to: Organic matter results from the decomposition of biomass. Ask if someone can give an example of **soil organisms**. Guide the answer to: macro- organisms, such as earthworms, mites, spring-tails and termites, and micro-organisms (those we cannot see with the naked eye) such as bacteria, fungi and protozoa.
2. Ask participants to **form pairs** and look at the farm where you are at the moment: **does this farm have healthy soil or not?** Let participants walk around for a few minutes and observe the soil.
3. Ask all groups to come back and **discuss the results**. Ask all groups one by one if they think this farm has healthy soil or not. Then ask a few groups to give reasons for their opinion on the soil.
4. Discuss in detail **unhealthy soil**. Ask the following questions:
 - a. *What do some farmer do that will contribute to **unhealthy soil**?* Intensive cultivation methods, deforestation, and excessive use of agrochemicals.
 - b. *Can someone give examples of **intensive cultivation methods**?* Deforestation, cutting of most shade trees, clean weeding (leaving no ground cover) and use of herbicides.
 - c. *Can someone explain what **deforestation** is?* Deforestation is clear felling of natural forests without replanting them.
 - d. *What do we mean with **excessive use of agrochemicals**?* Always spraying chemical agrochemicals without scouting and without looking for alternatives (add that we will discuss this in detail during the session Integrated Crop and Agrochemical Management) and using the most hazardous agrochemicals (tell participants that we will discuss this in detail during the session on use of agrochemicals, topic III.2).

Note for the trainer: Take your time to clearly explain all aspects to the group.

5. Discuss in detail **healthy soil**. Ask the following questions:
 - a. *What can we do to get healthy soil?* Leave residues on the field, apply mulch, spread cocoa husks under the trees, use cover crops, and plant shade trees.
 - b. *Can someone explain what **residues** from cocoa trees are?* Residues are organic plant materials such as leaves, cocoa husks, straw and branches which decay to release plant nutrients into the soil. You can also bring residues from other crops to your cocoa field (this is called **mulch**).
 - c. *What **type of materials** are good to leave on your cocoa farm?* Weeds (without seeds), crop residues, cocoa husks, leaves, and residues from agricultural processing (palm oil).
 - d. *Can someone explain what a **cover crop** is and why it should be used?* A cover crop is a crop which spreads on the ground as it grows, e.g. cowpea, beans, and watermelon. Cover crops protect the soil against erosion caused by rainwater run-off, against the heat of the sun, and they also suppress weeds.
 - e. *What are **good cover crops**?* Leguminous plants, such as beans and peas that enrich the soil by fixing Nitrogen.

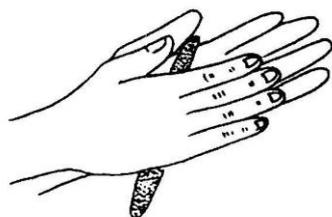
- f. *Why is planting **shade trees** good for our soil?* Shade trees will protect the soil against rain and heat, increase the organic matter when shedding leaves, and create a healthy environment. Seek advice from an extension agent as to which species of shade trees to plant.

Note for the trainer: Take your time to clearly explain all aspects to the group.

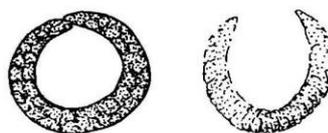
6. Ask the participants to follow you to the **identified spot** on the farm. Say that this spot contains **healthy soil** and we will look together why. Every time you do a step, explain what you do and what you are looking for.
- Dig out carefully a **leguminous plant** (bean plant from a house garden) with lot of soil around the roots. Examine carefully the roots for nodules (small knots). The more nodules are found, the more nitrogen is produced, which is good for the soil. If you cut a nodule and find that the inside is reddish/orange, this means that the nitrogen-fixing bacteria are active. When they die, they release a lot of nitrogen into the soil.
 - Look for **earthworms**. Tell participants that the presence of earthworms is a sign for a fertile soil. Earthworms are very important for soil fertility as they contribute to the decomposition of biomass by removing dead plant material from the soil surface, mix organic and mineral soil particles and build stable crumbs, which help improve the soil structure. Their excrements contain five times more nitrogen, seven times more phosphate, eleven times more potash and two times more magnesium and calcium than normal earth. Their tunnels promote infiltration and drainage of rainwater and thus prevent soil erosion and water logging. A soil that is poor in organic matter does not provide food for earthworms, so the soil becomes poor.
 - Point to the **mulch**. Say that mulch will retain the moisture in the soil.
 - Look at the soil and **perform a simple soil test**: sandy and clayey soil is in general not so good to grow cocoa while sandy-loam soil is more suitable.

To test the soil type:

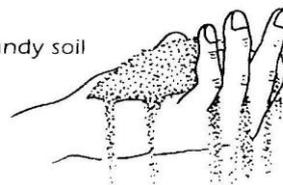
Roll the soil into a sausage between your hands and try to form a circle.



Clayey soil Sandy-loam soil



Sandy soil



- Add that there are also other **bacteria and micro-organisms** living in the soil which we can't see but which also help the soil to be healthy and productive.
7. Add that if the soil looks good and all other conditions for producing cocoa are met, and the trees is still not producing well, ask someone to **test your soil** to see what specific nutrients you lack so they can be added.

Note for the trainer: Depending on the standard initiative, add the specific requirements as mentioned under requirements.

Finish

- Summary:** Summarise by saying that a healthy soil is very important for growing cocoa trees. Cocoa farmers can leave residues of cocoa trees on the field, apply mulch and use cover crops (in particular beans and leguminous tree crops) to improve soil fertility. Intensive cultivation methods, deforestation and excessive use of agrochemicals can lead to an unhealthy soil. To distinguish between poor soil and one that is rich in organic matters, farmers should watch out for the presence of earthworms. Technical advice from extension agents can also be called on.
- Questions:** Ask if anyone has a question or comment.
- Evaluation:** Ask participants what they should do to get healthy soils. Ask them what they should not do. Ask how to distinguish between poor and rich soils.
- Next step:** As a mother feeding her child, we need to feed our soils with residues and mulch, and cover crops to maintain the fertility of the soil so our cocoa trees will grow better and produce better and more pods.

Topic II.4: Fertiliser Application

Key Information



Use organic materials...



...complemented by mineral fertiliser

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Apply:

- The **right type** of fertiliser: every fertiliser contains different nutrients. Apply only the nutrients that your trees need.
- The **right amount**: read the label or ask your extension officer to know the correct dosage. Know the number of trees on your farm. Applying more than recommended is a waste of money.
- At the **right time**: just before the rains start and when pods start to grow.
- The **right way**: read the label or ask your extension officer to know how to apply the fertiliser. Incorrect application can damage your trees.

General advice:

- Always protect yourself** when handling or applying fertiliser.
- Store in a dry and locked place.** If fertiliser comes into contact with moisture it will dissolve and lose its effectiveness. You cannot store the fertiliser in your house or on your farm, it should be stored in a **separate place**.
- Puncture** the fertiliser bags after use so they cannot be reused.
- Fertiliser should only be applied by adults that are **trained**.
- Fertiliser should never be handled or applied by children.**

Background Information

Plants and trees need **several nutrients** to grow properly. If a plant does not receive enough of a nutrient, it will not grow optimally, no matter how much of other nutrients the plant has access to.

Plant nutrients exist naturally in and on the soil and in the atmosphere. The natural environment sometimes does not provide **adequate amounts of nutrients** for growing crops, or the crops use up the existing nutrients. Therefore, missing nutrients need to be **added** to replace them. These nutrients should be added in the **right quantity and type**.

Continuous cropping on the same piece of land, without fertilisation, can cause **loss of soil fertility**. When the soil is eroded by water or by wind, the nutrients are removed, worsening still the loss of soil fertility. You can find out what nutrients are missing in your soil by conducting a **soil analysis**. Based on the analysis, you can apply adequate fertilisers to supplement the missing nutrients in the soil. As a result, an increase in yield is achieved to ensure sustainability in cocoa production. To maximise the benefits of fertiliser use, farmers have to understand that the demand of cocoa trees depend on their growth stage. The existing soil health conditions also affect the nutritional demand of the soil.

Fertilisers are available in **organic form** (from plant or animal products, e.g. cocoa husks, compost, manure) and **mineral form** (man-made, e.g. NPK, Urea, MOP, TSP). Each of them has its advantages and disadvantages. While the basic soil fertility should come from organic material (also called biomass), additional mineral fertiliser might be necessary to increase the yield. Whenever possible, a soil analysis should be made by the extension service to measure the nutrient level of the soil and recommend the best fertilisation regime.

Organic fertiliser

Organic fertilisers such as green and animal manure and agricultural waste products are abundant in farms. They enhance soil fertility when used appropriately. Use organic fertilisers as available to improve soil fertility, minimise negative impact on the soil by chemical fertilisers and to reduce costs. Cocoa husks are rich in potassium and should be spread under the cocoa trees instead of piled on heaps, but remove pods affected by black pod disease.

Mineral fertilisers

There are three categories of mineral fertilisers:

- **Single fertiliser:** This type of fertiliser should only be used if you know exactly what type of nutrient your trees need. Some examples of single fertilisers are: urea, ammonium sulphate, super sulphate (SP36), TSP, KCL.
- **Mixed fertiliser:** This type of fertiliser consists of a mix of two or more single fertilisers and should only be used if you know exactly what type of nutrients your trees need. Popular mixed fertilisers include: urea + KCl, KCl + SP 36.
- **Compound fertilisers:** These fertilisers are mixed by fertiliser factories. Well known compound fertilisers include: nitrogen-phosphate-potassium (N-P-K), or nitrogen phosphate-potassium-magnesium (N-P-K-Mg) in various dosages.

Key times for applying fertilisers

Apply fertiliser to cocoa trees during the following key periods:

- **Start of the wet season:** Rain dissolves fertilisers and carries them into the soil, near the roots, where they can be absorbed by the trees. If there is no water, fertilisers cannot be absorbed by the roots. Cocoa trees grow new branches and leaves at the start of the wet season. Nitrate helps growth of leaves and phosphorus promotes flowering. Potassium is useful to the tree for many reasons. This combination of nutrients is found in the commonly used 'compound fertiliser' called NPK.
- **Start of pod production:** When trees start producing pods after the short dry season, they need more potassium. Apply potassium chloride (KCl) or a compound fertiliser with potassium at this time.

Be careful with fertilisers

- The overuse of chemical fertilisers can harm useful microorganisms in the soil.
- Using more fertiliser than the recommended dosage is a waste of money.
- Always store fertilisers in a dry and locked place.
- Never allow children to be involved in applying fertilisers.
- Always read labels on fertiliser packages before applying them; or consult a competent agent before application.

If animal manures are used, they should be mixed with plant material and collected on a heap for composting to reduce the risk of diseases.

Standards Requirements

Common Standards requirements

- Give priority to organic fertilisation methods to maintain soil fertility (using residues generated by the farm, such as cocoa husks) before using chemical fertilisers (not required by Fairtrade).
- Use, handle and store agrochemicals as well as organic fertilisers in a way to avoid danger to people and minimise negative impacts on the environment.
- Allow only people who have been trained to handle and apply fertilisers.
- Keep records about purchased fertilisers, their specifications and where and in which quantities they have been applied (not required by Fairtrade).
- Carry out activities/trainings that prevent/control erosion, and thus reduce the loss of nutrients and its negative impacts on water bodies.

Specific Standards requirements

UTZ

- Measures are taken to improve soil fertility according to the nutritional needs of the crop, including compensation for nutrients lost from harvests.

Rainforest Alliance

- You must have a soil or crop fertilisation programme based on soil characteristics and properties, periodic soil or foliage sampling and analysis, and advice from a competent and im-

partial professional or authority, like CRIG in Ghana.

Fairtrade

- Provide training to the members of the organisation on the appropriate use of fertilisers. This training must include:
 - Measures to ensure that fertilisers (organic and inorganic) are applied in amounts that respond to the nutrient need of the crop.
 - Measures to safely store fertilisers separately from agrochemicals in a way that minimises risks of polluting water.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand the role of the three key components (N, P, K) in fertilisers.
- Know that the key times of applying fertilisers are the start of the wet season, and the start of pod formation.
- Know that recommended dosages of fertilisers are on their labels.
- Understand that the over-dosage of chemical fertilisers makes farmers lose money and damages the soil fauna.
- Keep fertilisers out of reach of children.
- Use organic material in combination with chemical fertilisers.

Materials needed:

- Sealed clear plastic bags with commonly used fertilisers for cocoa
- Manure and plant material (natural organic material)
- Real fertiliser labels

Time needed: 1 hour

Preparations: None

Set up

Attention: Ask the participants what will happen if they do not eat good food every day. They will answer that they will starve and become ill. Agree with them.

Title: The topic of this session is *fertiliser application*.

Objectives: We are going to discuss why to apply fertilisers, when and how to apply them, the different type of fertilisers, and how to store and handle them.

Benefits: By knowing how to correctly apply fertilisers, they can restore the soil fertility.

Direction: During this session we will only discuss fertiliser application and not the different types of fertilisers.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Ask the following questions:
 - a. *As humans we need food to live. Can we survive if we only eat one type of food, for example only yam or only maize?* No, we need different types of food containing carbohydrates (carbs), vitamins, protein, minerals, etc.
 - b. *If we lack vitamins, does it help if we eat a lot of proteins?* No, that doesn't help. We need a mix of all types of nutrients.
 - c. *Also cocoa trees need different types of nutrients. Who can name a few nutrients?* Nitrogen (N), Phosphate (P), Potassium (K), Magnesium (Mg), Sulphur (S), Calcium (Ca), etc.
 - d. *Cocoa trees need all different nutrients to produce pods. When we harvest the pods, what will happen with the nutrients?* They will be taken from the tree.
2. Under normal circumstances the soil can **replenish** enough nutrients to replace those once left with the harvest. But continuous cropping without adding organic or mineral fertiliser results in **loss of soil fertility** and reduction of cocoa yields. Tell participants that there are **mineral and organic fertilisers**. Ask if someone knows the **difference**. The correct answer is: **Mineral fertilisers** (also called chemical or mineral fertilisers) are obtained from non-living sources through man-made processes, while **organic fertilisers** are obtained from living organisms, e.g. animal waste (manure), crop residues (such as leaves), compost, and many other natural products.
3. Ask if someone can give an **example** of a **mineral fertiliser**. If the participant mentions one of the fertilisers you are carrying, show the bag to everyone. If they do not mention the fertilisers, show them after you have allowed a few answers. Ask what other types of chemical fertiliser they use on their cocoa trees.
4. Show participants the bag with **organic fertiliser** and tell them that this is organic fertiliser. Ask them what other types of organic fertiliser they use.
5. Ask:
 - a. *Do all fertiliser contain the **same nutrients**?* No, each fertiliser contains different nutrients.
 - b. *Can we just add any nutrients to our cocoa trees?* No, it depends on what nutrient the tree needs. If a tree does not receive enough of a nutrient, it will not grow optimally, no matter how much of other nutrients the plant has access to.
 - c. *How do we know **which nutrient** our cocoa trees need?* The best is to carry out soil analyses or leaf analyses every 2-3 years to determine possible lack of nutrients and apply fertilisers based on the soil analysis report. If that is not possible, you can ask advice from extension officers or other technical officers.
6. So it is important to apply **the correct type of fertiliser**. Say that in Nigeria, CRIN recommends the following fertilisers for cocoa: 1.39 kg Urea + 3.4kg SSP or TSP+ 1.36 kg MOP/Tree +1% Solubo +0.05% CuSO₄ + 0.7% ZnSO₄.
7. Tell participants that it is important to apply fertilisers at the **right time**. Ask participants: When is the best time to apply fertiliser? Let them discuss in pairs (with their neighbour) for a few minutes. Ask the question again and ask a few groups for their answers. Then repeat the correct answers:

- a. Apply fertilisers at the **beginning of the rainy season**. *Why?* To allow the nutrients to be dissolved in water so that the roots can absorb them for the growth of leaves and flowers.
 - b. Apply fertilisers again when the **Pods start to grow**. *Why?* To grow many big and healthy pods for better yields the cocoa tree needs another boost.
8. Another important aspect is to apply the **right rate**. How do we know the **right dosage** to apply?
- a. **Read the fertiliser label**. Pass the labels around and let them read it and show you the recommended dosage.
 - b. If the farmer cannot read, he should ask someone else to read the label for him.
 - c. If there is no label (for example for organic fertiliser), seek advice from extension officers.
 - d. To know the exact amount of fertiliser you need on your farm, you should know the **number of trees** on your farm.
9. Say that you know a lot of farmers who are adding some **extra fertiliser** because they think their trees will grow bigger pods. Ask: is it a good idea to add more than recommended? No, it is not. Compare with humans: when your tummy is full, it is not use to eat another plate of fufu. **Over-application of fertilisers is a waste of money**. The trees will not grow better by applying more than what they need.
10. So we have discussed that you need to apply the right type of fertiliser, apply it at the right dosage and at the right time. Finally we need to apply it in the **right way**. Ask the following questions:
- a. *How do we know how to apply the fertiliser?* You need to **read the label**. If there is no label (for example for organic fertiliser), seek advice from extension officers.
 - b. *How do we apply fertiliser in general?* We should apply it around the tree or broadcast it in the field.
11. Tell participants that mineral fertilisers are **agrochemicals**. Therefore, mineral fertilisers need to be treated and stored with care. The following is very important when we handle or store fertilisers:
- a. **Always protect yourself** when handling or applying fertiliser.
 - b. **Wash your hands after applying chemical or organic fertiliser**
 - c. Do not eat or drink during fertiliser application
 - d. **Store in a dry and locked place**. If fertiliser comes into contact with moisture it will dissolve and lose its effectiveness. You cannot store the fertiliser in your house or on your farm, it should be stored in a **separate place**.
 - e. No one is allowed in the field, when you apply fertilisers.
 - f. Fertiliser should only be applied by adults that are **trained**.
 - g. **Fertiliser should never be handled or applied by children**.
12. Note for the trainer: add the specific requirements as listed under requirements.

Finish

Summary: Say that with the harvest of cocoa pods, we also remove a lot of nutrients from the farm, which need to be replenished with organic and/or mineral fertiliser. Apply the right fertiliser at the right time, read the label or seek advice before applying

fertiliser. Apply fertilisers at the start of the rainy season, and again when pods start to develop.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants: What kind of fertilisers do you know? What are the best periods to apply fertilisers? How must we store fertiliser?

Next step: Next time when you apply fertiliser, make sure you have the right type, you apply the right quantity at the right time, and you apply it in the right way. It will help your trees to develop more and bigger cocoa pods.

Topic II.5: Integrated Crop and Pest Management

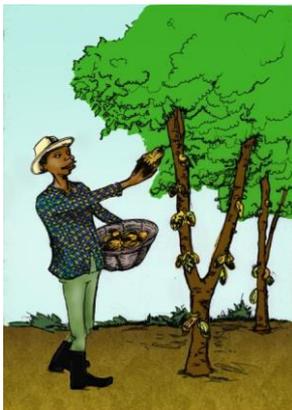
Key Information



1. **Prevent** pest and diseases



2. **Monitor** your farm on a regular base to check on pests and diseases



3. **Intervention:** If you identify a pest or disease, diagnose the severity of the pest or disease and take action

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

Integrated Crop and Pest Management (ICPM)¹ is applied to manage the cocoa farm, diseases and cocoa pests. The key elements of integrated crop and pest management are prevention of conditions on the farm that favour pests and diseases; quickly identifying the pest or disease and assessing the level of infestation; and then treating according to the severity of the problem. Under the ICPM approach, farmers seek to keep a balance between ecological and economic aspects of farm management.

One way to strengthen the ecosystem balance is to make it more diverse. The more different kinds of living things there are in an ecosystem, the more stable it usually is. A farm which contains only cocoa trees in nearly lifeless soil will have few organisms for natural enemies to live on and nothing to stop pests from developing. However, a cocoa farm where useful weeds and shade trees can grow and where the soil is rich in micro-organisms helps to balance pests and beneficial organisms, leading to a healthier environment where fewer agrochemicals need to be applied.

Another way to maintain a balanced ecosystem is to prevent sudden changes in it. A balanced, stable ecosystem takes a long time to develop. Shocks such as drastic changes in temperature, humidity, application of agrochemicals, etc. disrupt the balance. The situation allows some living things (like pests and disease pathogens) to "escape" from the balance and become abundant. Practices like pruning and planting shade trees can reduce drastic changes in temperature and humidity from one season to another. The use of non-chemical methods to manage pests and diseases can reduce the shocks of agrochemical applications. These practices may help maintain balance and stability in the ecosystem. ICPM also implies the elimination of prohibited chemicals for their negative impact on human health and natural resources.

Integrated Crop and Pest Management includes the following key steps:

1. Prevention

This means to reduce the likeliness that a pest or disease will attack the cocoa farm and spread. There are several ways to do prevention.

- **Selection of planting material:** Select disease-resistant varieties from CRIN and Tree Crop Units.
- **Sanitary harvesting:** Regularly remove diseased pods that may be a source of infection for other cocoa trees. Inspect cocoa fields at the start of the rainy season and after rains; check for pods with black pod symptoms, and old, black pods (mummies). Collect and burn them.
- **Plant nutrition:** Improve and maintain soil fertility and apply organic and mineral fertiliser if necessary to have healthy plants which can better resist pest and disease attack.
- **Pruning:** Pruning of cocoa trees has to be done to achieve a symmetrical, rounded canopy which looks like an umbrella with branches growing out and up to receive sunlight effectively. Pruning enables proper **air circulation** which improves wind-pollination, resulting in

¹ Sources: STCP (2005): Learning about Sustainable Cocoa Production: A Guide for Participatory Farmer Training; 1. Integrated Crop and Pest Management
ICCO/IPARC (2008): Pesticide Use in Cocoa. A Guide for Training, Administrative and Research Staff

better pod setting and higher yields of cocoa plants. When air circulation improves because of pruning, the incidence of pests and diseases on cocoa is minimised.

- **Removing chupons:** Chupons are new branches that grow on the stems of the cocoa trees. Chupons should be removed because they take nutrients, water and energy from the tree, which reduces production. Cut chupons off close to their base. Make a “clean” cut at an angle using a shape machete. When the original stem is not healthy, you may decide to allow a new chupon grow and develop into a new trunk.
- **Removing moss:** When pruning and weeding the farm, remove moss and mistletoe because they weaken the cocoa tree and reduce the yield.
- **Harvesting on time and regularly:** Harvest pods as soon as they turn yellow.
- **Good management of shade trees and canopy:** Keep enough light and aeration.
- **Conserving natural enemies of pests** by non-chemical ways of crop protection, for example the **ladybird beetle** who feeds on aphids which infest beans.

Pruning

An unpruned cocoa tree develops more branches than it needs to grow healthily. The unnecessary branches compete with cocoa pods for nutrients and reduce yields. The best cocoa tree has one stem only and two or three main branches, with enough side branches and leaves to capture most of the sunlight. Pruning has to be done to achieve a symmetrical, rounded canopy which looks like an umbrella with branches growing out and up. Pruning enables proper air circulation which improves air pollination, resulting in better pod setting and higher yields of cocoa plants. When air circulation improves because of pruning, the incidence of pests and diseases on cocoa is minimised.

When to prune

- Main pruning is normally done in April or May before the onset of the rainy season. Main pruning helps to re-create the canopy, and shapes and controls the height of the tree to about 2.5 to 3 meters.
- Maintenance pruning should ideally be carried out after the main harvest (around December).
- Sanitation pruning should be carried out throughout the year to maintain a healthy tree and canopy. However, do not prune too many branches at the same time, and do not prune when the plant is flowering because it can reduce pod formation.

Where and how to prune

- Skirting: Remove the low and drooping branches and open up the underside of the tree.
- Height control pruning: Prune at the growth point of the plant to keep the height at about 2.5 - 3m.
- Tipping: Remove branches that are growing into the canopy of neighbour trees.
- Internal pruning: Cut out branches growing on the inside of the canopy and remove over-shaded branches and dead wood.

2. Monitoring

You should scout your farm on a regular base (at least every week) to check if there are any pests or diseases on your farm. Best is to scout in a particular pattern to ensure that you check different parts of your farm.

How to scout?

There is no fixed set of rules on how to scout. It all depends on the type of crop, the size of the field and conditions. The following can be used as general guidelines:

- Enter the field at a point and leave at the same point.
- Cover as much as possible of the field to get a general idea of what is going on.
- Take samples of pests (leaves, insects, etc.).
- Mark areas with coloured cloth where high levels of infestation occur.
- Include the immediate surrounding areas of the fields. Sometimes pests are already in these areas on its way to the crops.
- Keep record of what you see by using a small notebook and pencil.
- Use scouting patterns to ensure you cover the whole field.

(Source: CropLife Africa Middle East).

3. Intervention

When you see a pest or disease, you should:

- Identify the disease or pest (consult CRIN or STCP manual).
- Identify the cause(s) of the disease or pest infestation (to prevent it in the future).

Assess the disease/pest infestation level to see if you have to intervene.

- Monitor the pest or disease to see if it is spreading and train personnel to do the same.
- Collect and record information about pest infestation to make an informed decision.

When necessary, apply control methods appropriate for the infestation level. Treatment can include:

- Removal of the pest by hand (for example insects).
- Applying organic pesticides.
- Apply agrochemicals in appropriate concentrations only if the infestation would cause unacceptable financial losses if left untreated. Sometimes it is sufficient to do spot treatment (only apply the infected tree) instead of treating the whole farm.

Standards Requirements

Common Standards requirements

- Use / train on physical, mechanical, cultural and biological control methods to reduce pests and diseases.
- Use / train on cultivation techniques such as planting of shade trees, pruning, and mulching to create ecosystems that foster natural plant vigour/resistance to pests and diseases.
- Conserve / train on natural enemies of pests by non-chemical ways of crop protection.
- Keep the cocoa farm clean to avoid insects and fungus development.
- Continually reduce the use of agrochemicals for crop production or show that agrochemicals are applied based on knowledge of pests and diseases.
- Choose the least toxic chemical solutions (not required by Fairtrade).
- Do not use agrochemicals or biological substances on the list of Prohibited Agrochemicals. These include Atrazine, Paraquat and Endosulfan.

Specific Standards requirements

UTZ

- Use crop protection products only if you can demonstrate competence to do so by provision of official qualifications, attendance certificates from training courses, etc.
- Communicate the use of any genetically modified organism as cocoa planting material (including trial plots) to UTZ and the buyer(s).
- Integrated Pest Management (IPM) measures are applied and documented.
- Pesticides listed on the Banned Pesticides List must not be used at any stage of production, or stored for use on the certified crop.

Rainforest Alliance

- Develop a plan for your farm for reducing the use of World Health Organisation Class II technical grade active ingredients of agrochemicals.
- Develop an integrated pest management programme for your farm based on ecological principles for the control of harmful pests.
- Include in the programme activities for monitoring pest populations, training personnel that monitor these populations, and integrated pest management techniques.
- Collect and record the following information: infestation dates, duration, area and location; type of pest; the control mechanisms employed; environmental factors during the infestation; damage caused and estimated costs of damage and control.
- Rotate the use of agrochemical products for crop production.

Fairtrade

- Do not use Genetically Modified Organism (GMO) materials. This includes Bt sprays (a bacteria which produces a toxic protein against chewing insects) derived from GMO strains and composts with GMO materials.
- Provide training to members on integrated pest management.
- Apply agrochemicals based on knowledge of pests and diseases.
- Compile a list of agrochemicals that are used on Fairtrade crops. It must be indicated which of those materials are in the Fairtrade International Prohibited Materials List (PML) part 1 Red List and part 2 Amber List.
- Do not use any materials on the Fairtrade International Prohibited Materials List Part 1 (red list).
- Minimize the amount of herbicides by implementing other weed prevention and control strategies.

Guidelines for the trainer

Learning objectives

By the end of this training, participants will:

- Apply preventive measures such as pruning and balanced use of agrochemicals to reduce the likeliness of diseases and pest outbreaks.
- Reduce spread of diseases by removing and burning diseased plant materials.
- Prune and remove chupons to obtain optimal tree architecture.

- Know the different types of pruning and when to prune to achieve maximum crop yield. Prune at the appropriate period to achieve maximum crop yield.
- Monitor regularly pest and disease infestation levels in their fields.
- Continually reduce the use of agrochemicals for crop production.

Materials needed: 3 coloured cards and a marker for your preparations.

Time needed: 45 minutes

Preparations:

- Write on three coloured cards the words (one word per card). Underline the first letter of each word:
 - Prevention
 - Monitoring
 - Intervention

Set up

Attention: Ask participants if there is only one road leading to their community. There are probably several roads that will lead to the community. Say that growing healthy crops and controlling pests and diseases also has several roads: there is not one way but several ways to do this.

Title: The title of this session is *Integrated Crop and Pest Management*.

Objectives: We are to see what Integrated Crop and Pest Management is and how we can apply it on our farms.

Benefits: Integrated Crop and Pest Management can help to prevent and control pests and diseases without disrupting the ecosystem.

Direction: There are training courses about Integrated Crop and Pest Management that take several months. During this session, we will only focus on the key elements.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Say that ICPM uses **all existing techniques** to grow healthy crops and to control pests and diseases. It can help to control pests and diseases without interfering too much with the **ecosystem**. Remind participants that the ecosystem consists of all components of the environment. Ask if some can give an example of such a component. Probably they will mention crops, trees, insects, and other living organisms. Make sure to mention the soil with its micro- and macro-organisms.
2. Say that we often use the **abbreviation ICPM** when we refer to Integrated Crop and Pest Management. The four letters ICPM actually refer to the **main steps** of Integrated Crop and Pest Management. Show one by one the coloured cards. When **showing a card**, mention the word on the card and ask if someone can explain what we mean with this. Show the cards in the following order and say that we will discuss each in detail:
 - a. **Prevention:** this means you take measurements to avoid that pests and diseases can come to your farm.

- b. **Monitoring:** this means you observe your farm carefully to see if any pest or disease will occur.
 - c. **Intervention:** when you have identified the problem, you should take a decision on what to do (action).
3. Say that we will start with prevention. Form a **bicycle chain**:
 - a. Let participants form two lines facing each other.
 - b. They should discuss with the person opposite them what we can do to **prevent** that a pest or disease will attack the cocoa farm and spread within the farm.
 - c. Let them discuss for a few minutes.
 - d. Stop the discussions. Everyone should now move to the right and stand on the spot where the person to their right hand side was standing. The two people at the end should turn to the other line (like a bicycle chain). They are now facing someone else.
 - e. Let participants again discuss the same question.
 - f. Do one more turn and let participants discuss again.
4. Stop the discussions Ask who would like **to share what they have heard**. Collect answers from several people and ask for an explanation. Make sure all points listed in the additional information are mentioned. Note: You can even be more specific and mention for example black pod, capsid, stemborer or cocoa swollen shoot virus, but in that case you need to know how to prevent all these pests and diseases.
5. Tell that if **prevention** is done in a good way, it will **avoid a lot of problems** on your farm. But prevention will never 100% prevent pests and diseases from entering your farm, therefore you also need to **monitor** your farm. Ask what it means to monitor your farm? Monitoring means you should scout your farm on a regular base (at least every week) to check if there are any pests or diseases on your farm. Best is to scout in a particular pattern to ensure that you check different parts of your farm.
6. Ask who of them is checking their farms on a regular base for pests and diseases. Ask those to **share** with the other **how** they check their farm. Make sure to **add information** as mentioned in the additional information on scouting.
7. Say that the last step of ICPM is **intervention**: you need to take action. Say that when they detect a pest or disease that they first need to know **what type of pest or disease** it is. How can they find this out? They can ask another farmer, extension officer or their farmers' organisation. They should also try to find out **how** the pest or disease entered their farm to prevent it from coming again.
8. When they know what type of pest or disease they have on their farm, they can **decide what action to take**. Ask what type of action they can take when they have a pest or disease (again, you can mention specific pests and diseases and ask how to treat them).
9. Note for the trainer: Depending on the group, add the specific standard requirements as mentioned under requirements.

Finish

Summary: Summarise all steps of ICPM. Repeat the specific requirements for each standard (depending on the group).

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants what the steps of ICPM are. Ask the group what they need to do on their cocoa fields.

Next Step: Keep in mind that prevention is always better than solving the problem: it can save you a lot of money and time when you prevent pests and diseases from entering your farm.

Topic II.6: Harvest and Post-harvest

Key Information



1. Harvest only yellow ripe pods.



2. Crack the pod with a non-sharpened steel blade and twist the pod open.



3. Discard the placenta, the pulp and any soft / empty / germinated or damaged beans from the mass.



4. Ferment the beans for 6 to 7 days. Use banana leaves to cover the beans.



5. Turn the bean mass every 2 days.



6. Place the beans on raised drying mats. Do not use fire.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

Harvest

Harvesting has great influence on the quality of beans. It is important to harvest at the **right time**. When pods are fully or partly green, they are not ready for harvesting. The beans inside the pod will be harder to remove from the pod. Such beans are of poor quality and may be **rejected** at the point of sale. They do not ferment well and result in **low price** or even rejection at the point of sale. Such beans give poor taste when made into chocolates. Moreover, beans in unripe pods are smaller and give **low yield**. On the other hand, if harvesting is done too late, the pods become over-ripe leading to germination of the beans in the pods. Birds, rats, insects or diseases may damage the pods if they remain too long on the tree. Harvesting too late causes the pulp to dry and result in bad fermentation. Therefore, the cocoa pods should be harvested when they are ripe, i.e. when they turn **yellow**. During the season harvest your pods every two weeks. Do not wait till the majority is ripe because that will cause other pods to be over-ripe.

Post-harvest

a) Pod breaking

Pod breaking is done to release the cocoa beans from their pods. After harvesting, the healthy cocoa pods are gathered at a **central point** for pod breaking to be performed. Break the cocoa pods **within two to three days** after harvesting by using a wooden club or non-sharpened steel blade. Do not use a cutlass to break cocoa pods because it may **damage** the beans in the pods. Scoop out the beans by hand and discard the husk, placenta, and the germinated and black beans.

b) Fermentation

The fermentation process helps to **develop** chocolate precursors in cocoa beans. To ferment cocoa beans, spread out fresh **plantain leaves** in a circle on the ground. **Puncture** the mat of leaves with a pointed stick to create **drainage holes** in the mat to allow easy pulp drainage. Heap fresh cocoa beans of 700 to 1,000 pods (300 – 500 kg) on the mat and **cover** them entirely with some of the leaves. Covering protects the fermenting beans from surface drying, mould growth and helps to maintain the heat generated within the heap. **Turn the bean mass** after day two and day four to ensure uniform heat and air circulation in the heap. Fermentation is normally done in **six to seven days**.



Photo credit: Martin Gilmour

c) Drying

Drying is the process of **reducing moisture** in fermented beans from about 55% to 7%. After fermentation, place cocoa beans on **raised drying mats** to ensure adequate air circulation in the sun. **Stir beans** frequently depending on the intensity of the sun to ensure uniform drying. The beans are covered every evening to protect them from possible showers and dew. **Do not use a wood fire kiln** because it releases smoke that would contaminate the cocoa. The minimum peri-

od of drying is **seven days**. A properly fermented and dried bean looks **brown** in colour when cut in half. When a handful of well-dried beans are squeezed, they make a cracking sound and snap when broken.

d) Storage

After drying, pack cocoa beans into clean and strong jute bags. Place the bags of cocoa beans on **wooden pallets** in a room which is well ventilated and has relatively low humidity. This prevents the beans from absorbing moisture and developing mould.²

Standards Requirements

Specific Standards requirements

UTZ

- Ferment, dry and store cocoa beans properly to make them reasonably free of foreign matter and odor.
- Dry cocoa beans on raised platforms to keep the beans out of contact with soil and away from roads.
- Package dried beans in clean jute bags that are sufficiently strong and do not contain mineral oils.
-
- Store the cocoa away from sources of contamination such as agrochemicals, fuel, flammable substances, or smoke.
- Store cocoa beans in dry places during loading and transportation.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand the reasons for harvesting ripe yellow pods only.
- Know and carry out the correct fermentation process to achieve good flavour and colour.
- Dry cocoa beans on raised mats to prevent contamination.
- Store cocoa beans in dry places to prevent moulding.

Materials needed:

- Four to five real pods in different stages (not ripe, almost ripe, ready to harvest, over-ripe)
- Small cards with numbers
- Small empty pieces of papers
- Well-fermented cocoa beans and under-fermented cocoa beans
- A non-sharpened steel blade or wooden club
- A heap of cocoa beans

² Source: Cocoa Research Institute of Ghana, Source Book for Sustainable Cocoa Production, version 1, 2010

- Banana leaves
- Drying mats

Time needed: 1 hour 45 minutes

Preparations:

- Put the different cocoa pods on a table in front of the group with the numbers in front of them. You should not put the pods in a specific order. If you do not have real cocoa pods, use the visuals/pictures. Make sure you have enough space (outside) so every participant can clearly see what you do.
- Make sure that you can do all steps (cracking the pods, removing placenta, etc.) smoothly. If necessary, practice.

Set up

Attention: Ask participants what they see on the table in front of them. They will answer “cocoa pods”. Ask if the cocoa pods are in the same stage of growing. They will say “no”.

Title: The title of this session is *harvest and post-harvest activities*.

Objectives: During this session we will see when the cocoa pod is ready for harvesting and what the correct steps are after harvesting.

Benefits: It is very important to harvest at the right time, otherwise it will affect taste and flavour of the cocoa. In addition, it is a requirement for certification. Proper handling of the cocoa beans after harvesting will result in good quality cocoa beans.

Direction: During this session, we will briefly discuss and demonstrate the harvest and post-harvest processes to obtain good quality cocoa beans.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

- a. **Invite** all participants to the front to have a **good look** at the cocoa pods (or visuals/pictures) on the table. Tell people to form pairs. Together they should **discuss** which cocoa pod is **ready for harvesting**. Give everyone a small piece of paper. They should write their choice (the number) on the paper. Give everyone enough time to closely observe all cocoa pods (or visuals/pictures).
- b. **Collect** all pieces of paper and **count** how many people have voted for each pod. Start with the **first pod** (fully or partly green) and tell participants how many groups have voted for this pod. If one of the groups has voted for this pod, ask why. Ask if other groups agree. If they do not agree, ask **why**. Tell participants that when pods are fully or partly green, they are **not ready** for harvesting. Ask what the **consequences** are if you harvest the pods too early. Guide the answer to that the beans inside the pod will be harder to remove from the pod. Such beans give **poor taste** when made into chocolates. More so, beans in unripe pods are **smaller** and will give **low yield**.

- c. **Discuss** the other pods in the same way. Explain for every pod why they are not ready for harvest and what the consequences are if they are harvested. Clearly point to the pod that is **ready for harvesting** (it is ripe with the appearance of a yellow pod colour).
- d. Ask the following questions:
 - a. *Some farmers say that during the rainy season pods will never get completely yellow but that they are ready for harvest anyway. Is that true?* No, this is NOT true. The official CRIN recommendation is to harvest, when “the pods are ripe and yellow in colour”.
 - b. *Some farmers say that a pod needs to be completely yellow before harvesting. Is that true?* No, this is NOT true. If parts of the pod are yellow, they are ready for harvest.
- e. Take the cocoa pod that is **ready for harvesting**. Ask for an experienced volunteer to demonstrate what to do with the pod after harvesting. Ask all participants to stand around the volunteer in a semicircle so they can clearly see what you are doing.

Note for the trainer: sometimes participants would like to test if you know what you are doing and they will insist that you will do the demonstration. In that case, do the demonstration yourself.

- f. Let the volunteer start with his/her **demonstration** and provide comments with every step. The steps are:
 - a. **Crack the pod** with a non-sharpened steel blade or wooden club and twist the pod open.
 - b. **Discard the placenta, the pulp and all soft / empty / germinated or damaged beans from the mass.** Ask *why the placenta needs to be discarded before fermentation?* In order to allow all beans to ferment equally. The placenta can be used as mulch.
 - c. **Ferment the beans.** Put the beans on a banana leaf and cover the heap with banana leaves. Ask *why should you cover the beans with banana leaves?* Banana leaves maintain the heat and reduce the formation of moulds. Ask *if we can use plastic to cover the beans?* No, we cannot use plastic because it will not allow water to easily drain from the beans. Ask *how many days do the beans need to ferment?* Six to seven days. Add: Turn the bean mass to distribute heat uniformly and to allow entering the mixture.
 - d. **Place the beans on drying mats** that are raised. Ask *why should the beans be placed on raised drying mats?* This is to ensure adequate air circulation in the sun, to keep the beans out of contact with soil and away from roads. Ask *if you can use wood fire to dry the beans?* No, because it releases smoke that will contaminate the cocoa. The beans should be dried for at least seven days.
- g. Ask *how do you know if the beans are properly dried?* A properly fermented and dried bean looks brown in colour when cut in half. In addition, when a handful of well-dried beans are squeezed, they make a cracking sound and snap when broken.
- h. Ask participants to **form pairs**. Give each pair some **cocoa beans**. Ask participants to **check** if these beans are **well fermented** and dried or not. Let participants work on their assignment. Walk around to check if participants test the beans in the correct way and if they can indicate if beans are well fermented and dried. If many participants have problems recognising the well fermented and dried beans **repeat** how this can be checked and show a few examples.
- i. Finally, **add the following points**:
 - a. **Ferment, dry and store cocoa beans properly** to make them reasonably free of foreign matter and odours.

- b. Package dried beans in **clean jute bags** that are sufficiently strong and properly sewn or sealed.
- c. Store the cocoa **away from sources of contamination** such as agrochemicals, fuel, flammable substances, or smoke.
- d. Store cocoa beans in **dry places** during loading and transportation.
- e. During the season we should harvest pods **every two weeks**. You should not wait until the majority of the pods is ready to harvest otherwise other pods will be over-ripe by the time the majority is ripe.

Finish

Summary: Summarise the steps during and after harvesting.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants why it is important to harvest at the right time. Ask what the consequences are if pods are harvested prematurely or when they are over-ripe. Ask participants what steps they need to take after harvesting. Ask for every step, why they should do it in that way.

Next Step: Proper handling of the cocoa beans after harvesting will result in good quality cocoa beans. So take your time for post-harvest handling.

Topic II.7: Productivity Enhancement

Key Information



Replant old cocoa farms



Use improved planting material



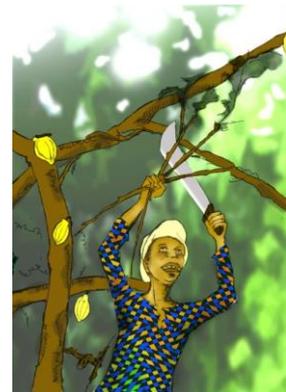
Manage your soil



Apply mineral fertilisers according to soil analysis



Practice farm sanitation



Apply Integrated crop and pest management measures



Prune your trees

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

Training in good agricultural practices can help cocoa farmers to improve agricultural techniques to increase yields, while certification is a tool that can help farmers achieve sustainability in terms of environmental and social conditions and economic viability of cocoa production. Sustainability will only be achieved if farmers can make a decent living from their cocoa, even during times of low prices. Small cocoa farmers in West Africa are trapped in poverty because they only produce 300 to 500 kg of cocoa beans per hectare on average. These low yields are the major cause for the low farm incomes. Certifying these farmers without substantially increasing their cocoa yields is economically not viable and certifying farmers who are stuck in poverty is unsustainable. The core elements of sustainability address not only environmental and social but also economic issues. If we want to attract more young people within the rural communities to take over cocoa cultivation, this activity has to become economically more attractive without harming the environment.

The elements of this module on productivity basically underline, and partly repeat the good agricultural practices of this training curriculum but emphasise the increase of cocoa yields. The objective is to contribute to the welfare of the smallholders cultivating cocoa through higher and sustainable productivity levels of good quality cocoa at lower production costs. This module goes beyond the requirements of the three standard initiatives. It is not necessarily a requirement for certification but, as mentioned above, it is very relevant for the economic sustainability of the cocoa communities.

The elements of productivity enhancement are:

1. Replanting

Cocoa plantations that are older than 30 years usually have **low yields** due to the age of the trees, poor maintenance and low resistance to pests and diseases. A healthy cocoa tree produces at least 25 pods per year resulting in at least 1 kg of dry cocoa beans. This translates into a production potential of at least 1,100 kg of dry beans per hectare per year. With improved planting material and good management, much higher yields can be achieved. Trees that produce ten or less pods per year are unproductive and rehabilitation or replanting of the cocoa plantation is necessary to increase productivity and farmers' incomes. For details of replanting refer to the STCP training material used in the Farmers Field School.

Replanting means **removing unproductive trees** and **replacing** them with new planting materials. Although farmers are often reluctant to cut trees that still produce (even though they are very low yielding), it is unavoidable if farmers want to increase their incomes in the long run. To this end, the plantation is **divided into two to four blocks** and replanting starts on the most unproductive block. A block of **one hectare** will require **1,100 trees with 3m x 3m spacing**; therefore one hectare divided into two blocks is 550 trees, three blocks 366 trees and four blocks 275 trees.

2. Using improved planting material

Farmers are sometimes tempted to use seeds from their own farm for replanting, because they think that would save costs. However, since the sources of pollen for those seeds are not known, they risk very low yields of the new trees in future. The farmers will have to make a living of the trees for most of their lives, so choosing planting material has an immense effect on the family's income. Planting material should always be obtained from **seed gardens** of the Tree Crop Unit.

The Cocoa Research Institute of Nigeria (CRIN) has developed an **improved hybrid variety** (CRIN Tc1-Tc8) whose advantages are: early bearing (two years after transplanting), high yielding and better resistance to diseases (black pod, swollen shoot virus) and pests (capsids). This hybrid variety is available at all the stations of the Tree Crop Unit.

The higher costs for improved hybrid plants as compared to farmer's own material, will be very quickly recovered by the higher yields obtained once the trees come into bearing. The use of Genetically Modified Organism (GMO) is **not** allowed.

Instead of replanting, there are also **grafting** methods available that can substantially reduce the costs of rejuvenation of the cocoa farm. These techniques need to be promoted more strongly.

3. Soil management

Soil is among the most important production factors for the farmer. The soil is a living organism, because it is a habitat for plants, animals and micro-organisms which play an important role for the productivity of the farm. Nutrients that we take out of the farm in form of cocoa pods have to be replaced, preferably by organic materials, such as leaf litter from cocoa and shade trees, animal manure, compost and green manure in form of leguminous plants. Increasing the organic matter in the soil improves its **fertility** and protects the soil against **erosion** at the same time.

More information on soil management can be found in topic II.2 (Soil erosion) and II.3 (Soil fertility).

4. Fertiliser application

Sometimes organic material is not sufficient to exploit the full production potential of the cocoa tree, especially if high-yielding hybrid varieties are grown on the farm. Adding mineral fertilisers in addition to organic material will improve yields and incomes. For a mature cocoa plantation, CRIN recommends a mixture of:

1.39 kg Urea + 3.4kg SSP or TSP+ 1.36 kg MOP/Tree +1% Solubo +0.05% CuSO₄ + 0.7% ZnSO₄

The fertiliser is to be broadcasted under the cocoa trees once a year.

More information on fertiliser application can be found in topic II.4.

5. Sanitation and pruning

Cocoa trees need adequate environmental conditions to yield productively. A **good environment** is created and maintained for the cocoa when good sanitation is practiced. Sanitation means **removing unwanted materials** from the farm. To ensure good sanitation on the farm, particular attention has to be paid to the removal of dead, diseased or damaged pods, dead branches and trees, weeds, mistletoe and chupons. The aim of this "sanitary harvesting" is to prevent the spread of diseases such as black pod.

Pruning

An unpruned cocoa tree develops more branches than it needs to grow healthily. The unnecessary branches compete with cocoa pods for nutrients and reduce yields. The best cocoa tree has one stem only and two or three main branches, with enough side branches and leaves to capture most of the sunlight. Pruning has to be done to achieve a symmetrical, rounded canopy which looks like an umbrella with branches growing out and up. Pruning enables proper air circulation which improves air pollination, resulting in better pod setting and higher yields of cocoa

plants. When air circulation improves because of pruning, the incidence of pests and diseases on cocoa is reduced.

When to prune

- Main pruning is normally done in April or May before the onset of the rainy season. Main pruning helps to re-create the canopy, and shapes and controls the height of the tree to about 2.5 to 3 meters.
- Maintenance pruning should ideally be carried out after the main harvest (around December).
- Sanitation pruning should be carried out throughout the year to maintain a healthy tree and canopy. However, do not prune too many branches at the same time, and do not prune when the plant is flowering because it can reduce pod formation.

Where and how to prune

- Skirting: Remove the low and drooping branches and open up the underside of the tree.
- Height control pruning: Prune at the growth point of the plant to keep the height at about 2.5 - 3m.
- Tipping: Remove branches that are growing into the canopy of neighbour trees.
- Internal pruning: Cut out branches growing on the inside of the canopy and remove over-shaded branches and dead wood.

Removing chupons (new branches that grow on the stems of the cocoa trees) is important because they take nutrients, water and energy from the tree, which reduces production. Cut chupons off close to their base, using a sharp machete.

Removing weeds will ensure that the weeds do not compete with the nutrients of the cocoa tree. Weeding should be done manually on a regular base.

6. Integrated Crop and Pest Management (ICPM)

Integrated Crop and Pest Management (ICPM) is applied to **manage diseases** on cocoa effectively. The key element of integrated crop and pest management is to avoid conditions on the farm that favour diseases and pests. Under the ICPM approach, farmers seek to keep a balance between ecological and economic aspects of farm management. More information on ICPM can be found in topic II.5 (Integrated Crop and Pest Management).

Economic benefits

A simple calculation for an established farm using the “traditional” method without pruning and fertilisation compared to the modern system using a hybrid variety, pruning and fertilisation shows the economic benefits of the improved system:

	” Traditional” method without pruning and ferti- sation	“Modern” method with hy- brid cocoa, pruning and ferti- lisation
Area	1 ha	1 ha
Production costs (variable costs - mainly labour, inputs)	₦27, 820	₦ 131,950
Yield	350 kg	1,100 kg

Sale price (currently GHC 200/bag of 64 kg)	₦ 450/kg	₦ 450/kg
Gross revenue (price/kg x yield)	₦141,960	₦ 446,160
Gross margin or profit (gross revenue – production costs)	₦ 114,140	₦ 314,210

Source: adapted from CLP - Farmer Business School

This simplified calculation shows that in every year, the farmer who uses the modern cocoa cultivation method with the new hybrid variety has almost three times (₦ 200,070) more money in his pocket than the farmer who uses the old method.

Standards Requirements

Common Standards requirements

- All three Standards promote good agricultural practices to enhance cocoa productivity and hence incomes of producers.

Specific Standards requirements

UTZ

- The IMS identifies the barriers and feasible measures for group members to optimise their yields.
- To identify and prioritise feasible measures, the following are taken into account: - costs, potential yield increase, and availability of inputs required (e.g. labour, equipment, knowledge, pesticides, etc.).

Rainforest Alliance

- SAN's Sustainable Agriculture Standard actively promotes Climate Smart Agriculture to sustainably increasing agricultural productivity and incomes.

Fairtrade

- Discuss if investing the Fairtrade Premium in activities that increase productivity would help your members to have more secure incomes.
- Producers are encouraged to use at least 25% of the value of the Fairtrade Premium for productivity and quality improvement activities.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand the economic consequences of the “old” production method with little input and low yields and the new or “modern” method using improved varieties, pruning and fertilisation.
- Use improved cocoa varieties for (re)planting.
- Understand that improved techniques, such as pruning, fertilisation and ICPM principles need to be implemented to take full advantage of the agronomic and economic potential of the improved varieties.
- Appreciate that cocoa farming can be a very attractive business, if properly managed, making it also attractive to young people within the cocoa communities.

Materials needed: None

Time needed: 1 hour (when participants need to learn about pruning, add another 30 minutes to demonstrate pruning)

Preparations: None

Set up

Attention: Ask participants who would like to get more money out of their cocoa farms.

Title: The title of the session is *Productivity enhancement*.

Objectives: We will look at different techniques to increase the productivity.

Benefits: When you increase your production, your yields will be higher and you will get more money in your pocket.

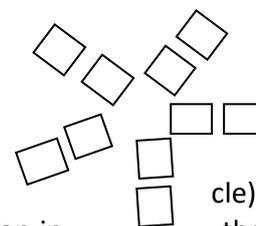
Direction: During this session we are going to focus on 6 practices to increase the production on your farm. All of them have been discussed before into detail so this will be an overview of what we can do to increase our production.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Form a **Margolis wheel**:

- a. Let participants form **two circles**: one outer circle and one inner circle (if you do not have chairs, let people stand).
- b. Participants from both circles should **face each other** (a participant standing in the inner circle should face someone in the outer circle). When you have an odd number of participants, have an extra person in the outer circle and let two participants in the outer circle face one participant in the inner circle.
- c. Tell participants that they should **discuss** with the person opposite to them what you can do on your farm to increase the production.
- d. Let participants discuss for a few minutes.



- e. **Stop the discussion.** Now everyone who is standing in the **inner circle** should take the place of the person on their right-hand side (which means the inner circle will **move** clockwise). Everyone now face another person.
 - f. Let participants **discuss** the same question for a few minutes.
 - g. Stop the discussion and now let everyone in the **outer circle** move: they should also move to the right (the outer circle will now move counter clockwise). Again let participants discuss for a few minutes.
2. Stop the discussions and **discuss the results**. Ask who would like to **share what they have heard**. Collect answers from several people and ask for an explanation. Add technical information if necessary. Make sure the following practices are mentioned:
- a. **Replanting:** Cocoa plantations that are older than 30 years usually have low yields due to the age of the trees, poor maintenance and low resistance to pests and diseases. A healthy cocoa tree produces 25 pods per year on average, giving approximately 1 kg of dry cocoa beans. Trees that produce ten or less pods per year are unproductive and replanting of the cocoa plantation is necessary. Replanting means removing unproductive trees and replacing them with new planting materials. Divide your plantation into two to four blocks and start with replanting on the most unproductive block. A block of one hectare will require 1,100 trees; therefore one hectare divided into two blocks is 550 trees, three blocks 366 trees and four blocks 275 trees.
 - b. **Improved planting material:** Farmers are tempted to use seeds from their own farm for replanting, because they think that would save costs. However, since the sources of pollen for those seeds are not known, farmers risk very low yields from the new trees in future. Planting material should always be obtained from seed gardens such as the Cocoa Research Institute of Nigeria (CRIN). CRIN has developed an improved hybrid variety (CRIN Tc1-Tc8) whose advantages are: early bearing (two years after transplanting), high yielding and better resistance to diseases (black pod, swollen shoot virus) and pests (capsids). This hybrid variety is available at all the stations of the Tree Crop Unit. The higher costs for improved hybrid plants as compared to farmer's own material will be very quickly recovered by the higher yields obtained once the trees come into bearing. The use of Genetically Modified Organisms (GMO) is not allowed.
 - c. **Soil management:** Soil is among the most important production factor for the farmer. The soil is a living organism, because it is a habitat for plants, animals and micro-organisms which play an important role for the productivity of the farm. Nutrients that we take out of the farm in form of cocoa pods have to be replaced, preferably by organic materials, such as leaf litter from cocoa and shade trees, animal manure, compost and green manure in form of leguminous plants. Increasing the organic matter in the soil improves its fertility and protects the soil against erosion at the same time.
 - d. **Fertiliser application:** Sometimes organic material is not sufficient to realise the full production potential of the cocoa tree, especially if high-yielding hybrid varieties are grown on the farm. Adding mineral fertilisers in addition to organic material will improve yields and incomes. In Nigeria, CRIN recommends a mixture of: 1.39 kg Urea + 3.4kg SSP or TSP + 1.36 kg MOP/Tree + 1% Solubo + 0.05% CuSO₄ + 0.7% ZnSO₄. The fertiliser is to be broadcasted under the cocoa trees once a year.
 - e. **Sanitation** means removing unwanted materials from the farm. To ensure good sanitation on the farm, particular attention has to be paid to the removal of dead, diseased or

damaged pods, dead branches and trees, weeds, mistletoe and chupons. The aim of this “sanitary harvesting” is to prevent the spread of diseases such as black pod.

- f. **Integrated Crop and Pest Management** is applied to manage diseases and pests of cocoa effectively. The key element of integrated crop and pest management is to prevent conditions on the farm that favour diseases and pests. Under the ICPM approach, farmers seek to keep a balance between ecological and economic aspects of farm management.
 - g. **Pruning** of cocoa trees has to be done to achieve a symmetrical, rounded canopy which looks like an umbrella with branches growing out and up to receive sunlight effectively. Pruning enables proper air circulation which improves wind-pollination, resulting in better pod setting and higher yields of cocoa plants. When air circulation improves because of pruning, the incidence of pests and diseases on cocoa is minimised.
3. When **pruning** is mentioned, explain the following. Pruning is **cutting branches to shape the canopy** of the cocoa tree and to **remove dead or unwanted branches**. Ask if someone can draw on the flip-sheet board how an **ideal canopy** should look like. Let several participants draw a canopy and discuss with all participants how an ideal canopy should be. If necessary make a **final visual** to show it (a symmetrical, rounded canopy which looks like an umbrella). Ask participants to **identify a well-pruned cocoa tree** on the farm where you are.
 4. Ask participants **when pruning** should be done for each type of pruning. Guide the answers towards:
 - a. **Main pruning** is normally done in April or May before the start of the rainy season. Main pruning helps to re-create the canopy, and shapes and controls the height of the tree to about 2.5 to 3 meters.
 - b. **Maintenance pruning** should ideally be carried out after the main harvest (around December).
 - c. **Sanitation pruning** should be carried out throughout the year to maintain a healthy tree and canopy. However, do not prune too many branches at the same time, and do not prune when the plant is flowering because it can reduce pod formation.
 5. Ask participants **where and how to prune**. Guide them towards the following answers and point to the concerned parts of the cocoa tree when something is mentioned:
 - a. **Skirting**: Remove the low and drooping branches and open up the underside of the tree.
 - b. **Height control pruning**: Prune at the growth point of the plant to keep the height at about 2.5 - 3m.
 - c. **Tipping**: Remove branches that are growing into the canopy of neighbour trees.
 - d. **Internal pruning**: Cut out branches growing on the inside of the canopy and remove over-shaded branches and dead wood.

Note for the trainer: Hopefully farmers already have followed a training programme that explained how to prune a cocoa tree. If farmers do not have sufficient knowledge, take a bit more time to **explain and demonstrate pruning**.

6. Add that each standard initiative has its own requirements. We have listed these requirements when we discussed the topics.

Finish

Summary: Summarise the agricultural practises that increase productivity.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants what they can do to increase productivity. Ask for details about replanting and improved planting materials.

Next Step: We have discussed many ways to increase your production. If you are capable to apply at least a few of them on your farm, it will get more money from your farm.

Topic II.8: Quality Enhancement

Key Information

Beans of **bad quality** can be **rejected** and farmers do not get any money for rejected beans. It is important to apply good practices including (*credit to Martin Gilmour, Mars Inc.*):

<p>Physical handling</p> <ul style="list-style-type: none"> • Avoid cutting beans during pod opening. • Avoid breaking the shell by careful handling in fermentation, drying, bagging and storage (e.g. scoops rather than shovels, store in low stacks). • Avoid mixing bean lots of differing quality. • Discard debris, foreign material, waste. • Discard flat, germinated, mouldy, insect-damaged, germinated, clumped and black beans. 	<p>Harvesting and breaking</p> <ul style="list-style-type: none"> • Harvest every two weeks during main harvest. • Harvest only ripe pods. • Discard diseased, mummified and insect damaged pods. • Avoid wounding pods with machete. • Break open the pods without causing any damage to the bean. • Discard germinated beans, insect damaged beans, debris. 
<p>Fermentation</p> <ul style="list-style-type: none"> • Store pods no longer than seven days. • Break pods with a wooden club/baton. • Discard the placenta, black beans, germinated beans. • Pile the wet beans on banana leaves (300-2000 kg wet beans). • Cover the beans with banana leaves, leave for six to seven days. • Mix the fermentation thoroughly after two days, cover again and leave for a further two days, repeat once. 	<p>Drying</p> <ul style="list-style-type: none"> • Sundry where possible, protect beans from rain. • Dry cocoa beans off the ground on raised drying mat, away from open fires and smoke. • Turn the beans frequently and cover them at night. • Dry for minimum of seven days in the sun (to below 8% moisture). 

Mitigation of agrochemical residues

- Apply Integrated Crop and Pest Management and see if there is an alternative that does not involve agrochemicals to control the pest or disease.
- Usage must comply with all national and international regulations.
- Only use agrochemicals that are approved by CRIN.
- Use the correct equipment.
- Apply the recommended quantities.
- Observe the **re-entry period** (the number of days between the pesticide application and the moment a treated field can be entered) and **pre harvest interval** (the number of days that need to be observed between the pesticide application and harvesting).
- Only use recommended agrochemicals.
- Assure an even application of the agrochemicals.
- Always use personal protective equipment and clothing.
- Assure correct disposal of agrochemicals containers.
- Avoid agrochemical cross-contamination (drying mat, storage areas, etc.).



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

This module is part of good agriculture practice (GAP) but goes beyond the certification requirements.

The quality of cocoa beans has several aspects:

- **Physical quality**, such as size, appearance, colour, degree of fermentation, foreign matter.
- **Organoleptic quality**, this means the flavour (smell and taste).
- **Chemical quality**, such as pH, moisture, Free Fatty Acids (FFA), essential oils, mycotoxins and agrochemical residues. The chemical quality assessment can only be done by a qualified laboratory.

The international standard for cocoa quality is described in the Codex Alimentarius of the Food and Agriculture Organisation (FAO).

Defects of cocoa beans which lead to reduction in their value and which can be assessed at farm level include the following:

- Mouldy/mildewed beans – poorly dried beans, mouldy smell.
- Insect damaged/moth-eaten beans.
- Slaty beans (dark-grey inside colour because of insufficient fermentation).
- Black beans with high free fatty acid (FFA) content caused by black pod and other diseases.
- Germinated beans caused by harvesting overripe pods.
- Purple beans because of harvesting unripe/green pods.
- Brown beans with black spots caused by over-fermentation.
- Smoked beans, caused by contact with smoke.
- Bean debris and foreign matter, because of poor sorting and unclean drying area.
- Small and flat beans, caused by poor nutrition and maintenance of the trees.

According to CRIN, defective beans should not exceed the following limits:

Grade I cocoa beans	Grade II cocoa beans
Mouldy beans, maximum 3% by count	Mouldy beans, maximum 4% by count
Slaty beans, maximum 3% by count	Slaty beans, maximum 8% by count
Insect-damaged, germinated or flat beans, total maximum 3% by count	Insect-damaged, germinated or flat beans, total maximum 6% by count

Good harvest and post-harvest practices are necessary to ensure good and consistent quality and food safety. To produce high quality cocoa is up to the farmer. Following the advice on good agricultural practices is the key to good cocoa quality.

<p>Mitigation of Free Fatty Acids (FFA) FFA is a component of every cocoa bean. High levels of FFA reduce the quality of the bean.</p> <ul style="list-style-type: none"> • Discard clumps of unripe beans (harvest only ripe pods). • Discard germinated and insect damaged beans. • Remove black beans from the fermenta- 	<p>Mitigation of mycotoxins (caused by fungal infection e.g. ochratoxin):</p> <ul style="list-style-type: none"> • Discard insect damaged / rotten / mummified pods. • Avoid wounding pods with machete. • Don't store harvested pods longer than seven days. • Follow heap fermentation and sun drying
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<p>tion and drying stages.</p> <ul style="list-style-type: none"> • Carefully handle beans in fermentation, drying, storage to avoid damaging the shell. • Dry cocoa beans thoroughly. • Store cocoa beans in a dry place. 	<p>guidelines.</p> <ul style="list-style-type: none"> • Dry cocoa to 7% moisture. • Carefully handle the beans. • Assure efficient removal of shell.
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Standards Requirements

Specific Standards requirements

UTZ

- Dry cocoa beans in a way that prevents contamination from smoke, fuel, odours, and other sources that may affect the quality.
- Equipment used for quality control is maintained in good condition to ensure correct functioning.
- A risk based mechanism is in place to respect Maximum Residue Levels (MRLs) of the destination country.

Fairtrade

- Discuss if investing the Fairtrade Premium in activities that increase quality would help your members to have more secure incomes.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know how to distinguish the good quality beans and the various forms of defective beans.
- Apply good agricultural practices to get good quality beans.

Materials needed:

- Lots of cocoa beans (at least 50) with different defects
- At least ten good quality beans
- Flip-sheet and marker for your preparations

Time needed: 1 hour

Preparations:

- Arrange the beans in groups of five to six beans. Make sure that every handful of beans contains one good quality bean and that the bad beans show different defects.
- Prepare a flip-sheet with the following text:

Quality of beans (*this is your heading so underline it*)

 1. Physical handling

2. Harvesting and breaking
3. Fermentation
4. Drying
5. Agrochemical residues

Set up

Attention: Show participants the bag of beans.

Title: The topic of this session is *Quality enhancement*.

Objectives: We are going to discuss what a bad quality bean is and look at several good agricultural practices to get good quality cocoa beans.

Benefits: If they know how to produce good quality, their beans will not be rejected, as high quality is a market requirement.

Direction: During this session, we will look at five different agricultural practices. Practices that have been discussed before will not be discussed in detail.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Show participants the cocoa beans and say that we are going to have a look at the **quality** of the beans. They have to discuss within groups which beans are of **lesser quality** and **why** they are of lesser quality. Split them in groups and give each group a handful of beans. Let the groups discuss for a few minutes.
2. **Discuss the results** (make sure everyone pays attention). Ask if all groups have found beans of lesser quality or if all beans are of good quality. Ask the first group who found beans of lesser quality to **pick out one bean** of lesser quality. Ask them **why** the bean is of poor quality. Write their answer on a **flip-sheet** (even if participants are illiterate, you should write it down to keep track of the answers). Ask the group to **show the bean** they are referring to, so everyone can clearly see what is wrong with the bean. Ask if other groups have a **similar bean**. Make sure that everyone has clearly seen the bean and knows why this bean is of poor quality.
3. Continue with the **other groups** and follow the **same procedure** until all groups have given their input. Make a second round if not all defects have been mentioned.
4. Make sure to have discussed the following **defects**:
 - a. Mouldy/mildewed beans – poorly dried beans, mouldy smell.
 - b. Insect damaged/moth-eaten beans.
 - c. Slaty beans (dark-grey inside colour because of insufficient fermentation).
 - d. Black beans with high free fatty acid (FFA) content caused by black pod and other diseases.
 - e. Germinated beans caused by harvesting overripe pods.
 - f. Purple beans because of harvesting unripe/green pods.
 - g. Brown beans with black spots caused by over-fermentation.
 - h. Smoked beans, caused by contact with smoke.
 - i. Bean debris and foreign matter, because of poor sorting and unclean drying area.
 - j. Small and flat beans, caused by poor nutrition and maintenance of the trees.

If one of the defects is not mentioned, look at the beans and see if you can detect a bean with such a defect and show it to all groups. If you do not have such a bean, just **mention** the defect.

5. Ask **what to do** with the defective beans. Guide the answer to: **return them to the field** or compost them together with other plant material. **Warning:** this should only be done with beans that do not contain any pests or diseases. Beans or pods that contain pests or diseases should be buried far away from any cocoa farm.
6. Ask the groups if any of them has a **good quality bean**. Let every group show the good quality bean. Walk around to check if every group has selected the good quality bean.
7. Ask **why producing good quality beans** is important. Guide the answer to:
 - a. It is a market requirement that your beans are of good/high quality.
 - b. It is a guarantee that your beans will be purchased when delivered to the Purchasing Clerks.
 - c. It helps to maintain the quality standard of Nigeria's cocoa.
8. Say that fortunately we can do a lot to **avoid bad quality beans**. Do an exercise to exchange experiences:
 - a. Split participants into **three groups**. Give each person in one group 3 cocoa beans (does not matter if it is good quality beans or not), give each person in another group 2 beans and each person in the last group 1 bean.
 - b. Say that everyone needs to find a partner who has a **different number of beans** in his/her hand. When everyone has found a partner they should **discuss** with each other what they can do to **ensure good quality beans**. Let everyone discuss for a few minutes.
 - c. Stop the discussion and say that the person with **most beans** should give one bean to the other person.
 - d. Again they should find a partner who has a **different number of beans** in his/her hand (it cannot be the same person!). Again let participants **discuss** what they can do to ensure good quality beans.
 - e. Stop the discussion and say that the person with **most beans** should give one bean to the other person.
 - f. Again they should find a partner who has a **different number of beans** in his/her hand (it cannot be the same person!). Again let participants discuss what they can do to **ensure good quality beans**.
 - g. Stop the discussion and say that the person with most beans should give one bean to the other person.
9. **Discuss the results**. Ask if two persons who have 1 bean in their hand can **share what they have heard**. Then ask two persons who have 2 beans in their hand to share what they have heard. Finally ask two persons who have 3 beans in their hand to share what they have heard. **Add information** and make sure the idea is well discussed.
10. **Show the prepared flip-sheet** with *quality of beans* and say that all these practices can be put into **7 categories**. Mention all categories and give **examples** of all categories. Refer to what was mentioned before by participants and add information that you will find in the additional information.

Finish

Summary: Summarise that good quality beans are required by the market and guarantee that your beans will be purchased when delivered to the PC. List what can be wrong about a cocoa bean. Use the flip-sheet to summarise the agricultural practices a farmer needs to do to get good quality beans.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants why good quality beans are important. Ask what they need to do in order to get good quality beans.

Next Step: The better you guarantee the quality of your cocoa beans, the less chance they will be rejected. Keep in mind that rejected beans do not bring any money in your pocket.

MODULE III:

GOOD ENVIRONMENTAL PRACTICES

Topic III.1: Water

Key Information



Avoid contamination with agrochemicals or waste



Maintain a natural vegetation belt

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

Water is a vital natural resource for the survival of men, animals and plants. With two thirds of the earth's surface covered by water and given the fact that 75% of our own body consists of water, it is clear that water is one of the prime elements responsible for life on earth. Water circulates through the land just as it does through the human body, transporting, dissolving, and replenishing nutrients and organic matter, while carrying away waste material.

Certified farms need to conserve water and avoid wastage. All kinds of contamination of surface and underground water have to be avoided by adequate measures, such as keeping a certain distance between the fields/plantations and rivers, streams, lakes, etc., preventing water contamination caused by the run-off of chemicals or sediments and by avoiding any dumping of wastes (crop residues, empty containers, plastic bags, etc.) into the waters. Manure, fertilisers and agrochemicals must be handled and stored in a way that prevents contamination because they pose a threat to human health and to biodiversity.

Standards Requirement

Common Standards requirements

Protect water sources against contamination and pollution by:

- Avoid soil tillage and cultivation close to water bodies.
- Avoid contamination of water bodies with agrochemicals (keep at least 5 m distance when spraying, store chemicals away from water).
- Dispose of liquid wastes safely away from water bodies (no waste deposit into water bodies).
- Maintain a natural vegetation belt, at least five meter wide, along water bodies which must not be treated with agrochemicals or fertilisers. Depending on the steepness of slope, cropping intensity and type of water body, the vegetation belt needs to be up to 20 m wide.
- Give clear instructions to all people on the farm about the water protection requirements.

Specific Standards requirements

UTZ

- Avoid the use of crop protection products within following distances:
 - Within 5 meters from any water body up to 3 meters wide including seasonal streams and creeks.
 - Within 10 meters from any water body over 3 meters wide (e.g. rivers and lakes).
 - Within 15 meters from springs.

Rainforest Alliance

- Map water resources found on the property.
- Establish buffer zones whereby the use of crop protection products is avoided within following distances:

For farms on flat land

- Within 10 m from streams and creeks
- Within 10 m from rivers and lakes
- Within 15 m from springs

For farms on a slope

- Within 20 m from streams and creeks
 - Within 20 m from rivers and lakes
 - Within 30 m from springs
- Treat water used for washing of application equipment and wastewater from houses (kitchen, shower and toilet) before discharging them into the environment.

Fairtrade

- Do not cultivate or apply agrochemicals to identified conservation and buffer zones around water bodies and watershed areas.
- List sources of water used for irrigating and processing Fairtrade crops.
- Keep informed about the situation of the water sources in the area.
- Provide training to members on measures to use water efficiently
- Handle wastewater from central processing facilities in a manner that does not have a negative impact on water quality, soil fertility or food safety.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Not cultivate and contaminate a buffer zone of at least 5 m to any water body.
- Be able to draw a map with water resources on his property (RA requirement) and to develop a water conservation plan.

Materials needed:

- Blue or white paper sheets or branches to visualise a water stream if there is no stream around
- Large sheet of paper
- Big marker
- If the group is to be certified by Rainforest Alliance: Mapping of the surface and underground water resources found on the property
- Example of map of the water bodies in the area for Rainforest Alliance or Fairtrade (see specific requirements)

Time needed: 1 hour

Preparations:

- If there is a water stream around, do your session next to this stream. If there is no stream, you have to make one by yourself, for example, by putting blue or white paper sheets or branches in the grass in the form of a stream.
- Draw several cocoa trees on the large sheet of paper with the marker. This is your cocoa field.

Set up

- Attention:** Ask participants why water is so important. Guide the answer to: water is a vital natural resource for the survival of men, animals and plants. Without water nothing can live. Add that water can become scarce in our region and therefore we need to handle it in a careful way.
- Title:** The title of this session is *Water*.
- Objectives:** We are going to discuss why water is so important for growing cocoa and how we can protect our water sources.
- Benefits:** If they know how to protect water sources around their farm, they can avoid contamination of these sources and protect their health, family and environment.
- Direction:** During this session, we will focus on water management on a cocoa farm but of course you need to manage the water in your community also well.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Take the participants to your **water stream** (either a real water stream or your visual of a water stream). Explain to them that this is a water stream.
2. Show them the visual of your **cocoa field** and tell them that this is your cocoa field. Place your cocoa field next to the stream (one meter or closer). Ask participants if they think it is a good idea to have a cocoa farm **close** to the water stream. Let a few people answer but do not comment on their answers. Tell participants that we are going to have a look at some of the consequences of farming nearby a water source.
3. Ask the following questions. Try to engage all participants in the discussion and encourage participants to think about the answer to the questions you will be asking.
 - a. *I am working on my cocoa field doing **cultivation and tillage**. What are the **consequences** for the water source?* Rain can wash soil into the water and contaminate it; the riverbank can become damaged by erosion.
 - b. *I have black pod on my farm and that I would like to spray with **agrochemicals** (pretend you are spraying your farm). What are the consequences of spraying so close to a water body?* Agrochemicals can leak into the water stream or can reach the stream via the soil and contaminate it.
 - c. *Is it more likely to have **black pod** on your farm if you are nearby or far away from a water source?* Nearby because fungus grows best in moist conditions, and the air humidity around water bodies is higher.
 - d. *The raining season will start and there is so much rain that the water source is going to overflow. What will happen to my farm?* The farm will be **flooded**.
4. Repeat that farming nearby a water body can contaminate the water and there is a risk of flooding. Ask *if it is not a good idea to cultivate or grow cocoa nearby the water, what would be a safe distance?* Collect a few answers. Tell participants that for protecting the water and for certification reasons they have to keep a distance of at least five meter from the water body.

5. **Move your farm** from the water source according to the **necessary distance** (Note for the trainer: the distances are different for every standard initiative. In the standard requirements in this topic, you will find the correct distance per standard initiative). Count the meters by counting your steps (one large step counts for one meter) or by using cutlass (3 cutlass are a bit less than 1 meter).
6. Ask participants *what else we can do to **protect the water source** from contamination?* Guide the answers to: no waste deposit (including agrochemicals or fertilisers) into water bodies, no washing of protective equipment or spraying equipment in the water, no storage of agrochemical containers near water. Ask for each case what the **consequences** would be. The consequences would be that you contaminate the water and people who are using the water (for example in the village next to your farm) will get sick. Make sure that everyone understands the consequences of contaminated water. Note for the trainer: Take your time to discuss these cases.
7. Add that in order to **conserve water** and prevent contamination they need to **plan** carefully their activities which may affect water bodies.
8. Tell participants that there are some **specific requirements** for the standard organisations. Tell the specific requirements and try as much as possible to show them to the participants. In particular, the mapping for Rainforest Alliance needs to be shown (show an example).

Finish

Summary: Summarise by saying that water is important for life and that we should handle it carefully. We should not farm too close to a water body (repeat the specific instructions according to the different standards), and avoid cultivation, tillage and spraying nearby water sources.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants why we should not farm close to a water source. Ask for the distances we need to observe when spraying agrochemicals.

Next Step: If you manage your water well, you and the whole community can benefit from it. Therefore it is important that everyone in the community will not contaminate water bodies.

Topic III.2: Safe and Responsible Use of Agrochemicals

Key Information



1. Protect yourself.



2. Read the label and use the recommended dosages of agrochemicals as indicated on the label.



3. Use only agrochemicals that are approved by the authorities.



4. Transport agrochemicals properly closed to prevent spillage and separate them from human beings and other user items.



5. Store agrochemicals in well ventilated places. Keep out of reach of children.



6. Place warning signs after spraying chemicals.



7. Triple rinse and puncture empty packages. Empty agrochemical containers should be stored, labelled, handled and disposed of safely.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

Farmers often apply agrochemicals without understanding the causes of the problems and without knowing how to prevent them in the first place. Agrochemicals are often used without selecting the most appropriate and safest product that is registered with the authorities. Spraying machines often do not have the recommended nozzle size or are not properly maintained, causing risks of poisoning for the farmer and the environment. Farmers must understand that application of agrochemicals must be based on rational use and that they are the last resort in a combination of various techniques to reduce the likelihood that pests and diseases grow out of control.

Before using agrochemicals:

1. Identify the **problem**: What am I trying to control?
2. Access the **level of attack**: Is it worth applying agrochemicals?
3. Think about **alternative control measures**: What other means can I apply apart from using agrochemicals?
4. Select chemicals **recommended by authorities**: Is the agrochemical on the list of approved chemicals?
5. **Read the label** and find out:
 - Is this the right product for the pest or disease identified?
 - How much will I need?
 - What is the pre-harvest interval?
 - How do I protect myself?

Personal protection measures

- Wear personal protective equipment (see also topic IV 1 on health and safety).
- Never use your mouth to clean nozzles.
- Never eat, drink or smoke while spraying.

How to spray cocoa

After making sure your equipment is in good working condition,

- Assess the target to know **which part of the tree to spray** (pods, trunk, shoot or whole tree).
 - **Fungicides** against black pod should be applied on the pods (spot treatment) with a knapsack sprayer with a cone nozzle.
 - **Insecticides** against mirids (akate) should be applied with a mistblower to cover the whole tree. Adjust the nozzle to 0.2.
- It is not necessary to apply **herbicides** against weeds on a mature farm. You might want to apply it when young trees are planted. In that case use a knapsack sprayer with a cone nozzle.
- Use the right amount of water and agrochemical **mixture**. Follow the instructions on the label and only mix the recommended quantity per spray tank. Only mix as much agrochemical as you need for the day.

- **Spray evenly** and make sure you do not miss any target.
- If there is **dripping** from the pods or leaves, reduce your volume application rate because you are spraying **too much**.

After spraying, **clean the sprayer** and then wash yourself and your clothes. **Do not dispose** of washing water near a water source. Rinse empty agrochemical packages at least three times (with the water for rinsing placed in the next spray tank load) before destroying and disposing of it.³

Standards Requirements

Common Standards requirement

- Keep agrochemicals out of reach of children.
- Only use or store agrochemicals which are permitted by the certification standard and officially registered in your country (RA and UTZ only).
- Do not use chemicals that are banned or not approved in the country for cocoa.
- Apply agrochemicals that are suitable for the pest, disease or weed, according to label recommendations.
- Use the prescribed dosage, timing and intervals of application of agrochemicals as indicated on their labels and train workers accordingly.
- Store agrochemicals in places which are well ventilated and light enough to ensure that product labels can be easily read.
- Properly seal agrochemicals when transporting them to prevent spillage.
- Store, label, handle and dispose of safely empty agrochemical containers.
- Place warning signs at the farm after applying agrochemicals to indicate time of application and recommended days until harvest and train workers accordingly.
- Keep invoices or any other documentary evidence of all agrochemicals used in a safe place and make them available at the time of inspection.
- Calibrate at least once a year and maintain application equipment in order to minimise waste and excessive applications of chemicals (RA and UTZ only).
- Do not re-use empty containers.
- Only apply agrochemicals if you have received an appropriate training.
- Keep records to prove that reliance on chemicals is being reduced gradually (RA and UTZ only).

Specific Standards requirements

UTZ

- Integrated Pest Management (IPM) measures are implemented and documented.

³ Sources: STCP (2005): *Learning about Sustainable Cocoa Production: A Guide for Participatory Farmer Training; 1. Integrated Crop and Pest Management.*
 ICCO/IPARC (2008): *Pesticide Use in Cocoa. A Guide for Training, Administrative and Research Staff.*
 CropLife Africa Middle East: *Spray Service Providers in cocoa.*

- Pesticides listed on the Banned Pesticides List cannot be stored nor used on the certified crop.
- Effective pesticides without any acceptable replacement can be used if mentioned on the Watch List and only if strict conditions are complied with
- Calibrate at least once a year motorized crop protection equipment to ensure correct operation.

Rainforest Alliance

- Store only the quantity of materials needed to guarantee continuity of work at a particular period.
- Rotate chemical products to prevent the development of resistance.
- Train workers very well before they handle chemicals.

Fairtrade

- Maintain a safe central storage area for agrochemicals and other hazardous chemicals. The safe storage area must:
 - be locked and accessible only to trained and authorised personnel.
 - be ventilated to avoid a concentration of toxic vapours.
 - have equipment, such as absorbent materials, to handle accidents and spills.
 - not contain food or any other items.
 - contain hazardous materials clearly labelled and indicating contents, warnings, and intended uses, preferably in the original container when possible.
 - contain information on safe handling (safety sheets).
- Label all agrochemicals clearly.
- Equip areas for preparing agrochemicals for spills. Plan spraying in such a way as to have no or very little spray solution left.
- Do not re-use agrochemical and other hazardous chemical containers to store or transport food or water.
- Triple rinse, puncture and safely store empty containers. Clean and store all equipment that has been in contact with hazardous materials.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Use agrochemicals rationally based on scouting and pest/disease infestation levels.
- Use only agrochemicals which are permitted by local authorities and standard initiatives.
- Apply agrochemicals by using the recommended dosages on their labels.
- Protect themselves by wearing protective clothing when applying agrochemicals.
- Store agrochemicals in places which are well ventilated, out of reach of children and away from food.

Materials needed:

- Visual 22 to 28 in large print (see overview of visuals per topic)
- Full set of protective equipment

- Copy a label of an agrochemical often used for cocoa

Time needed: 1 hour

Preparations: None

Set up

Attention: Ask participants who of them have ever sprayed chemicals on their cocoa farms. Probably most of them will raise their hand.

Title: The topic of this session is *Safe and responsible use of agrochemicals*.

Objectives: We are going to discuss general rules when applying agrochemicals.

Benefits: If they know how to use agrochemicals in a responsible way, they will reduce losses due to pests and diseases. In addition, if they know how to use agrochemicals in a safe way, they can avoid accidents and contamination that might harm human beings, animals and the environment.

Direction: During this session, we will not discuss how to actually spray the agrochemical. We will only focus on the general rules linked to certification.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Divide the participants in **six groups**. Give each group **one visual**. Tell the groups that each of them has a visual that indicates something they should do when handling chemicals. They should discuss what they **see on the visual** and what the **consequences** are if they do not follow what is depicted on the visual. Give the groups some time for discussions.
2. **Discuss the results**. Start with the first group. Let the group hold up the visual so everyone can see. Ask the group **what** the visual depicts. Then ask for the **consequences** if they do **NOT** what is depicted on the visual. Discuss the other visuals in the same way. Make sure to discuss the following:
 - a. **Visual 22 Protect yourself:** If you do not protect yourself you can get **contaminated** with severe consequences. Ask: *What are the consequences if you do not protect yourself?* When contaminated on the skin it can cause burnings. When contaminated in the eyes it can cause blindness. Inhalation or ingestion can even lead to death. In topic IV.1 on health and safety we will discuss this in more detail.
 - b. **Visual 23 Reading the label:** The visual depicts “read the label correctly and only use the **recommended dosages** of agrochemicals as indicated on the label”. Ask *what do to when someone **cannot read**?* The farmer should ask someone else to read the label or ask the extension officer for help. Ask *What are the **consequences** if they do not read the label?* The label gives information on how to correctly use the product, how to protect yourself, what to do in case of emergency, etc. If you do not read the label, you might have the **wrong product** or you will use the product not in the correct way (applying too much or not enough chemicals), which can lead to resistance of pests, waste of money (when nothing happens) or even **damage or destroy** your cocoa.

- c. **Visual 24 Use only approved agrochemicals:** The visual depicts to only use agrochemicals that are approved by the authorities. Ask: *What are the consequences if they use agrochemicals that are not approved?* With chemicals that are not approved by the authorities you are not sure about the active ingredients. The container might contain something completely different and can damage or destroy your cocoa. In addition, it is illegal to buy illegal or fake chemicals and you can be arrested.
 - d. **Visual 25 Transporting agrochemicals:** When transporting agrochemicals, they must be properly closed to prevent spillage and be separated from human beings and other user items. If chemicals are spilled during transport it can do serious damage to humans, animals and the environment.
 - e. **Visual 26 Storage of agrochemicals:** Store agrochemicals in places which are well ventilated and light enough to ensure that product labels can be easily read. Keep agrochemicals out of reach of children. Ask: *What are the consequences if we do not store our agrochemicals well?* If products are well stored, the quality will be guaranteed until the expiry date. Good ventilation is important to avoid nasty smells. If children swallow agrochemicals, they can die. Within a community it is a good idea to build a common storage place for agrochemicals.
 - f. **Visual 27 Re-entry period:** After applying agrochemicals, place warning signs at the farm to indicate the time of application and recommended days until harvest. Ask: *What are the consequences if you do not place a warning sign?* People can get very sick if they enter a farm that has just been sprayed.
 - g. **Visual 28 Handling empty containers:** Empty agrochemical containers should be stored, labelled, handled and disposed of safely. Ask: *What are the consequences if empty containers are not properly handled?* Reusing empty containers can lead to sickness and even death. When we discuss the topic on waste management (topic III.5) we will see how we can properly rinse and dispose of empty containers.
3. After the exercise, mention the following:
- a. **Never** use your mouth to clean nozzles. This is to avoid contamination.
 - b. **Never eat, drink or smoke** while spraying. This is to avoid contamination.
 - c. **Never spray against the wind.** This is to avoid that the cloud of spray will contaminate you.
 - d. **Never spray when it rains.** This is to avoid that the agrochemical will be washed away before being effective.
 - e. Assess the target to know **which part of the tree to spray** (pods, trunk, shoot or whole tree).
 - **Fungicides** against black pod should be applied on the pods (spot treatment) with a knapsack sprayer with a cone nozzle.
 - **Insecticides** against mirids (akate) should be applied with a mistblower to cover the whole tree. Adjust the nozzle to 0.2.
 - f. It is not necessary to apply **herbicides** against weeds on a mature farm. You might want to apply it when young trees are planted. In that case use a knapsack sprayer with a cone nozzle.

- g. Use the right amount of water and agrochemical **mixture**. Follow the instructions on the label and only mix the recommended quantity per spray tank. Only mix as much agrochemical as you need for the day.
 - h. **Spray evenly** and make sure you do not miss any target.
 - i. If there is **dripping** from the pods or leaves, reduce your volume application rate because you are spraying **too much**.
4. Tell participants that there are some **specific requirements** depending on the standard. Tell them the specific requirements and try as much as possible to show them to the participants. Emphasize that children under 18 years and pregnant women should never handle (storage, cleaning, transport) or apply agrochemicals.

Finish

Summary: Summarise all the Do's and Don'ts when handling agrochemicals by referring to the visuals. Stress the importance of protecting yourself.

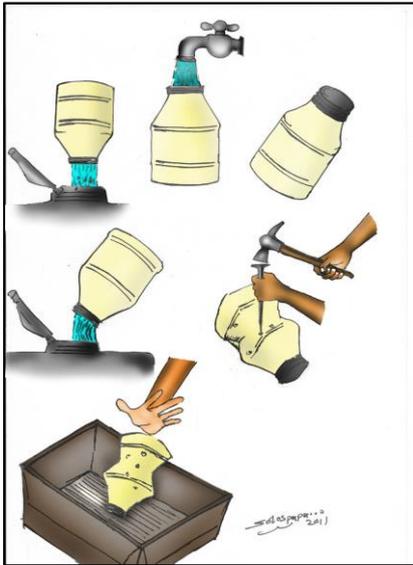
Questions: Ask if anyone has a question or comment.

Evaluation: Show a few visuals and ask what they depict. Ask a few do's and don'ts when using agrochemicals.

Next Step: Applying agrochemicals is one of the most difficult farming activities. Make sure to only have agrochemicals applied by those that have received training.

Topic III.3: Waste Management

Key Information



Dealing with empty agrochemicals containers

1. Drain the remaining product of the container into the spraying tank.
2. Fill the container for a quarter with clean water.
3. Shake the container very well (up and down) and drain the content in the spraying tank.
4. Rinse the container three times in total.
5. Puncture the empty container at the bottom with a sharp subject.
6. Put the empty containers in a special storage place in the community where no one can touch it.
7. Spray the waste water in your spray tank over your cocoa trees.
8. Bring the containers back to the buying company or input supplier.

NEVER BURN OR BURY YOUR EMPTY CONTAINERS!

Dealing with other waste

- Waste attracts diseases and harmful animals, so deal with it in a **proper way**.
- On your farm and within the community you can build **waste pits**; one for organic waste and one for non-organic waste.
- Bury infected pods **separately** far away from any farm.
- Leaves, branches, and other organic waste from the cocoa tree can stay on the farm as **residue**.

NEVER BURN ANY WASTE!

Background Information

Good waste management on farms is essential to ensure a healthy, safe and productive farming enterprise. Farmers are obliged to ensure that their waste do not impact negatively on the environment. 'Clean and green' agriculture is of increasing importance to cocoa farmers. Appropriate management of farm waste can benefit farms by preventing:

- Contamination of the land and water on farms.
- Breeding sites for disease spreading organisms.
- Pests and predators.
- Contamination of cocoa.

Avoid or reduce the production of waste

Effective waste management begins with purchasing only what you need. When purchasing materials, such as agro-inputs, consider the costs of disposal. Where appropriate, buy materials in bulk so that you save on packaging material.

Empty chemical drums and used containers

All empty chemical containers should be rinsed three times immediately after use to prevent the chemical residue from solidifying in the containers. Then puncture the containers in the base to make them unusable and store them in a secure compound until their disposal is arranged. The leftover and rinsing liquid can be sprayed on cocoa trees. The agrochemicals will be so much diluted that it will not harm the trees. The wastewater should be sprayed immediately and not kept for the next spray round. The reasons is 1) you do not know what chemical reactions might be formed in the spray tank when you add another product for another spray round, and 2) it is too risky to keep it in the spray tank (children might touch it, it might spill, etc.). Care should be taken to ensure that the water used for rinsing does not contaminate the environment - particularly the drinking water. Never burn the containers, because the fumes are toxic. Also burying of containers is not allowed.

Treat wastes where appropriate

Green wastes can be composted and reused as a fertiliser and soil conditioner. Composting green wastes will assist in destroying weed seeds.

Standards Requirements

Common Standards requirements

- Do not litter your farm or community with agrochemical containers, fertiliser bags, seed bags, feed bags etc.
- Dispose of waste as soon as possible so that they do not accumulate on your farm or community.
- Dispose of any agrochemical hazardous waste in a safe manner as indicated on their label.
- Use organic waste in sustainable ways such as composting and mulching and raise awareness in your community.

Specific Standards requirements

UTZ

- Dispose surplus agrochemicals or waste water according to national legislation. If national legislation does not exist or apply, apply surplus mix over an untreated part of the crop or on fallow land, as long as the recommended dose is not exceeded and harm to humans and the environment is minimized.
- Do not use open waste dumps and do not burn waste in the open-air.

Rainforest Alliance

- Transfer waste only to persons or businesses that have been authorised to collect it. This guarantees that the treatment or final use of the waste complies with legal requirements.
- Engage in practices such as soil cover management, planting trees and other perennial vegetation, proper sourcing and management of fertilisers and fuels to reduce green house emission.
- Do not use open waste dumps and do not burn waste in the open-air.

Fairtrade

- Designate areas for the storage and disposal of hazardous waste.
- Raise awareness among farmers about re-using organic waste through the implementation of practices that allow nutrients to be recycled. Burning organic waste may only happen if it is required by applicable legislation for sanitary purposes, or it is clearly a more sustainable practice.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Not resort to bad practices such as littering farm with waste, use of open waste dumps (RA and UTZ), reuse of agrochemical containers or burning of toxic waste.
- Know how to triple rinse correctly hazardous agrochemical containers and how to dispose of them.

Materials needed:

- Empty bottles with a fake label (made of paper wrapped around the bottle) that says “agrochemicals”. It is too dangerous to use real agrochemicals bottles.
- Empty carton boxes with the self-made label “agro-inputs”
- Empty plastic bags with the self-made label “agro-inputs”
- Empty plastic bags
- Empty water bags
- Cocoa and other leaves
- Cocoa husks
- Infected pods
- Bucket with water
- Empty bucket with the label ‘spraying tank’ or a real spraying tank
- Sharp object to puncture a plastic bottle

- Gloves

Time needed: 1 hour 15 minutes

Preparations:

- Put all materials (except the two buckets and the sharp object) on a table so participants can clearly see them

Set up

Attention: Tell participants that you have been to a cocoa farm this morning and that you have collected some waste.

Title: We are going to discuss *Waste management*.

Objectives: We are going to see what type of waste is coming from our farms and how we can best deal with it.

Benefits: If you know how to deal with waste in a proper way, you can avoid contamination of the environment, your farm and your family.

Direction: During this session, we will focus on waste from the farm. We will not discuss waste that can occur in their homes but of course you have to deal with that in a correct way as well.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Ask participants what **type of waste** they have on their **farms**. Make sure the answers include empty packages from agro-inputs (such as plastic bottles, carton boxes, and plastic bags), empty water bags (when they drink something on the farm), cocoa leaves, infected pods, cocoa husks and other materials. Every time a type of waste material is mentioned and you have it on your table, pick it up and **show** it to all participants.
2. Ask **why** you should **manage waste** on your farm. Guide the answer to: leaving waste on your farm can **damage** your health, the health of other persons and animals, and it can damage the environment. Add that they should dispose of waste as soon as possible so that it does not accumulate on the farm.
3. Tell participants that we will start with all **packaging materials for agro-inputs**. Put on the gloves and tell participants the first thing they should always do is to protect themselves! Hold up the empty **agrochemical bottle**. Look at the bottle and say that this bottle is of very good quality and that you are sure your wife/sister would like to use it to transport water. Ask participants if they think this is a good idea. Ask **why** it is not a good idea. Guide the answer to: agrochemicals are **hazardous** for human beings. When re-using empty bottles or other containers, people can get poisoned and they can even die.
4. Ask participants what you should do with the empty bottle. You need to **clean** it. Ask if someone can explain how to clean the bottle. The correct answer is: you need to triple rinse it, meaning you have to rinse the empty bottle **three times** with **clean water**. Ask if someone can **demonstrate** this for you. Give the person the bucket with water and the spraying tank or labelled empty bucket. Tell participants that we will demonstrate triple rinsing for a plastic bottle, but that they should follow the same procedure for metal containers.

5. Let the **volunteer** triple rinse the bottle. Every time the volunteer is doing a step **ask other participants** what the volunteer is doing. If necessary, **explain or add information**. Make sure the following steps are clearly demonstrated and explained.
 - a. Keep the bottle **upside down** to make sure all liquids are out. You should empty the bottle in the spraying tank.
 - b. Fill the bottle for **one-fourth** with clean water.
 - c. Close the bottle and **shake** for 30 seconds. Shake in a **vertical way**, not horizontally. This is to ensure that all liquids are mixed with the clean water.
 - d. **Empty the bottle** by placing it upside down over the spraying tank. Hold it for 30 seconds.
 - e. Repeat step b, c and d two times (in total you rinse the bottle three times).
6. Thank the volunteer for the excellent job done. Hold up the empty bottle and say: "So, this bottle is well cleaned, so my wife/sister can use it now to carry water." Wait for reactions. If there is no reaction, ask if this is a good idea. Ask why this is **not** a good idea. The correct answer is that even if an agrochemical bottle is triple rinsed, it still contains **residues** that cannot be seen with the naked eye, but still harm human beings and the environment. Repeat that you can **never re-use empty agrochemical containers**. Let all participants repeat this after you. Tell participants in order to make sure that no one can re-use this bottle, they should **puncture** it. Take a sharp object and puncture the bottle at the bottom.
7. Point to the empty bucket (your spraying tank). Ask what you should do with the **wastewater** in your spraying tank: you should spray it **immediately** over your cocoa. The product will be so much diluted that it cannot harm your cocoa trees.
8. Tell participants that we are going to continue with the **other types** of packaging materials for agro-inputs. Hold up the **carton box** and the **plastic bag** with agro-inputs. Ask what to do with this. To avoid re-use, they should **destroy** it by puncturing or cutting it in pieces.
9. Show participants all **punctured empty agro-input package materials** and ask what you should do with it after you have punctured everything. If someone says **burning**, ask what the consequences can be. When burning these materials, toxic smoke can develop. Even the on-farm incinerator is **not allowed** anymore because temperatures are not high enough to eliminate the toxic components.
10. If someone says **burying**, ask what the **consequences** can be. The consequences can be that the soil is getting contaminated. Repeat that **empty agrochemical packages should never be burned or buried**.
11. Add that the best option is to return the packages to the dealer or buying company. Till that time they should be stored in a separate **collection point**. You can make a collection point in the community.
12. Hold up the **plastic bags and empty water bags**. Ask what to do with this. If possible, the materials should be re-used. In some countries, including Nigeria, there are projects that collect the empty water bags and **recycle** them into handbags and other user items. Otherwise, make a **disposal pit** in the community that can be used by everyone.
13. Hold up the **organic waste**, including the leaves and pods. Ask what to do with this. These materials can be used in sustainable ways such as composting and mulching. Best is to leave them on the farm. Be aware: contaminated pods and other organic waste should be buried separately far away from any farm to avoid spreading of the disease or pest.
14. Repeat the **key messages**:

- a. Do not litter your farm with agrochemical containers, fertiliser bags, seed bags, feed bags, etc.
 - b. Dispose of waste as soon as possible so that it does not accumulate on your farm.
 - c. Dispose of any agrochemical hazardous waste in a safe manner as indicated on their label.
 - d. Use organic waste in sustainable ways such as composting and mulching.
15. Note for the trainer: Depending on the standard initiative, you should mention the specific requirements.

Finish

Summary: Summarise the key messages, explain the triple rinsing principle and stress that empty agrochemical containers must never be re-used.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants why waste management is important. Ask how to dispose of empty agrochemical containers. Ask what to do with organic waste.

Next Step: When you do not have a collection point for empty container in your community, discuss how you can develop one.

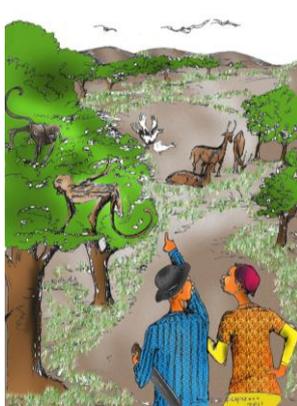
Topic III.4: Ecosystem Protection

Key Information

The **ecosystem** refers to all living things around you and how they interact with each other. A good functioning ecosystem will:

- Retain moisture in the soil and air so trees and other plants will grow better.
- Wildlife and other animals are preserved, including natural enemies of pests.

Cocoa production has **damaged** the ecosystem in Nigeria but farmers can take certain actions on their cocoa farm to protect the ecosystem.



Produce away from national parks, wildlife refuges, forestry reserves, buffer zones and other public or private conservation areas.



Establish protected zones by growing trees and other types of vegetation on the banks of water bodies.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

The habitats of plants and animals need to be **preserved** because all living species have a **role to play** in our environment. Forests, for instance, provide habitats for many plants and animals that find shelter and food. Farming, cutting trees, development of roads and new settlements destroy habitats. In this way, plants and animals which previously used such places are displaced or destroyed, leading to loss of biodiversity.

The **importance of forests** includes the following facts:

- Forests enhance **rainfall**. This happens when trees capture water from the ground and re-lease it into the atmosphere. This water comes back as rainwater.
- Forests act like a sponge to **retain large quantities of water**. They gradually release the water so that it does not run off to cause floods and erosion.
- Most rivers have their **source** in forests. Often, the only streams that flow in the dry sea-son are found in forests.
- Trees help to **reduce erosion** along streams and thus protect soil and maintain clean water.
- During unusual climate changes such as long dry periods and extreme rainfall, forests pro-vide **habitats for wildlife**.

Cocoa production has contributed to deforestation and biodiversity loss in West Africa and other tropical countries. However, cocoa can also play a **positive role** for the environment and biodi-versity conservation, if it is grown in a way that is similar to the cocoa's natural habitat, the rain forest. **Shade-grown** cocoa agroforestry systems are much more beneficial for the protection of biodiversity than full-sun plantation systems. Agroforestry systems involve growing tree species in association with food crops and livestock on the same piece of land. Cocoa agro-forests play an important role for the environment, like maintaining soil moisture, protecting soils from ero-sion, providing habitat for pollinators and other beneficial insects.

Benefits of shade-based agroforestry systems include:

- Improved soil fertility.
- Preservation of water sources and water quality.
- Control of pests and diseases and hence lesser need for agrochemicals.
- Enhanced pollination and crop production.
- Improved microclimate, favourable for cocoa production.
- Longer life for cocoa trees.
- A more diverse range of economic opportunities to farmers.

To manage biodiversity:

- Use simple tools like machetes (cutlasses), hoes, axes, etc., to clear land instead of burning the vegetation in order to maintain soil fertility and to minimise erosion.
- Leave part of the land to serve as habitats for wildlife.
- Keep a number of forest tree species, fruit trees and shrubs on farms. These trees provide fruit, give shelter to birds and animals, improve soil fertility and maintain the general eco-system of the farm.
- For food crops outside the cocoa plantation, maximise efficiency of land use by planting two or more crops on the same piece of land.

- Allow leaves, seeds, fruits and husks to decay on the spot to serve as organic matter in order to enhance soil fertility and water retention.
- Produce away from water bodies.
- Reduce the use of agrochemicals which are for the most part harmful to the environment.

A piece of land may be reserved to protect and serve as habitat for wildlife. They are **protected areas**. Such lands are sometimes protected by laws and managed by specific authorities. In protected areas no one is allowed to dwell, farm, cut down trees for timber, hunt or fish.

Standards Requirements

Common Standards requirements

- Produce away from national parks, wildlife refuges, forestry reserves, buffer zones and other public or private conservation areas.
- Protect ecosystems that provide habitats for wildlife.
- Do not cut forest trees to establish new farms.
- Establish protected zones by growing trees and other vegetation on the banks of water bodies and between farms and protected areas.
- Keep a vegetation cover wherever possible to avoid bare soils and plant or promote natural growth of diverse trees on land not suitable for agriculture.
- Use diverse and native tree species that will lead to multiple canopy levels.
- Do not collect threatened or endangered plant species.
- Do not burn to prepare new land for farming. Rather use tools such as machetes (cutlasses), hoes, axes etc. to clear land not addressed in Fairtrade Standards).

Specific Standards requirements

UTZ

- Maintain or plant at least 12 shade trees per hectare. Local indicator guidelines are:
 - Maintain a shade density of 40% equivalent to 20 trees per hectare (representing a spacing between trees of 22 m x 22 m on the ground) at all times.
 - Maintain an optimum shade canopy in accordance with the following developmental stages of the cocoa trees:
 - Maintain a minimum of 12 shade trees per hectare (equivalent to 24 m x 24 m and representing 30% shade) on farms with mature cocoa trees (4 years and above).
 - Maintain 70% shade corresponding to at least 12 permanent trees (providing 30% of the shade) and temporal shade from food crops (plantain, cocoyam, cassava, or native species) on young cocoa farms (0-3 years).
- Trees can be used for other purposes (e.g. wood or fruit).

Rainforest Alliance

- Do not cut timber trees and non-timber trees unless you have a permit that has been granted by legal authorities based on a sustainable management plan.
- Identify, protect and restore all existing natural ecosystems, both aquatic and terrestrial,

through a conservation programme that includes the restoration of natural ecosystems or the reforestation of areas within the farm that are unsuitable for agriculture.

- Meet the following requirements:
 - 20 trees per hectare, of which at least 12 different native tree species.
 - The tree canopy comprises at least two strata or stories.
 - The overall canopy density on the cultivated land is at least 40%.
- Protect and restore ecosystems that provide habitats for wildlife living on the farm, or that pass through the farm during migration. Take special measures to protect threatened or endangered species.
- Promote vegetative cover of the soil in general, in particular plant trees in areas susceptible to erosion (with steep slope, for example) and areas inadequate for agricultural production.
- Do not destroy any natural ecosystem or high value ecosystems by or due to purposeful farm management activities.
- Do not farm in areas that could provoke negative effects on national parks, wildlife refuges, biological corridors, forestry reserves, buffer zones or other public or private conservation areas.
- Do not cut natural forest to prepare a new farm.

Fairtrade

- Cultivation in virgin forest areas is prohibited; unless it is proven that there is no other arable land.
- Maintain a buffer zone of:
 - 100 meters around virgin forests and potable water sources.
 - 20 meters around rivers, swamps, lagoons, secondary forests and primary roads.
- Prevent the use of fire in ways that adversely affect natural systems.
- Avoid negative impacts on protected areas and in areas with high conservation value within or outside the farm or production areas from the date of application for certification. The areas that are used or converted to production of the Fairtrade crop must comply with national legislation in relation to agricultural land use.
- Report on activities that are carried out to protect and enhance biodiversity. Activities can include: identification of key biodiversity issues in the region and actions that farmers have implemented in order to improve the situation, training that was provided to farmers, agroforestry systems, maintaining and restoring natural ecosystems in areas that are not suitable for cultivation, and in buffer zones around bodies of water and watershed recharge areas and between production and areas of high conservation value, either protected or not, activities to increase ecosystem connectivity by identifying unproductive sites and buffer zones.
- Maintain buffer zones around bodies of water and watershed recharge areas and between production and areas of high conservation value, either protected or not. DO not apply agrochemicals, other hazardous chemicals and fertilizers in buffer zones.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand the importance of biodiversity for the environment and for the cocoa farm.
- Understand the contributions of forests to the ecosystem.
- Maintain the required (by standards) number of forest trees in farms.
- Produce away from national parks, forestry reserves and wildlife parks.
- Create protected zones by growing trees along water bodies.
- Preserve some natural species (such as multi-purpose trees and shrubs) as wildlife refuges on their farms.

Materials needed: None

Time needed: 45 minutes

Preparations:

- Identify a farm where you can show the different information on biodiversity as described under the learning objectives. If this is not possible, you should prepare a visual of a plot of land with all the information in it (a plot of land with trees, protected zones, natural vegetation, etc.)

Set up

Attention: Ask the participants who of them has trees on their cocoa farm (beside cocoa trees). Let people raise their hands.

Title: The topic of this session is *Ecosystem protection*.

Objectives: We are going to discuss the role of trees and how we can protect ecosystems.

Benefits: A healthy ecosystem will contribute to healthy cocoa trees and reduce the need for chemical inputs.

Direction: During this session, we will not discuss what shade trees are best for a cocoa farm and how to grow them. We will also not discuss which animals you can hunt and which you cannot.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Ask the participants if someone can explain what an **ecosystem** is. Collect a few answers and then guide the answer to: An ecosystem consists of plants, animals and microorganisms all **interacting** among themselves and with the **environment** in which they live (soil, water, forest, cocoa farm).
2. Ask the participants what the **role of forests** is. Guide the answers to: forests enhance **rainfall**. This happens when trees capture water from the ground and release it into the atmosphere. This water comes back as rainwater. Trees act like a **sponge** to retain large quantities of water. They gradually release the water so that it does not run off to cause floods and erosion. Often, the only **streams** that flow in the dry season are found in forests.
3. Ask the participants why it is important to **preserve the ecosystem**. Collect a few answers and add the following: all living species have a **role** to play in our environment. Forests, for

instance, provide **habitats** for many plants and animals that find shelter and food. A healthy ecosystem contributes to a sustainable cocoa production.

4. Ask if we always take **good care** of the ecosystem around us or if someone can mention some examples of not taking good care of the ecosystem. Collect a few answers. Add, if necessary, that farming, cutting down of trees, development of roads and new settlements destroy habitats of plants and animals.
5. Split participants in **small groups** of two to three persons. Tell them that every group has to think about what they can do as cocoa farmers **to protect the ecosystem**. Tell them they should think about the use of tools, agroforestry, water management, etc. Give the groups a few minutes to discuss.
6. **Discuss the results in plenary**. Ask the first group to give you one idea on how to protect the ecosystem on their farm. Ask other groups if they can observe what the group has mentioned on the cocoa farm where you are at the moment. If possible, **show it** (for example, if the group has mentioned to create a protected zone by growing trees along water bodies, show the trees).
7. Ask the **second group** for another idea and discuss it in the same way. Continue with the other groups. Make sure the following ideas are mentioned (if necessary, add them when all groups have given all their ideas). Try as much as possible to **show** the ideas to the participants:
 - Use **simple tools** like machetes (cutlasses), hoes, axes, etc., to clear land. It reduces erosion.
 - Leave part of the land to serve as **habitats** for wildlife.
 - Keep a number of **forest tree species**, fruit trees and shrubs on farms. These trees provide fruit, give shelter to birds and animals, improve soil fertility and maintain the general condition of the ecosystem of the farm.
 - Maximise **efficiency of land use** by planting two or more crops on the same piece of land.
 - Allow leaves, seeds, fruits and husks to decay on the spot to serve as **organic matter** to enhance soil fertility and water retention.
 - Produce away from **water bodies**.
 - **Reduce the use of agrochemicals** which are for the most part harmful to the environment.
 - Produce away from **national parks**, forestry reserves and wildlife parks.
 - Create **protected zones** by growing trees along water bodies.
 - Preserve some **natural vegetation** within the farm.
8. Refer to the visuals in the handout. Clearly explain what is seen on these visuals, including:
 - a. **Produce away** from national parks, wildlife refuges, forestry reserves, buffer zones and other public or private conservation areas.
 - b. Establish **protected zones** by growing trees and other types of vegetation on the banks of water bodies.
9. Tell participants that there are some **specific requirements** from the standard initiative. Tell the specific requirements (mentioned under Requirements) and try as much as possible to

show them to the participants. Depending on the standard initiative, you should add the specific requirements as described under requirements.

Finish

Summary: Summarise what a cocoa farmer can do to protect the ecosystem of the cocoa farm and to promote diverse (shade) trees. If possible, show it on the farm.

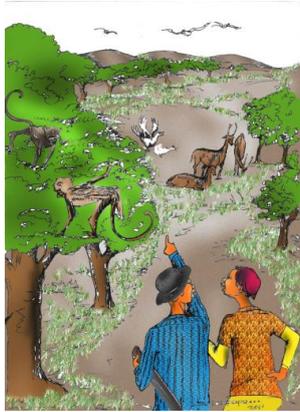
Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants why the ecosystem is important for us. Ask what they can do as cocoa farmers to protect the ecosystem. Ask for some specific requirements (answers will depend on the standards).

Next Step: We have discussed what we can do to protect the ecosystem on our cocoa farms. Please inform your family and labourers as well so we can create a healthy environment to grow our cocoa.

Topic III.5: Wildlife Protection

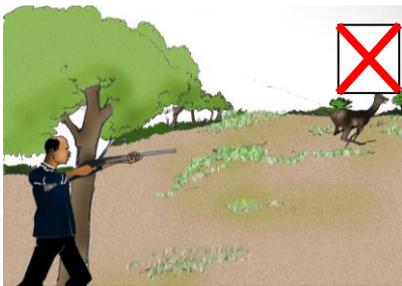
Key Information



Protect wildlife as a natural heritage of your country.



Don't use poison or other illegal methods for fishing and hunting.



Don't hunt protected animals.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Background Information

There are increased concerns about the **effects** that farming activities over the years have had on wildlife, with reports of **declining numbers** of farmland birds, insects, small mammals and rare plant species. The natural homes of plants and animals have been **altered or destroyed due to farming activities** such as land clearing, bush burning, application of agrochemicals, ploughing and harrowing as well as logging. Wildlife exists in a variety of habitats and some species, such as grass-cutters, can thrive in cultivated areas. Wild animals are our natural resources and require our collective efforts to conserve them. For most farmers wildlife is considered a pest that is directly competing with agricultural activities. However, wildlife does not have to compete with agriculture; on the contrary, it can **benefit** the farmers by maintaining a healthy balance in the ecosystem.

It is important for cocoa farmers to produce high yielding quality cocoa. However, their production objectives should not endanger the survival of wildlife. Instead, they should **conserve** wildlife through sustainable farming with the following activities:

- Maintain a **varied ecosystem** as much as possible by retaining semi-natural habitats such as wetlands, forest trees and having a wide mix of crops within the cocoa plantation. This will maximise the insect and seed food sources for wildlife and increase the number of breeding sites.
- **Keep fertilisers and agrochemicals away** from natural vegetation and water. Agrochemicals are hazardous pollutants that affect wildlife at many levels. Many agrochemicals take a long time to degrade and build up in the soils or throughout the food chain. Predators such as hawks and owls can be harmed if they eat poisoned animals. Some groups of animals which live in water bodies are particularly vulnerable to these chemical pollutants and suffer greatly as a result of the high levels of agrochemicals in their habitat.

In Nigeria, the annual ban on hunting and collection of wild animals, otherwise known as "Close Season" begins on 1st August and lasts till 1st December. This is the breeding season of most of the animals. During this period it is illegal for anybody to hunt, capture, or destroy any wild animal except the grass-cutter which can be done only under license issued by the Wildlife Division of the Forestry Commission.

Some endangered species in Nigeria⁴

African Elephant (*Loxodonta africana*)

Chimpanzee (*Pan troglodytes*)

Wild Dog (*Lycaon pictus*)

White throated monkey (*Cercopithecus erythrogaster*)

Sclaters' queron (*Cercopithecus sclateri*)

Niger Delta red colobus (*Procolobus pennatii epieni*)

Baboon-sized drill (*Mandrillus leucophaeus*)

Hippopotamus

⁴Nigeria biodiversity and Tropical Forestry Assessment (2008): http://pdf.usaid.gov/pdf_docs/PNADN536.pdf

Nigeria wildlife: <http://www.mapsofworld.com/nigeria/tourism/wildlife.html>

Ondo State Wildlife Animal Preservation Law 1978 CAP 129 Volume VI

Standards Requirements

Common Standards requirements

- Know the threatened and endangered species in the production area.
- Do not resort to bad practices such as bush burning, draining of ponds, or illegal hunting of wildlife animals.
- Protect and restore the ecosystems that provide habitats for wildlife living on, or pass through the farm (not required by Fairtrade Standards).
- Harvest in a manner that:
 - Maintains the viability of the species and allows it to continue to reproduce itself.
 - Is moderate to ensure that the product is still available to other species in the ecosystem which depend on it.
 - It respects legislation (i.e. closed season and open season).
 - Endangered species are not hunted on any occasion.

Specific Standards requirements

UTZ

- Monitor the animal and plant diversity and their abundance in the production area and establish a baseline.
- Ecological diversity is promoted by the group by protection and enhancement of habitats and ecosystems.

Rainforest Alliance

- Create and maintain an inventory of wildlife and wildlife habitats found on the farm.
- Do not hunt, capture, extract or traffic wild animals on the farm. The local indicator guidelines are:
 - Respect valid Ghanaian laws, customs and government policies on wildlife conservation.
 - Respect the annual ban on hunting and collection known as “close season” which begins every year on August 1 and lasts until December 1.
 - Do not hunt, capture or destruct any wild animal - except licensed hunting of grasscutter (“Akrantie”) - during this “close season” period.
 - Do not commit group hunting.
 - In areas defined as the Community Resource Management Approach (CREMA), comply with the regulation of hunting and other uses of wildlife as regulated within the framework of the wildlife division and in accordance with national legislation (Wildlife Division Policy 2000; section 5.4).
 - In areas where CREMA is not empowered, take initiative and/or encourage their communities to establish CREMA once the process of certification has begun, according to Wildlife Division Policy 2000 (section 5.6).
- Keep an inventory of the wild animals held in captivity on the farm, and implement policies and procedures to regulate and reduce their tenancy.
- Allow the farm to breed wild animals in captivity only when the farm has the required conditions and the permits stipulated by law.
- When reintroducing wildlife into natural habitats have the appropriate permit from the relevant authorities and comply with the conditions established by law, or reintroduce the animals via duly authorized and established programmes.

Fairtrade

- Raise awareness among farmers so that no collecting or hunting of rare or endangered species takes place.
- Raise awareness among farmers so that alien invasive species are not introduced.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know the threatened and endangered species in the production area.
- Not resort to bad practices such as land clearing by fire, draining of ponds, hunting protected wild animals, or excessive agrochemical use.
- Protect and restore the ecosystems that provide habitats for wildlife living on the farm, or that pass through the farm.
- Collect sustainably in a manner that allows the species to continue to reproduce itself and ensure that a sufficient number remains for other species in the ecosystem which depend on it.

Materials needed: Visual 29 and 31 in large print (see overview of visuals per topic)

Time needed: 45 minutes

Preparations: None

Set up

Attention: Ask participants who of them still lives in the areas where they grew up. Ask those participants if there was more or less wildlife in those days compared to now. Most will say there is less wildlife.

Title: The topic of our next session is *Wildlife protection*.

Objectives: We will discuss why wildlife is important, which species are endangered in the production area and what they as cocoa farmers can do to protect wildlife.

Benefits: Wildlife has a function in the ecosystem as we saw in the previous topic on biodiversity. Just as forests, wildlife on their cocoa farms can contribute to sustainable farming.

Direction: During this session we will only focus on wildlife, not on other aspects of biodiversity.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Refer to the question you asked about the **wildlife in their environment**. Ask if anyone has an idea **why wildlife is decreasing**. Collect a few ideas. Make sure the following is mentioned:

The natural homes of plants and animals have been altered or destroyed due to farming activities such as land clearing, bush burning, application of agrochemicals, ploughing and harrowing as well as logging.

2. Ask participants **why it is bad that wildlife is disappearing** from farms. Collect a few answers. Make sure the following is mentioned: Wildlife plays a vital role in the ecosystem. As part of good environmental practices as certified cocoa farmer, we need to protect the wildlife.
3. **Show** participants the visual (visual no 29 and visual no 30) with the **bad practices**. Explain that these visuals are bad practices. Ask participants what these bad practices are in relation to wildlife. Let participants **discuss** for a few minutes **in pairs**. After a few minutes, collect answers from a few groups. If a group mentions an action cocoa farmers should not do, ask **why** they should **not do this**. Mention the **consequences** of the actions so participants clearly understand why this action is not good. Add any ideas if necessary. Make sure the following is mentioned: bush burning, draining of ponds, poisoning for harvesting wildlife animals and other forms of illegal hunting, and overuse of fertilisers and agrochemicals or their application too near to water bodies. **Refer to the visuals** every time a bad practice is mentioned.
4. Show participants the visuals with the **good practices** (visual no 31) and explain that these visuals depict good practices. Ask what these good practices are. Discuss in the same way as the bad practices. Make sure the following is mentioned:
 - a. **Protect and restore the ecosystems** that provide habitats for wildlife living on the farm, or that pass through the farm.
 - b. **Harvesting** should be done in a manner that:
 - **Maintains** the viability of the **species** and allows it to continue to reproduce itself.
 - Is **moderate** to ensure that the product is still available to other species in the ecosystem which depend on it.
 - **Maintains** a varied **ecosystem** as much as possible by retaining semi-natural habitats such as wetlands, forest trees and having a wide mix of crops within the cocoa plantation.
 - **Respects legislation** (i.e. closed season and open season).
 - **Endangered species** are **not** collected on any occasion.
5. Tell participants that the standard initiatives have some **specific requirements**. Mention these requirements depending on the certification aimed for.

Finish

Summary: Summarise why wildlife is important and what the do's and don'ts are. Use the visuals to give the summary.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants why wildlife is important. Ask what they should not do as cocoa farmers. Ask what they should do.

Next Step: We have discussed how to protect our wildlife. Make sure to inform your family member, everyone in the community and your labourers.

MODULE IV: GOOD SOCIAL PRAC- TICES

Topic IV.1 Health and Safety

Key Information



Put warning signs after spraying chemicals



Store chemicals out of reach of children



Store chemicals away from foodstuffs



Wear protective clothing

When working with sharp tools

- Wear closed shoes.
- Do not work too close to someone else.
- Do not use them when taking medicines or any other type of sedative.
- Check your equipment to ensure that it is in good condition.

When working with ladders

- Make sure the ladder is in a good order.
- Make sure the ladder is firmly placed and cannot shift.
- Ensure that you have “three-point-contact” i.e. either your two legs and a hand are in contact with the ladder or you have your two hands and a leg in contact with the ladder
- Do not overreach.

Background Information

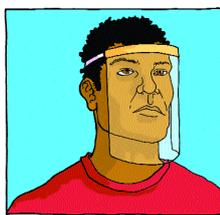
Because of widespread diseases and pests in cocoa, farmers frequently use agrochemicals, such as insecticides, fungicides and herbicides in their plantations. These products can be a serious health threat for the farmer and his/her family, either through direct contact when spraying or by contaminating food or water when stored improperly. It is important for farmers to store agrochemicals in a safe place and to wear protective clothing when handling and applying agrochemicals.

Personal protective clothing and equipment

- **Long dresses** (preferably overalls): Long dresses protect the body. Wear shirts and other dresses which have long sleeves and full length trousers when handling agrochemicals. Close the long sleeved shirt at the neckline and wrists. Remove them immediately if they become wet when applying agrochemicals.
- **Gloves:** Gloves protect the hands. Wear gloves over the sleeves. Only when mixing chemicals, gloves should be worn under the sleeves. Always wear gloves when handling agrochemicals. Do not use gloves made of cloth as these absorb chemicals.
- **Boots:** Boots protect your feet. You should always wear boots when handling agrochemicals. Make sure that the legs of your trousers are outside your boots so the liquid does not run into your boots.
- **Goggles or face shields:** Goggles protect the eyes while face shields protect the whole face. Wear goggles if there is a chance of getting agrochemical spray or dust in your eyes. Face shields protect your face and eyes from direct splashes of agrochemicals. Do not use goggles with cloth or foam headbands. Wash goggles and face shields with warm, soapy water immediately after use and store them in a clean, dry place.
- **Mask or respirator:** Masks and respirators protect the nose and the mouth. Masks or respirators are recommended when handling dust or powders. Respirators are required when spraying storage agrochemicals inside a building (note: this is only allowed by people who have followed a special training for this!).
- **Hats:** Hats protect the head. Wear a wide-brimmed hat during spraying to reduce the risk of exposure to agrochemicals by splashing or drifting during spraying.



Goggles



Face shield



Mask



Respirator

Storage of plant protection products

Keep agrochemicals under lock and key away from children. Lock away chemicals safely so that they do not contaminate food and feed by spillage or evaporation. Store chemicals in dry and cool conditions. Finish using old consignments before using new ones.

Re-entry times

For safety reasons, a certain time interval should elapse between agrochemical applications and the re-entry of the treated areas. This is known as the re-entry period. During this period, the chemical is absorbed by the crop or otherwise removed from the plant surface. Read the label on the chemical to know its recommended re-entry period. Display hazard warning signs at entry points to create awareness of the restriction. Children should be strictly protected from entering the treated areas.

(Source: CropLife Africa Middle East)

Sharp tools

Machetes, axes, harvesting hooks, pruners, ladders, earth chisels, knives and chain saws are some of the tools used by both men and women in cocoa farm work for land clearance, weeding, pruning, harvesting and other activities. The use of these tools can be hazardous and lead to injury.

Risks when handling tools

- Tools are used by untrained and unsupervised youth and children.
- Farmers injure other farmers working too close to them.
- Improper use of chain saws by inexperienced, untrained operators.
- Use of sharp tools when drunk or under the influence of drugs (including medication).

Outcome of exposure

- Cuts to the operator due to accidental contact of the sharp edge with a body part.
- Injury to other farmers.
- Heavy loss of blood.
- Infected wounds if the cut is not properly treated.
- Amputations, especially during chain saw use.

How to avoid accidents

- Always wear closed shoes when working on the farm.
- When working together in a group, leave a wide distance between you and the others.
- Do not use sharp tools after drinking alcohol or taking medicine that makes you feel sleepy.
- Chain saws should only be used by a trained operator or under the supervision of an experienced operator.

Ladders

Description of hazard

- Use of weak or damaged ladders (for example, ladders with missing rungs).
- Incorrect placement of the ladder.
- Overreaching while on ladder.

Outcome

- Falls, which may result in broken bones and other injuries.

How to avoid accidents

- Inspect ladder to ensure it is in good order.
- Do not use a weak ladder or one with missing rungs.

- Place ladder on firm ground and not on tables, drums or other such supports. If ladder is too short for the job, find a longer one.
- To prevent the ladder from slipping it can be held in place by another person or by tying it to an object.
- Place ladder such that at least three rungs are above the highest place to be reached.
- The distance from the base of the ladder to the base of the surface to which the ladder is leaned should be one-fourth of the total length of the ladder.
- Always ensure that you have “three-point-contact” i.e. either your two legs and a hand are in contact with the ladder or you have your two hands and a leg in contact with the ladder.
- When carrying a load, make sure you have one hand free to grip the ladder.
- Do not overreach while working on the ladder. Overreaching may cause you to fall.⁵

Standards Requirements

Common Standards requirements

- Store agrochemicals out of reach of children.
- Store agrochemicals and protective clothing away from foodstuffs in a well-ventilated area.
- Store agrochemicals in sealed containers so that they do not spill over.
- Wear protective clothing when handling or applying agrochemicals.
- Clean and dry protective clothing and equipment after use.
- Place warning signs at entry points of treated areas to alert people of re-entry periods after an agrochemical application.
- Store agrochemicals separately according to their characteristics.
- Handle and apply agrochemicals only if you have been trained to do so.
- Do not allow persons younger than 18 years, pregnant or nursing women to handle agrochemicals or fertilizers.
- Ensure there are clean sanitary facilities available for all persons that come in contact with agrochemicals.
- Keep a first aid box to be able to respond to emergency situations.
- Wash all agrochemical containers three times before being stored for disposal or return to supplier.

Specific Standards requirements

UTZ

- Ensure that only people that have been properly trained will handle agrochemicals.
- Inform labourers about health, safety and environment risks in the production process.
- Keep records of all pesticides that are used by the producers.
- Protect people from entering recently sprayed areas.
- Handle and dispose surplus application mix and empty containers in a way that minimizes exposure to humans, the environment and harvested cocoa. Handle obsolete pesti-

⁵ Source: S. Tettey, M. Ogoe and S. David, 2009. Preventing and reducing injuries and ill health in cocoa production. Learning about sustainable cocoa production: a guide for participatory farmer training, manual no. 4. Sustainable Tree Crops Programme, International Institute of Tropical Agriculture, Accra, Ghana. October 2009 version.

cidesadequately and securely.

Rainforest Alliance

- Ensure that all people who apply or handle agrochemicals undergo medical examinations before initiating such activities on the farm.
- Allow only males between the ages of 18 and 60 to handle and apply agrochemicals.
- Ensure that all agrochemical containers maintain their original labels.
- Store only the amount of agrochemicals necessary to meet short term needs.
- Do not allow anyone to apply agrochemicals for more than six hours per day in order to limit their exposure to agrochemicals and to minimise the risk of accidents.

Fairtrade

- Ensure everyone organization who handles agrochemicals and other hazardous chemicals is trained on the risks of handling these materials and on how to handle them properly. The training must address:
 - how to store safely, especially so materials cannot be reached by children
 - how to understand the product label and other safety instructions made available by the manufacturer. Containers should be labelled indicating contents, warnings, and intended uses (preferably in the original container when possible)
 - how to handle accidents and spills when preparing and applying
 - how to handle and safely dispose of empty containers, including triple rinsing and puncturing containers
 - intervals of time when people are not allowed to enter a sprayed area or field without any personal protection equipment.
- Raise awareness amongst all members and workers of the hazards and risks related to agrochemicals and other hazardous chemicals, even if they are not directly handling these materials
- Do not apply agrochemicals and other hazardous chemicals within 10 metres from ongoing human activity (housing, canteens, offices, warehouses or the like). Keep a buffer zone of at least 10 metres unless there is a barrier that effectively reduces agrochemical drift.
- Ensure that work processes, workplaces, machinery and equipment on the production site are safe.
- Do not allow children under the age of 18 years, pregnant or nursing women, mentally handicapped people, people with chronic, hepatic or renal diseases and people with respiratory diseases to carry out any potentially hazardous work. Ensure alternative work for employees in the case that a change of work is necessary to comply with this requirement.
- Have accessible first aid boxes and equipment and a sufficient number of people trained in first aid in the workplace at all times.
- Provide clean drinking water and clean toilets with hand washing facilities close by for workers, and clean showers for workers who handle agrochemicals. These facilities must be separate for women and men and the number of facilities must be in proportion to the number of workers.
- Ensure that workers nominate a representative who knows about health and safety issues and who will raise workers' concerns on health and safety issues with the organisations management.
- Provide training to workers who carry out hazardous work on the risks from this work to their health, and to the environment, and on what to do in case of an accident.
- Display all information, safety instructions, re-entry intervals and hygiene recommendations clearly and visibly in the workplace in the local language(s) and with pictograms.

- Provide and pay for personal protective equipment for all workers who perform hazardous work. It must be made sure that the personal protective equipment is used and that replacement equipment is ordered and distributed when the existing equipment wears out.
- Improve health and safety conditions by:
 - putting up warning signs that identify risk areas and potential hazards in local languages and including pictograms if possible.
 - providing information to workers about safety instructions and procedures including accident prevention and response.
 - putting safety devices on all hazardous machinery and equipment and protective guards over moving parts.
 - providing safety equipment to all workers who perform hazardous tasks and instructing and monitoring workers on its proper use.
 - storing equipment safely for chemical spraying.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know the health hazards of agrochemical use for the skin, for the eyes, and by ingestion or inhalation
- Protect themselves by wearing the recommended set of protective clothing and materials.
- Know that children and pregnant or nursing women must not handle or apply agrochemicals.
- Store agrochemicals in tight containers in locked places to protect themselves, children and other people from hazards.
- Place warning signs at entry points of treated areas to alert people of the re-entry.
- Handle hazardous tools and equipment (machetes, chain saws, ladders) properly.

Materials needed:

- Personal Protective Equipment including gloves, boots, overalls, hat, goggles and mouth-piece or facial screen.
- Flip-sheet board
- Markers (at least one black and one red)

Time needed: 1 hour

Preparations: Visual of a human being (use the whole full flip-sheet so you will have a large drawing)

Note for the trainer: this topic has some overlap with topic III.2 Use of agrochemicals. Because safe and responsible use and careful handling of agrochemicals some key information is repeated here.

Note for the trainer: it is useful that you practise how to put on the protective equipment and remove it in the correct order, so it will be easier to explain why this order is so important.

Set up

- Attention:** Show a few pieces of personal protective equipment and ask participants why we are wearing this when handling agrochemicals. They will answer: to protect ourselves.
- Title:** The topic of this session is *Health and safety*.
- Objectives:** We are going to discuss how to reduce risks with handling agrochemicals, sharp tools and ladders on the farm.
- Benefits:** If you know the protective equipment and how to wear it, you can protect themselves against contamination. In addition, you can reduce serious accidents when you handle sharp tools and ladders well.
- Direction:** During this session, we will discuss safety and health rules when handling agrochemicals, sharp tools and ladders. We will not discuss any product information.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Ask participants again **why** we should wear **protective equipment** when handling agrochemicals. They will answer: **to protect ourselves**. Tell participants that we are going to have a look at the **consequences** when they do not wear protective equipment during handling and spraying of agrochemicals. Show your visual of the **human being**. Ask participants **how** agrochemicals **can enter your body**. Every time a participant mentions a body part, take the red marker and mark that part red. For example, when someone says “mouth”, mark the mouth red. By the end, your whole human being should be red. Say that agrochemicals can enter through:
 - a. **Dermal transfer:** via the skin -when skin and eyes are not protected-, or when agrochemicals soak through clothing.
 - b. **Inhalation:** by breathing, especially in closed spaces or spraying against the wind.
 - c. **Ingestion:** by swallowing, when eating, drinking, or smoking with contaminated hands.
2. Ask participants what the **consequences** are when you get **contaminated** by agrochemicals on contact with **the skin** (dermal absorption) or with the eyes. Guide the answers to:
 - a. Itching.
 - b. Burning of the skin, leaving scars.
 - c. Infertility.
 - d. Blindness (if contact with eyes).
 - e. Numbness or weakness of arms, legs, feet or hands.
 - f. Some serious cases can lead to infertility (after contact with the scrotum, for example when urinating with contaminated hands) and even death.
3. Ask participants what the **consequences** are when you get **contaminated** by agrochemicals by **ingestion or inhalation**. Guide the answers to:
 - a. Dizziness
 - b. Vomiting
 - c. Convulsions
 - d. In serious cases it can lead to coma and respiratory and cardiac failure resulting in death.

4. Tell participants that we have heard enough reasons to **protect ourselves** when handling agrochemicals. Ask participants how we know what to wear as protective equipment. Guide the answer to: **read the label**. We should always read the label when handling agrochemicals.
5. Now we are going to see in practice **how we can protect ourselves**. Take the protective equipment and show all pieces to the participants. Every time you **show a piece**, you **ask** participants how it is called and **what it protects**:
 - a. **Gloves** to protect your hands.
 - b. A **hat** to protect the top of your head.
 - c. **Overalls** (or comfortable clothes) to protect your body, arms and legs.
 - d. **Boots** to protect your feet.
 - e. **Goggles** to protect your eyes.
 - f. **Respirator or mask** to protect your mouth and nose.
 - g. **Facial mask** to protect your eyes, mouth and nose.

Note for the trainer: You either show goggles and a respirator or mask, or a facial mask.

6. Ask for a **volunteer**. Ask the volunteer to stand in front of the group. Tell the group that **they should tell** the volunteer **how to dress** him/herself. Every time someone says something and the volunteer does it, **describe** what the volunteer is doing. Ask the other participants **why** the volunteer is doing this. For example: if the volunteer is putting on gloves over his sleeves, say: He is putting the gloves over the sleeves. Is this **correct**? Can anyone tell me **why**?
7. Make sure to **discuss the following**:
 - a. **Order of putting equipment on**: start with the overalls or an apron; then put on the mask, goggles, hat, boots, and finally the gloves.
 - b. **Wear gloves over sleeves** to avoid chemicals leaking into the sleeves (except when mixing; in that case gloves should be worn under the sleeves).
 - c. **Wear trousers over the boots** to avoid chemicals leaking into the boots.
8. Ask the volunteer to **remove all equipment**. Tell participants that when removing equipment they should start by washing the gloves (while wearing them) before removing anything. Then remove the hat, goggles, mask, boots, gloves, and overalls. Thank the volunteer and let him/her take his/her seat again.
9. Add that they should **wash themselves** with soap and water after they have finished. Work clothes including footwear must be washed with soap or other detergents after each day's use. It must be washed **separately** from other clothing and kept in a separate place. They should **not dispose** of the washing water near a water source.
10. Tell participants that they now know how to protect themselves, but they should also **protect their children and the environment**. They can do this by:
 - a. **Storing agrochemicals in locked places** to protect themselves, their children and other people from hazards.
 - b. **Storing agrochemicals in tight containers** so that they do not spill over or evaporate.
 - c. **Placing warning signs** at entry points of treated areas to alert people of the re-entry after an agrochemical spraying.
 - d. Categorically **excluding** persons younger than 18 years and pregnant or breastfeeding women to handle or apply agrochemicals.

11. Add that besides agrochemicals, also **sharp tools and ladders** can cause accidents. Ask if anyone can give an **example** of someone who got an accident with a sharp tool or ladder. Let a few people tell their (juicy) story or tell one yourself. Sharp tools can cause **cuts** to the operator due to accidental contact of the sharp edge with a body part; injury to other farmers, heavy **loss of blood, infected wounds** if the cut is not properly treated, and even **amputations**, especially during chain saw operations. Falling from a ladder can result in **broken bones** and other injuries.
12. Ask what can be done to **avoid accidents** with **sharp tools**. Make sure the following is mentioned:
 - a. Always wear **closed shoes** when working on the farm.
 - b. When working together in a group, leave a **wide distance** between you and the others.
 - c. **Do not use** sharp tools after drinking alcohol or taking **medicine** that makes you feel sleepy.
 - d. **Chain saws** should **only be used** by a trained operator or under the supervision of an experienced operator.
13. Ask what can be done to **avoid** falling from a **ladder**. Make sure the following is mentioned:
 - a. Inspect ladder to ensure it is in good order.
 - b. Do not use a weak ladder or one with missing rungs.
 - c. Place ladder on firm ground and not on tables, drums or other such supports. If ladder is too short for the job, find a longer one.
 - d. To prevent the ladder from slipping it can be held in place by another person or by tying it to an object.
 - e. Place ladder such that at least three rungs are above the highest place to be reached.
 - f. The distance from the base of the ladder to the base of the surface to which the ladder is leaned should be one-fourth of the total length of the ladder.
 - g. Always ensure that you have “three-point-contact” i.e. either your two legs and a hand are in contact with the ladder or you have your two hands and a leg in contact with the ladder.
 - h. When carrying a load, make sure you have one hand free to grip the ladder.
 - i. Do not overreach while working on the ladder. Overreaching may cause you to fall.
14. Note for the trainer: There are some **specific requirements** for Rainforest Alliance and Fairtrade that you should mention.

Finish

Summary: Summarise by showing the personal equipment, detail what it protects and specify for the boots and gloves how to wear them (trouser over boots, gloves over sleeves). Add how to protect children and the environment. Ask what to do to avoid injuries from sharp tools and defective ladders.

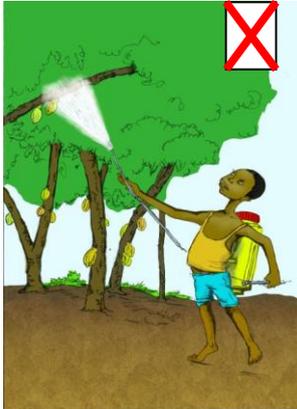
Questions: Ask if anyone has a question or comment.

Evaluation: Show participants a few pieces of protective equipment and ask what it protects and how we should wear it. Ask who can handle and apply agrochemicals. Ask how we protect our children and the environment.

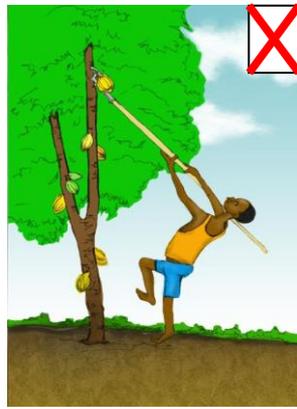
Next Step: Contamination with agrochemicals and accidents with sharp tools and ladders can have horrible consequences. Make sure to inform family members and labourers on how to avoid these accidents.

Topic IV.2: Child Labour

Key Information



Children must not spray or handle chemicals.



Children must not use the harvesting hook ("go-to-hell").



Children must not climb trees to cut mistletoe.



Children must not use sharp tools.



Children must not transport heavy loads.



Give children light tasks.



Send your children to school.



Opening cocoa pods with a wooden mallet.

Background Information

Every child has a right to education, a decent livelihood, development and protection, but this is not always the reality in cocoa growing areas. As various reports⁶ pointed out, many children in West African cocoa areas are engaged in the worst forms of child labour, for example in hazardous work that is dangerous to their health, safety and development. These children carry heavy loads, work long hours in the sun, and some of them are even trapped in forced labour on cocoa farms. These children typically lack any opportunity for education, leaving them with no way out of poverty. Education for a child is an important step towards securing opportunities and a decent livelihood as an adult. Many consumers around the world put pressure on the big chocolate manufacturers to take tangible and concrete steps to put an end to the worst forms of child labour in the cocoa sector. If the worst forms of child labour continue, producers may find it difficult to market their cocoa as consumers are increasingly aware that they do not want to consume products made with child labour. Moreover, child labour constitutes a violation of children's basic rights enshrined in national laws and international conventions. There exists an international cocoa initiative against the worst forms of child labour.

What are worst forms of child labour?

Child labour is work that exploits a child by preventing it from access to education and harming its health and/or development. According to the ILO (International Labour Organisation of the United Nations), child labour refers to work that is mentally, physically, socially or morally harmful to children and interferes with their education by preventing them from going to school or by requiring them to combine school attendance with excessively long and heavy work (ILO Convention 182). The minimum age for a child to be legally allowed to work is determined by laws in each country and can be set at 14, 15 or 16 years. In Nigeria, the minimum age for employment is 18.

Child labour may appear in many different forms. One category of child labour is referred to as "the worst forms of child labour" and is defined as *work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of a child*. It has been defined to include all forms of slavery, child trafficking, child soldiers, commercial sexual exploitation, hazardous child labour and using children in illicit activities. Eliminating these worst forms of child labour should receive the most urgent attention, according to the 171 countries that have ratified ILO Convention 182. Hazardous work is one of the worst forms of child labour. In cocoa production, work that is hazardous for the health and safety of children includes the application and handling of chemicals, transporting excessively heavy loads, and using a machete to break cocoa pods. Convention 182 therefore states, among others, that hazardous work should not be done by persons younger than 18 years.

Not all work carried out by children can be considered "child labour". In rural areas children can be found helping their parents with light work in the field or carrying out small tasks in the house. This is not child labour as defined by ILO. As part of their upbringing, children participate

⁶ E.g. Payson Center for international Development and Technology Transfer of Tulane University, 2007: First annual report: Oversight of public and private initiatives to eliminate the worst forms of child labor in the cocoa sector of Cote d'Ivoire and Ghana; ILO 2005: Combating child labour in cocoa growing.

in work appropriate to their level of development and which allows them to acquire practical skills and learn to become responsible citizens.

Most countries have signed international agreements with the ILO that state that children aged 12-15 are permitted to carry out "light work" which is not likely to harm their health or development or attendance at school. In Nigeria, the following national laws and programmes exist to protect children against abuse and exploitation:

- The Child's Rights Act 2003 protects the rights of all children in Nigeria.
- The Nigerian Labour Act 1990 makes provisions for the protection of children from engaging in hazardous work.
- The Criminal Code Act law of the Federation of Nigeria.
- The Trafficking in Persons (Prohibition) Law Enforcement and Administration Act (2003) protects children and adults against trafficking.
- The Hazardous Child Labour Activity Framework for the Cocoa Sector in Nigeria.

What are causes of child labour?

The causes of child labour are manifold: low agricultural productivity and low cocoa prices, insufficient financial management skills (e.g. lack of savings), lack of access to financial services and lack of business skills (how to run the farm as a business) are some of the contributing factors to low farming incomes. Low incomes may force some farmers to reduce costs of labour by using their own children or employing other children as they are paid little or nothing for their work.

Children work in cocoa production mainly because their parents and adult relatives do not earn enough to support the family and to employ adult labour for the cocoa farm. Other causes are lack of access to relevant quality education, structural inequalities, gender-based discrimination, conflict, the HIV/AIDS epidemic, environmental disasters, etc. Because of lack of education on the part of the parents, they may not see the necessity to send their children to school. Other reasons for child labour could be that there are no schools, not enough teachers, school fees and other costs, etc. Sometimes parents are not aware of the dangers of involving children in certain activities. The children of sharecroppers, migrants and seasonal workers are particularly at risk to have to work on farms, as their families usually are poor and need their children's help to improve incomes.

Why should cocoa farmers prevent child labour?

Child labour creates a cycle of poverty, puts children at unacceptable risks, and negatively affects their future since it may prevent them from getting education and/or a healthy physical and psychological development. This means that these children will later find it difficult to improve their living conditions because they lack the necessary education.

It should be understood that children are exposed to higher risks of accidents than adults during work because of their lack of work experience and knowledge of hazards, and how to prevent them. As the bodies of children are still growing, carrying heavy loads and using heavy tools can lead to serious or even permanent injuries and malfunctioning of organs.

Children are also much more vulnerable to the exposure of agrochemicals than adults. Chronic long-term health effects from exposure to agrochemicals may only appear much later and affect the health and livelihood of the child and its family.

What can farmers and cocoa communities do to prevent worst forms of child labour?

First of all, farmers have to understand that children who are engaged in child labour (as defined above) are prevented from developing their bodies and minds healthily in a way that they become successful, responsible members of the community. Nourishing the children healthily and allowing them to go to school regularly is probably the best and most important thing parents and guardians can do. Children may be engaged in cocoa farming but not in the execution of hazardous activities, or in work that negatively affects their education.

Farmers can also do a lot to improve their living conditions so that they don't need to resort to child labour. Education (formal and informal and both for parents and children) is the key to overcome child labour and to improve the family's livelihood. Wherever possible, farmers (both men and women) should take part in educational programmes offered by the government or NGO's. Forming or joining farmer groups and organisations helps to discuss this issue and to learn from each other. The development of Internal Management Systems (IMS) could provide proactive alerts to farmers of child labour and ways to address it, in particular communities where this form of labour remains common. Communities can organise themselves to monitor the existence of the worst forms of child labour and take action if necessary. The individual farmer can reduce the dependence on cheap labour by improving the productivity of his farm and hence income through keenly following advice on good agricultural practices as described in this curriculum. Farmers should learn to understand their farms as a business in order to better plan expenditures and incomes, and to improve their savings ratios, which is necessary for investing further in their cocoa farms or in alternative income generating activities.

Article 3 of ILO Convention No. 182 calls for immediate prohibition of the worst forms of child labour by enacting laws, regulations and standards. It applies to all children under the age of 18, but calls for special attention to girls. It covers four major categories:

- All forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict.
- The use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances.
- The use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties.
- Work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children (hazardous work).⁷

Standards Requirements

Common Standards requirements

All three standard initiatives have a strict position on (worst forms of) child labour. As it is against these standards, cocoa producers who use worst forms of child labour cannot be certi-

⁷ Sources:

ILO Conventions No. 105 on Abolition of Forced Labour (1957), No. 138 on minimum age for labor (1973); No. 182 on the worst forms of child labor (1999);

STCP, 2002: *Child Labor in the Cocoa Sector of West Africa*

STCP, 2005: *Learning about Sustainable Cocoa Production: A Guide for Participatory Farmer Training*,

Republic of Ghana, Ministry of Manpower, Youth and Employment, 2008: *Hazardous Child Labour Activity Framework for the Cocoa Sector in Ghana (HAF)*

fied and hence cannot enjoy the benefits that come with certification. Already certified farmers, who are found using worst forms of child labour are expelled from the certification programme and will not be able to sell their cocoa as certified cocoa. All standards follow International Labour Organisation (ILO) Conventions 105, 138 and 182 on child labour and forced labour.

Common Standards requirements also include:

- Put in place measures for effectively eliminating child labour and to raise awareness among producers to dialog with them on worst forms of child labour, child labour and the importance of education.
- Where there are indicators of exploitation/trafficking of children, report these cases to the relevant authorities.
- Ensure that children who are carrying out work on the farm are always accompanied and supervised by one of their parents, a legal guardian, or an authorized adult.
- In case the farmers' group/organisation employs young workers aged between 15 and 17 (Ghana) they must keep records including date of birth, names of parents or legal guardian, place of origin and permanent residence.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know the criteria for farm activities that are considered child labour (which is abusive and exploitative), as opposed to acceptable forms of work for children on cocoa farms.
- Send their children to school, acknowledging the importance of education for their social and mental development and for their future economic opportunities.
- Keep children and young workers under 18 away from hazardous activities (handling and application of agrochemicals, use of sharp tools, carrying heavy loads, climbing trees).
- Understand that poverty can be tackled and the need to resort to child labour can be overcome through higher income from a professionally managed farm, which is achieved through good agricultural practice and a better financial management (savings, cost calculations, record keeping).

Materials needed:

- Masking tape
- Visual 32 (in large print): Child that looks normal (not happy or sad). This is Ama.
- Visual 33 (in large print): Child that looks sad and/or is crying. This is Kofi.
- Visuals 34 to 341 in large print (see *Overview of visuals needed per topic*)

Time needed: 1 hour 15 minutes

Preparations:

- Prepare on the ground two squares of each approximately 3 by 3 meters next to each other with masking tape. Put in the left square the visual (visual 32) with the child that looks normal (Ama) and in the right square the visual (visual 33) with the child that looks sad and is crying (Kofi). If possible put the visuals on trees just outside or inside the squares so they are well visible.

Set up

- Attention:** Tell participants that you would like to introduce them to two children from another community: Ama and Kofi. When you mention the names, point to the visuals (visual 32 and 33) in the squares. Tell participants that these are children of cocoa farmers and they both help their parents on their farms. But there is a huge difference between how they help their parents on the farm.
- Title:** The topic of this session is *Child labour*.
- Objectives:** We are going to discuss what child labour is, what farm work is acceptable for children to perform and what is not acceptable.
- Benefits:** Child labour is strictly prohibited by all standard initiatives. Already certified farmers, who are found using worst forms of child labour are expelled from the certification programme and will no longer be able to sell their cocoa beans as certified. In addition, children who grow up healthy and are educated will have many opportunities in life and will be much more willing to take over the cocoa farm when they are adults.
- Direction:** During this session, we will not only discuss what work is not allowed by children but also what is acceptable.

Delivery

Explanation, **Demonstration**, **Exercise**, and **Guidance**:

1. Ask participants if they know the **minimum age for employment**. Collect a few answers before giving the correct answer: In Nigeria, the minimum age for employment is 18.
2. Ask if someone can explain what **child labour** is. Collect a few answers and repeat key words. Then tell participants that child labour is work that **harms, abuses and exploits a child**, or **prevents a child from going to school** and **endangers its normal physical and mental development**.
3. Ask if they know other cocoa farmers that **use children** on their farms. Most of them will raise their hands. Tell participants that most of us use our own children on our farm and that is not always bad. But what **type of work is acceptable and what is not acceptable**? That is what we will discuss in our next **exercise**.
4. Show the participants the two squares and introduce the two children, Ama and Kofi again. Add that **Ama is a happy child** (point to visual 32 that shows Ama). She helps her parents on their farm but what she does is acceptable and does not fall under worst forms of child labour. Now **poor Kofi** (point to visual 33 that show Kofi) is a different story. Also he helps his parents on their farms, but what he has to do is not acceptable and sometimes even hazardous.
5. Tell participants that you will **show them a visual** that depicts **work that children do on the farm** of their parents. The participants need to decide if the work is **acceptable or not**. If they think it is acceptable they need to **move** to the square of Ama. If they think it is not acceptable they should move to the square of Kofi. Ask if everyone has **understood** the exer-

cise. Tell them that you will first describe the work and give them some time to think. Then you will **count to three** and on the count of three they have to move to a square. Add that they have to think for themselves and that the discussion is for later.

Note for the trainer: The counting to three is important to avoid that one person takes the lead and the rest will just blindly follow that person. Make sure that participants have some **time to think before moving**, but stress that they should not discuss.

6. **Show the first visual** (visual 34) and explain what it depicts: plucking overhead cocoa pods with the “go-to-hell”. Give everyone a bit of time to think and then count to three. **Encourage everyone to move to a square.** When everyone has moved ask someone in the square of Ama **why** he thinks this is acceptable. Then ask someone in the square of Kofi why he thinks this work is not acceptable. Then give the correct answer: Using the “go-to-hell” is **not acceptable** because children can hurt themselves with the sharp tool. Paste the visual under the visual of Kofi. Ask participants to move out of the squares.
7. Show the **second visual** (visual 35) and explain what it depicts. Follow the same procedures. Every time you give the final answer, paste the visual either under Kofi or Ama (depending on whether it is allowed or not). You have to describe the following situations:
 - a. **Visual 34 Harvesting overhead pods with the harvesting hook (“go-to-hell”):** not acceptable because children are exposed to higher risks of accidents during work than adults due to their lack of work experience and knowledge of hazards, and how to prevent them.
 - a. **Visual 35 Handling and application of chemicals:** strictly forbidden because children are much more vulnerable to the exposure of chemicals than adults. Chronic long-term health effects from exposure to agrochemicals may only appear much later and affect the health and livelihood of the child and its family.
 - b. **Visual 36 Collecting the harvested pods to a heap at the breaking point:** this is acceptable. Now ask participants if it is also acceptable if a child has to do this for eight hours in a row? No, that is not acceptable. Add that work should not prevent the child from going to school.
 - c. **Visual 37 Transporting excessively heavy loads:** not acceptable because as the bodies of children are still growing, carrying heavy loads can lead to permanent injuries and malfunctions of organs, particularly the back and neck.
 - d. **Visual 38 Using a machete to open cocoa pods:** not acceptable because children are exposed to higher risks of accidents during work than adults due to their lack of work experience and knowledge of hazards, and how to prevent them.
 - e. **Visual 39 Opening cocoa pods with a wooden mallet:** this is acceptable, as long as it is a wooden mallet and is done under adult supervision.
 - f. **Visual 40 Climbing the tree to cut mistletoe:** not acceptable because children are exposed to higher risks of accidents during work than adults due to their lack of work experience and knowledge of hazards, and how to prevent them.
8. Finally show **visual 41** and say **that any task that is done full time** by a school age child is also child labour because it **prevents** the child from attending school.
9. Thank the participants for their participation. Repeat that **children lack work experience** and knowledge of **hazards**, and how to **prevent** them. Therefore they are exposed to **higher risks**

of accident during work than adults. Child labour can lead to **serious accidents**, permanent injuries and malfunctions of organs.

10. Add the following:

- a. Child labour contributes to **trapping their children in a poverty cycle** and prevents them from becoming successful, responsible members of the community.
- b. **Education for their children is important** for the mental and intellectual development of children and the most promising way to escape poverty.
- c. **Poverty can be tackled** and the need to resort to child labour can be overcome through higher income from a professionally managed farm, which is achieved through good agricultural practice and a better financial management (savings, cost calculations, record keeping).

11. Say that we have now seen some types of work that is prohibited for children. But our children will take over our farm and they have to **learn certain things**. Ask participants: *How can we teach our children how to grow cocoa if they are not allowed to do certain things?* Let a few people give their opinion. Add, if necessary, that you can also teach children by showing them how to do it.

12. Ask the following: suppose you are part of a group that would like to apply for certification and you know that one of the group members **uses his/her children** to do activities on the farm that fall under the worst form of child labour. *What can you do?* Let a few people give their opinion. Add, if necessary, that it should be discussed with that person and explained to him why it is wrong to use children for this type of work. Stress that a group **cannot be certified** if one of them is using child labour.

Finish

Summary: Summarise what type of work for children is acceptable and what is not acceptable. Repeat that child labour can hinder the development of the child and its chance to escape the poverty cycle. Mention the requirements for workers under 18.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants for examples of labour that is acceptable for children. Ask for examples that are not acceptable. Ask for the specific requirements for the concerned standard.

Next Step: Child labour is a major issue for certification bodies. To ensure that you will not get certified because one of your group members is using children for hazardous work on his/her farm, you need to discuss with your group how to avoid this.

Topic IV.3: Working Conditions

Key Information



Clean and safe living quarters with access to clean drinking water and toilets/latrines.



Mensah discusses about developing plans for good working conditions with his employees.



Mensah hands over a working contract to his employee.



Mensah educates his employees.

Background Information

Since 1919, the International Labour Organisation (ILO) has developed a system of international labour standards aimed at promoting opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and dignity. Meanwhile, there are 188 conventions on labour issues, which cannot all be cited here. The most relevant for the cocoa sector are:

No. of ILO Convention	Title
87	Freedom of Association and Protection of the Right to Organise Convention, 1948
98	Right to Organise and Collective Bargaining, 1949
100	Equal Remuneration Convention, 1951
105	Abolition of Forced Labour Convention, 1957
111	Discrimination (Employment and Occupation) Convention, 1958
138	Minimum Age Convention, 1973

The voluntary standard initiatives have adopted the ILO conventions on labour issues and require that farmers, farmer organisations or agriculture companies adhere to these social rights standards. Operators who violate these standards may not be certified or lose their certification. Since these are internationally recognised conventions that have in most cases been adopted by the national governments in the West African countries, the voluntary standards differ little on these social issues. The national labour acts in each country need also to be observed and respected as they may be even more specific on some labour issues.⁸

Standards Requirements

Common Standards requirements

- All standards follow International Labour Organisation (ILO) Conventions 29, 87, 105, 138 and on labour rights and forced labour.
- Respect certain aspects related to good working conditions, like freedom of association and the right to collective bargaining, forced labour, discrimination, wages and contracts, working hours (must not exceed 48 hours), maternity provisions, respectful treatment of workers, stimulation of education of producers and their families.
- Discuss and develop plans for good working conditions between farms, workers, labour organisations, etc.
- Inform workers about their labour rights openly and clearly.
- Provide employees living on the farm or processing site with clean and safe living quarters

⁸ Sources:

ILO Conventions No. 87 on Freedom of Association and Protection of the Right to Organise (1948), No. 98 on Right to Organize and Collective Bargaining, No. 100 on Equal Remuneration Convention, 1951, No. 105 on Abolition of Forced Labour (1957), No. 111 on Discrimination (Employment and Occupation) Convention, 1958 No. 138 on minimum age for labor (1973).

with access to basic services like drinking water, toilets or latrines and a facility to store their personal properties securely (not required by Fairtrade).

- Give all permanent workers a legally binding written contract of employment.
- Put an adequate regulation on sick leave in place (not required by Fairtrade).
- Gradually increase salaries to levels above the regional average and official minimum.
- Give local and migrant, seasonal and permanent workers equivalent benefits and employment conditions for equal work performed.
- Put in place an employment policy (payment, leave, sick leave) for organisations/farms that employ more than ten workers (not required by Fairtrade).
- Give the opportunity to workers to make decisions regarding their rights and to organize for negotiating their working conditions.
- Put in place an educational programme for farm workers and their families on the requirements of the relevant standard (Fairtrade, RA, and UTZ) for certification, personal health, hygiene and workers' rights.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand that farm workers, whether family members or not, have to be treated fairly like the farmer him/herself would like to be treated, if he was in the same position.
- Know that the fair treatment of workers engages the employer to guarantee: freedom of association, legally binding written contracts, sick leave, fair salaries, and workers' information and education on labour rights, certification requirements, health / hygiene and social development.

Materials needed:

- Masking tape
- Visuals 42 to 45 in large print, cut into 12 pieces each (see overview of visuals per topic, cut on the dashed lines)
- Wall or pin-board to paste the visuals

Time needed: 45 minutes

Preparations: None

Set up

Attention: Tell participants that in the previous session we have talked about working conditions of children. But working conditions do not only concern children, they also concern adults.

Title: The topic of this session is *Working conditions*.

Objectives: We will discuss in this session what good working conditions are and what should be done for labourers.

Benefits: Satisfied labourers contribute to good social practices that are part of certification and will be much more motivated to good work. Employers who do not treat their labourers well, may not be certified or risk losing their certification.

Direction: We will only focus on working conditions of adults, not of children.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Ask participants who are **using labourers** on their farm. Let participants raise hands. Add that there are **international rules** on **working conditions for labourers** and if you are certified, or want to become certified, you have to **follow** these rules.
2. Tell participants that we are going to look at some of these **requirements**. You have depicted them in **four visuals** but you accidentally cut them into small pieces. Split the participants into **four groups**. Give each group one visual that is cut into pieces (a puzzle). Ask the groups to **make the puzzle** (on tables or on the ground) and then discuss what they **see** on the visual.

Note for the trainer: You can make a competition out of it and let first groups make the puzzle: the first group who finishes is the winner. Then let them discuss in their groups what they see on the visual.

3. When all groups are finished, tell everyone to **walk around** to have a look at the visuals of the other groups.
4. When everyone has seen all visuals, ask everyone to group around a wall, tree or pin-board. **Paste** the first visual **on the wall/tree/board**. Ask the group that made the puzzle to **explain** what they think the visual depicts. Ask other groups if they agree with the explanation or if they see different things in the drawing. **Add information if necessary** and mention the **requirements**. Discuss the other three visuals in the same way.
5. Make sure the **following requirements** are mentioned when discussing the visuals:
 - a. **Visual 42 Employees living on the farm:**
 - Employees living on the farm or processing site are provided with clean and safe living quarters with access to basic services like drinking water and toilets or latrines and a facility to store their personal properties securely.
 - b. **Visual 43 Discussing and developing plans:**
 - Discussing and developing plans for good working conditions between farms, workers, labour organisations, etc.
 - c. **Visual 44 Mensah hands over a working contract to his employee:**
 - All permanent workers must have a legally binding written contract of employment.
 - Inform workers about their labour rights openly and clearly.
 - An adequate regulation on sick leave is put in place.
 - An employment policy (payment, leave, sick leave) is in place for organisations/farms that employ more than ten workers.
 - Salaries are gradually increased to levels above the regional average and official minimum.
 - d. **Visual 45 Mensah in a classroom educating his employees:**

- An educational programme for farm workers and their families for certification, personal health, hygiene and workers' rights is in place.
6. Add the **following requirements**:
 - a. Respect certain aspects related to **good working conditions**, like freedom of association and the right to collective bargaining, forced labour, discrimination, wages and contracts, working hours (must not exceed 48 hours), maternity provisions, respectful treatment of workers, stimulation of education of producers and their families.
 - b. Give local and migrant, seasonal and permanent workers **equivalent benefits** and employment conditions for equal work performed.
 - c. Have opportunities for workers to make **decisions** regarding their rights and to organise for negotiating their working conditions.
 7. Add that every standard initiative has some **specific requirements**. Mention the specific requirements depending on the standard initiative as described under requirements.

Finish

Summary: Summarise the requirements for working conditions.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants what good working conditions they need to put in place for their labourers.

Next Step: Remember that a happy worker is a good worker. It always helps to think how you would like to be treated if you were a labourer working on a cocoa farm.

Topic IV.4: Community Relations

Key Information



Keep your farm attractive:
manage your waste well.



Take part in communal activities.



Be law abiding: acquire land through appropriate authorities.



Respond to complaints.



Use warning signs after the application of agrochemicals.

Background Information

Communities have concern about the environmental quality and the possible ways that farming could affect their drinking water source or other natural resources in their area. Their concern may make them extra vigilant about agricultural practices such as agrochemical applications, bush fires and felling of forest trees. Measures must be put in place to ensure that cocoa production activities sustain the physical environment and social standards of the communities in which farming takes place.

Be law abiding

Acquire land for farming through appropriate authorities such as chiefs, family heads, municipal and district assemblies. Keep proper documentation of lands. Do not farm on lands reserved by the community for social amenities such as schools, hospitals, markets, post offices, etc. Do not encroach on protected areas.

Be active in the community

Becoming involved in community-level activities can improve your relationship with the community in which you farm. Support the efforts by the community to promote educational activities, health and environmental improvement projects.

Respond to complaints

How you react to complaints or concerns expressed by the community in which you farm, will determine whether issue grows into anger, resentment and major conflict. Usually, bad farm practices that result in pollution of water bodies, felling of forest trees, indiscriminate burning of vegetation, farming on protected areas, etc. can invite complaints from the community members. Avoid these practices. If you accidentally are culpable, respond promptly and genuinely to such complaints by adopting correct practices.

Keep your farm attractive

The appearance of your farm can play an important role in determining what the community and others think about you and your farm operation. Do not litter your farm with agrochemical containers and other plastics. Prune your cocoa trees and leave shade trees your farm. This can enable you to obtain goodwill in the community.

Use warning signs

Always use warning signs to alert the community whenever you apply agrochemicals and dig trenches. This will prevent possible accidents to the members of the community.

Standards Requirements

Common Standards requirements

- Respect areas and activities that are important to the community.
- Do not farm on protected lands.
- Acquire land through appropriate authorities such as chiefs and other opinion leaders (not required by Fairtrade).

Specific Standards requirements

UTZ

- The certificate holder stimulates the education of producers and their families. awareness raising meetings for producers and their families to inform them on:
 - Worst forms of child labour (incl. hazardous work and trafficking).
 - Child labour and the importance of education.
 - HIV/AIDS, personal and wound hygiene, nutrition, agrochemicals and other health issues.
 - Workers rights.
 - Equal rights and opportunities for women.
- Make all people living and working on and around the farm aware of the concept of re-entry time.

Rainforest Alliance

- Identify, consult and consider the interests of the community regarding farm activities or changes that could have a negative impact on their quality of life or on local natural resources.
- Do not let your farming affect areas and activities that are important to the community socially, culturally, biologically, environmentally and religiously.
- Prioritise the hiring and training of a local labour force and for contracting and acquiring local services and products to support the growth of the local economy.
- Keep records of complaints and comments received, and their replies, related to the farm activities.
- Contribute fairly towards local shared resources consumed by paying legal dues and levies charged by the community.
- For any work, give priority to local labour force (to help the community development).
- Help with local environmental education efforts through activities such as:
 - Keeping good sanitation.
 - Environmental education of school children.
- Support and collaborate with local research to improve your environment and your farm.
- Acquire and keep official documentation of land use and tenure.
- If no official documentation of land use exists, show either:
 - That there is no dispute on land use.
 - That the local community is aware of the land use.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Acquire land for farming through appropriate authorities to avoid land disputes.
- Participate in development activities in their communities.
- Avoid actions which harm the interests of the community, such as contamination of water bodies or encroachment on protected areas.

- Respond to and solve complaints which may come from the community members in peaceful ways.
- Use warning signs to prevent accidents to community members.

Materials needed: Visual 46 to 50 in large print (see overview of visuals per topic)

Time needed: 45 minutes

Preparations: None

Set up

Attention: Ask participants in which community they live and where their farms are. Collect a few answers. Tell participants that their farming activities have consequences for the communities.

Title: The topic of this session is *Community relations*.

Objectives: We are going to discuss how we affect the communities with our farming activities and what we can do as cocoa farmers to avoid doing harm to the environment or the community.

Benefits: If you know how to avoid harming the environment or the community, you can live happily in your community.

Direction: During this session, we will discuss the very basics of community relations, but we will not go into detail.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Ask participants how their **farming activities** can **affect** the community. Collect several answers. Make sure the following is mentioned: farming could affect **drinking water sources** or other **natural resources** in the communities through agrochemical applications, bush fires or felling of forest trees.
2. In addition to good agricultural and environmental practices, cocoa farmers can do **more** for the community. Split the group into **five small groups**. Tell the groups that they will each get a **visual** that depicts something they can do as cocoa farmers to ensure that cocoa production activities sustain the physical environment and social standards of the communities in which farming takes place. With their group they need to **discuss** what they see and try to formulate it as **positive action** for cocoa farmers. Give each group one visual (visual no 44 to 48). Give the groups five to ten minutes to work.
3. **Discuss the results.** Ask a representative of group one to come up front and tell the others the result of the group work. Let the person **show the visual** to everyone. Let the person explain what the group discussed. Ask if anyone has questions for clarification. Ask if other groups **agree**. If they do not agree, ask why. Try to pick out key words and try to reformulate what the visual depicts, mentioning the following:
 - a. **Visual 46 Be law abiding:** Acquire land for farming through appropriate authorities such as chiefs, family heads, municipal and district assemblies. Keep proper documentation of

lands. Do not farm on lands reserved by the community for social amenities such as schools, hospitals, markets, post offices, etc. Do not encroach on protected areas.

- b. **Visual 47 Be active in the community:** Becoming involved in community-level activities can improve your relationship with the community in which you farm. Support the efforts by the community to promote educational activities, health and environmental improvement projects.
 - c. **Visual 48 Respond to complaints:** How you react to complaints or concerns expressed by the community in which you farm, will determine whether issue grows into anger, resentment and major conflict. Usually, bad farm practices that result in pollution of water bodies, felling of forest trees, indiscriminate burning of vegetation, farming on protected areas, etc. can invite complaints from the community members. Respond promptly and genuinely to such complaints by adopting correct practices.
 - d. **Visual 49 Keep your farm attractive:** The appearance of your farm can play an important role in determining what the community and others think about you and your farm operation. Do not litter your farm with agrochemical containers and other plastics. Manage the waste well, including waste in the community.
 - e. **Visual 50 Use warning signs:** Always use warning signs to alert the community whenever you apply agrochemicals and dig trenches. This will prevent possible accidents to the members of the community.
4. If the group is going for a certification by Rainforest Alliance, go through the **specific requirements** as listed under Requirements.

Finish

Summary: Summarise the consequences of farming on the community. Repeat the five kinds of action cocoa farmers can do.

Questions: Ask if anyone has a question or comment.

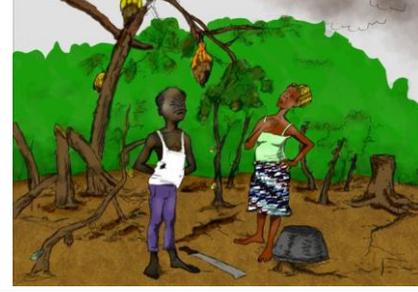
Evaluation: Ask participants what the consequences of farming on the community could be. Ask to name a few actions cocoa farmers can do.

Next Step: Most actions that we discussed do not take too much effort but it will ensure that you and your farm are not a point of discussion in the community.

Topic IV.5: Farmers' Organisations For Successful Certification

Key Information

To be certified individual farmers need to form a farmers' organisation. In addition to certification, being member of a farmers' group has the following **benefits**:

	
<p>Bulk purchase of goods and services, for example agro-inputs (fertilisers, agrochemicals, equipment) and transport, leading to lower costs because of better bargaining power</p>	<p>Easier access to services, for example training and education of members, extension services, and loans or credit.</p>
	
<p>Easier access to useful information on certification requirements, regulations, markets, technologies, etc..</p>	<p>Sharing of risks and assisting each other in times of problems.</p>
	
<p>Sharing of ideas and learning from each other.</p>	<p>Access to certification because an individual farmer cannot be certified.</p>

Ensure a healthy farmers' organisation:

- a. Set **clear rules and regulations** and develop procedures to make cheating difficult.
- b. **Select reliable, motivated leaders.**
- c. **Share responsibilities** and **involve** as many members as possible in decision-making and activities to create ownership.
- d. **Encourage youth and females to become leaders** as well or create a special seat for them in the Executive Council to give everyone the feeling that they are well represented.
- e. **Rotate leadership** on a regular base (2 terms of each 1 or 2 years, not longer) to avoid that always the same people will be in charge.

Background Information

A smallholder farmers' association (farmers' organisation) is a farmer-owned and farmer controlled business that provides services to the benefit of its members on a non-profit or cost basis. The organisation may also be managed by another entity, and the certificate can be owned by an NGO, exporter, trader, etc. The purpose of a farmers' organisation is to identify the needs and problems of the farmers and to develop corresponding solutions. These solutions are then developed into services that are offered on a regular basis to the members of the farmers' organisation.

Often a farmers' organisation consists of several smaller farmers' groups in which farmers are grouped from a same community. Some of these groups can function autonomous although they follow the constitution of the main farmers' organisation.

Principles of group formation

To develop a functioning farmers' organisation, the organisation should be:

- Homogeneous: members should live in similar geographic and economic conditions and have close social affinity. This reduces conflict and helps to build trust.
- Voluntary and democratic: members can decide, who can join their group, who will lead them, what rules they will follow, and what activities they will undertake.
- Formed around income-generating activities: income-generating activities are crucial to group development because they produce assets that help build self-reliance.

Interrelationships among group members

- Be friendly to everyone in the group.
- Treat everyone with respect.
- Insist that roles and obligations are taken seriously.
- Everybody should adhere to the code of conduct.
- Leaders should have certain minimum criteria.
- "Do unto others as you wish others to do unto you".

The main challenges of farmers' organisations are:

- **One person** will take **all decisions** without involving other members.
- Always the **same members** are selected to **represent the organisation** in meetings, conferences, training programs, etc.
- Leaders put their **own interest** before the interest of the group.

- Members **cheat** on each other or the organisation (for example by using equipment without paying for it, taking agrochemicals from the common storage facility without paying for it, selling conventional cocoa as certified, etc.).
- Members do **not abide by the constitution** and other regulations, for example they do not attend training programs or do not comply with the requirements for certification.

Standards Requirements

Common Standards requirements

The certification holder has to ensure that:

- Participation in the group or the certificate is independent of the producer's gender, ethnicity, colour, marital status, national origin, disability, religion or political opinion.
- Women and men receive equal opportunities for promotions and to fill all positions open.

Specific Standards requirements

UTZ

- The certificate holder should appoint a person to who producers and workers can file questions, ideas and complaints. This person has to be known and accessible to the producers and workers.
- Sign a contract or agreement with the certificate holder. The contract is understandable for every farmer and specifies the rights and obligations of both. You have the right to terminate the contract.
- Sharecroppers have an agreement, either written or verbal with witnesses, with the recognised landowner.

Rainforest Alliance

- The group administrator must implement a training programme for its group members to comply with Sustainable Agriculture Network standards. Only trained producers should do the work.
- Do not sell your certified products individually but through the group.
- The group administrator must implement an effective internal management system, including governance procedures for:
 - Approval of new group members and annual status of each member farm.
 - Group and group member record keeping requirements.
 - Internal inspections, sanctions and appeals.

Fairtrade

- Direct beneficiaries of Fairtrade within its standard are small producers (including their families) who are organised in producer organisations to advance their interests.
- The organisation has membership criteria as defined in its own stated rules and regulations (the organisation's constitution or by-laws).
- The rules that determine who can become a member must not be discriminatory.
- The majority of the members of the organisation are small producers according to Fairtrade's definition.
- At least half of the volume sold as Fairtrade per year must be produced by small producers.

- Fairtrade products may only be sourced from members. The organisation must therefore ensure that products from members are kept separate from non-members' products.
- One person in the organisation must be given responsibility to lead the operational steps required for the organisation to comply with the requirements in section 3.2 Environmental Protection.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Understand what farmers' organisations and their purposes are
- Know the factors which help to develop functioning farmers' groups
- Understand the benefits of farmers' organisations and groups

Materials needed: None

Time needed: 45 minutes

Preparations: Identify a very heavy object somewhere on the farm (this can be a log or a stone or even a bag with cocoa)

Set up

Attention: Ask participants if any of them are members of religious associations or fun clubs in their community. Let people raise their hands. Ask why they are member. Collect several answers but do not comment.

Title: The topic of this session is *Farmers' organisations for successful certification*.

Objectives: We are going to discuss benefits of being in a group and factors that can contribute to well functioning groups.

Benefits: Being in a group has a lot of benefits that go beyond certification.

Direction: During this session, we will not discuss how to set up a farmers' organisation or how to form groups.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Ask for a very **strong volunteer**. Ask the volunteer to **lift the heavy object**. Then ask for a second volunteer **to help**. Ask for another volunteer if it is still difficult to lift the object. Ask the first volunteer if it was **easy to lift** the object. Probably it wasn't. Then ask if it was easier when they did it together. Probably it wasn't. Thank the volunteers.
2. Ask the **other participants** what we just **observed**: the person alone found it difficult to lift the object but together it was much easier. Say that in general we can achieve more when we do it together and for that reason farmers' organisations are formed.

3. Ask: what are the benefits for farmers being a member of a farmers' organisation? Let participants form **pairs** and let them discuss the **benefits of being a member of a farmers' organisation**.

Note: you can also do a Margolis wheel or bicycle chain.

4. After a few minutes **discuss the results**. Ask all groups to mention benefits (ask every group for 1 idea and do a second round if necessary). Every time a point is mentioned that is linked to any of the visuals (see key information), **hold up the visual** and explain. If at the end some points were not mentioned, ask leading questions to draw them out of participants.
5. Agree that there are many benefits of being together in a farmers' group. But of course there are also some **disadvantages**. Ask: *what can be disadvantages of being in a group?* Collect several answers and add the following points if they were not mentioned:
 - a. Decision-making can be a tedious process, especially if the group would like to reach consensus. It is difficult to take decisions that will make everyone happy.
 - b. Being part of a group means having certain obligations towards the group, following rules and regulations and giving up on autonomy.
 - c. Running a farmers' organisation cost money. Fortunately costs can be covered with the premium in case the organisation is certified.
6. Say that there are also some **challenges** when functioning as a group. Ask: *what are the main challenges in groups you know in your community or other communities?* (**Note:** don't ask for challenges within their group because people will probably not give an honest answer). Collect several answers and ask leading questions to come to the following:
 - a. **One person** will take **all decisions** without involving other members.
 - b. Always the **same members** are selected to **represent the organisation** in meetings, conferences, training programs, etc.
 - c. Leaders put their **own interest** before the interest of the group.
 - d. Members **cheat** on each other or the organisation (for example by using equipment without paying for it, taking agrochemicals from the common storage facility without paying for it, selling conventional cocoa as certified, etc.).
 - e. Members do **not abide by the constitution** and other regulations, for example they do not attend training programs or do not comply with the requirements for certification.
7. Ask what a group can do about these challenges? Collect several answers and add ideas if necessary. Groups can:
 - a. Set **clear rules and regulations** and develop procedures to make cheating difficult.
 - b. **Select reliable, motivated leaders**.
 - c. **Share responsibilities** and **involve** as many members as possible in decision-making and activities to create ownership.
 - d. **Encourage youth and females to become leaders** as well or create a special seat for them in the Executive Council to give everyone the feeling that they are well represented.
 - e. **Rotate leadership** on a regular base (2 terms of each 1 or 2 years, not longer) to avoid that always the same people will be in charge.

8. Say that you know many groups that do not **function** very well. Ask: *how do you as group guarantee that you function well?* Let several people answer and have a bit of a discussion. Note: the discussion is not meant to get “correct” answers; the objective is to make people think about what is important for their group (norms and values).

Finish

Summary: Summarise the advantages and disadvantages of being a member of a farmers’ groups and the main challenges of groups.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants what advantages are of being a member? Ask what the main challenges are of groups and how groups can deal with those challenges?

Next Step: We have seen many benefits of being member of a farmers’ group but you will only benefit if the group functions well.

Topic IV.6: Being a Member of a Farmers' Organisation

Key Information

The **constitution** of a farmers' organisation contains all the **rules for the functioning** of the group, including the **rights and duties of each member**.



All group members have equal rights to vote.



All members are eligible into the governing body of the organisation.



Every member signs a contract with the Internal Management System.



Comply with all requirements.



Have your farm inspected by the internal inspector and external auditor.



Keep records.

Background Information

Exercising democratic control in the group

In farmers' groups, every member has the right to exercise democratic control over decisions and activities of the management. The democratic control should be exercised within the existing organs of the farmers' group. For example they can call for a vote to elect a leader or other office bearers of the farmers' group.

In every group, members have different talents, which need to be tapped in order to make the group more effective to achieve certification. Members have qualities that complement each other and these should be used optimally to bring synergy into the group. Members who can read and write can provide assistance to other members of the group with respect to record keeping, reading and interpretation of labels on agrochemicals. To enhance group performance, the leaders and members should have clear roles and responsibilities, allow everyone to participate, remind members of their roles and obligations, and ensure that members adhere to the code of conduct regarding certification.

Constitution

A constitution is a set of rules that guide the affairs of a group of people. With respect to cocoa certification, a constitution is equivalent to internal regulations of the farmer group. The rules designed by the farmers' group itself. However, the content of the constitution is always based on the IMS requirements of the standard organisation chosen by a particular farmers' group. It should be designed to protect the members' rights and responsibilities necessary to achieve certification, and to enable a transparent and democratic management of the group's business. It must be understood and agreed upon by all members.

There are numerous situations when a constitution is specifically needed:

- If somebody wants to become a member (eligibility criteria).
- If a leader has to be elected or dismissed (election procedures).
- If members need clear understanding and update of information on the certification requirements (roles and obligations).
- If internal and external inspection of cocoa farms is due.
- If a member is not producing his/her cocoa according to the requirements of a standard organisation (sanctions).

Rights and obligations of members

It is the responsibility of every member of the farmer group to:

- Be a duly registered member who has a contract with an internal Management system (ICS) management. The IMS gives the binding guidelines necessary for a farmer group to attain certification.
- Have detailed knowledge of the requirements of the standard initiative and comply with them.
- Permit inspection of farm by certification officers when needed.
- Keep safely and provide the necessary documents when requested by certification officers.
- Check that the buying company staff and PCs are able to guarantee the traceability, the identification of the product and the separation of the non-certified and certified cocoa.
- Contribute ideas for effective use of the premium by the farmer group.

Standards Requirements

Common Standards requirements

As a farmers' organisation you should:

- Have membership criteria as defined in own stated rules and regulations.
- Keep a list of its members.
- Put in place an organisational structure (IMS) which enables effective control by the members.
- Have at least one person in the group responsible for managing the organisational administration and bookkeeping (group administrator in IMS).
- Use training and education to promote the participation of members in the farmer group's administration and internal control.
- Not discriminate against members or restrict new membership on the basis of race, gender, disability, marital status, age, religion, political opinion, language, property, nationality, ethnicity or social origin.

Specific Standards requirements

UTZ

The certificate holder:

- Pays producers in a manner convenient to them (the producers).
- Clearly communicates prices and premiums in a transparent way.
- Reports to the producers about spending of the UTZ premium in a transparent way. The premium clearly benefits all certified producers, in cash and/or in kind.
- Clearly documents all cocoa revenues and all payments to producers for their cocoa in the national language.

Fairtrade

- There is a General Assembly with equal direct or delegated voting rights for all members as the supreme decision-taking body, and an elected Board. The staff answers to the General Assembly via the Board.
 - The majority of the members of the organisation are small producers.
- The organisation holds a General Assembly at least once a year and members are informed in good time when the General Assembly meeting will take place.
- Minutes of the General Assembly must be taken and signed by the president of the Board and at least one other member and must contain a list of participants of the General Assembly.
- The organisation's annual report, budgets and accounts must be presented to and approved by the General Assembly.
- The organisation establishes or improves internal mechanisms to facilitate members' control over the administration.
- The organisation must keep records and books that are accessible to all members.
- The organisation must have a bank account with more than one signatory.
- Identification of disadvantaged/minority groups within the organisation according to, for example, gender, age, income or land area.
- Programmes must be in place related to the disadvantaged/minority groups that have been

identified, to improve their social and economic position in the organisation.

Guidelines for the Trainer

Learning objectives

By the end of this training, participants will:

- Know their rights and duties as members of a farmer group which wants to achieve certification.
- Understand the requirements and benefits of a democratic governance of farmer groups.
- Know the key elements to be included in an internal standard.

Materials needed: None

Time needed: 45 minutes

Preparations: None

Set up

Attention: In the previous session we asked who of you is member of a church or other organisation. Let people raise their hands if they are member of such organisation. Ask if that organisation has certain rules that each member has to follow.

Title: The topic of this session is *Being a member of a farmers' organisation*.

Objectives: During this session, we will discuss our rights and responsibilities as members of a farmers' organisations.

Benefits: Every organisation has its own rules to function well; even families have their own rules. Also farmers' organisations need rules to avoid conflicts and to ensure a smooth functioning of the organisations.

Direction: We will not discuss in detail all the rules a farmers' organisations can put in a constitution, we will focus on the main rules that are mandatory by the certification bodies.

Delivery

Explanation, Demonstration, Exercise, and Guidance:

1. Say that every organisation, big or small, has a **structure**. Also the farmers' organisation they belong to has a structure. Ask the following questions (note: this is not about getting a correct answer; you rather ask the questions to make people realise how their organisation is functioning):
 - a. *What is the highest decision-making body in the organisation?* That is the **General Assembly**.
 - b. *Who are members of this General Assembly?* All members form the General Assembly.

- c. Say that it is not very practical to take every decision with all members, therefore there is often a smaller group representing the members. Ask *how is this group of members called within their farmers' organisation?* It is probably the **Executive Council or Board**.
 - d. *Who can explain the **difference** between the Internal Management System and Executive Council?* The IMS is staff while the Executive Council has been elected. The IMS is responsible for the day-to-day management while the Executive Council is more involved in taking long-term decisions.
 - e. ***How** are people elected in the Executive Council and **how many** people are in the Executive Council?* Most probably every group has a chairman and per geographical area (this can be a district or Local Government Council) a representative is elected among the chairmen.
 - f. *Does everyone have a **fair chance to be elected** in either the Executive Council or as chairman in a group?* Probably the group will say yes. In that case, ask follow up questions (note: it is important to ask the questions in an open friendly way without giving the group the feeling that you attack them): *How many of your leaders are under 25 years? And under 35 years? How many are female? If you compare your leaders, are they representing all different types of people you have in your farmers' group? If I am a female of 25 years with 0.5 acre of cocoa, do I feel that I am represented?* There is not wrong or right answer; just have a bit of a discussion.
 - g. When the group is convinced that everyone is **well represented**, say that that is great because one of the requirements for farmers' organisations is that **everyone is well represented** irrespective of race, colour, sex, disability, marital status, age, religion, political opinion, language, property, nationality, ethnicity or social origin. When the group is not so convinced that everyone is well represented, discuss what could be changed to have everyone represented (an idea might be to have a separate seat for a representative of youth and one for females).
2. Say that the **equal treatment of members** irrespective of race, colour, sex, disability, marital status, age, religion, political opinion, language, property, nationality, ethnicity or social origin goes for **all activities** in the organisation. This means that every member has **equal rights to vote** and every member is **eligible** into the governing body of the organisation.
 3. Say that those are your **rights** as a member. But of course every member also has **duties**. Ask: *what are your duties as member of this farmers' organisation?* Collect several answers. People might mention payment of dues, attendance in meetings, helping on each other farms and in the community (nnoboa), etc.
 4. Say that with certification a **few specific duties** are added to those that they have already listed. Mention the following duties. **Every member has to:**
 - a. Sign a contract with the Internal Management System.
 - b. Comply with all requirements.
 - c. Have his/her farm inspected by the internal inspector and external auditor.
 - d. Keep records.
 5. Finally ask where all these rules and regulations are written? In the **constitution**. Ask if this farmers' organisation has a constitution? Ask who of them has ever read the constitution? **Do not make comments** when the group does not have a constitution or no one has read it. Let people draw their **own conclusion**.

6. Add any **specific requirements** listed in the requirements.

Finish

Summary: Summarise the rights and duties of each member.

Questions: Ask if anyone has a question or comment.

Evaluation: Ask participants what rights they have as member. Ask what their duties are under the certification scheme.

Next Step: Under certification it is important that everyone will stick to the rules so assist each other in doing this.

FACILITATION AND COMMUNICATION SKILLS

Facilitation skills

Learning Styles

There are three main learning styles:

1. Listening and reading
2. Observing and imitating
3. Doing

What is facilitation?

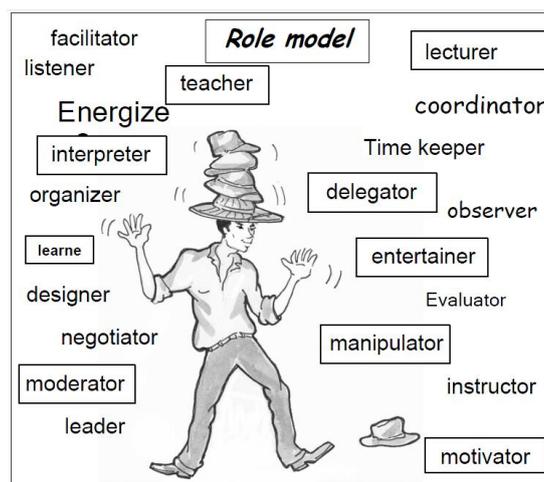
Facilitation is a way of guiding discussions, field experiments or training that improves the learning effect within the group. It is based on the principle that adults learn best from own experiences and from discussing about their experiences. Technical knowledge is offered by the facilitator according to the demand of the farmers and discussed in a participatory way.

Mostly, the group is to draw conclusions or to agree about next steps. Especially in this step, the facilitator should leave the initiative to the group and not impose own ideas. Facilitation skills are among the most important requirements for field staff working with farmer groups. Therefore, the two pages on facilitation should form the base for any training course on certification.

Facilitation is aimed at creating a good atmosphere for trainees to learn. It involves trying to make the learning process easy for the learners to adopt and adapt. For a successful facilitation, facilitators must make good use of animation skills / energisers.

The Role of a facilitator - *Different roles, different “hats”*

A trainer is wearing many different hats during the same training, or even the same session, depending on the setting or the training, the purpose of the session, the type of participants, the group dynamics, the situation, etc.



Adopted from Material for ToT participants - General guide for facilitation and training

The role of the facilitator is to be more or less directive and show how particular activities, and indeed complete sessions, can vary from being more teacher-centred to being more learner-centred. It is the role of the facilitator to select the most relevant methods and styles for a par-

ticular task. Good facilitators can switch styles and pace to suit the needs of the participants and the moment.

The role of the facilitator should include the following:

- Conflict resolution.
- Having a facilitation process which is seen to be neutral and unbiased.
- Mobilising the creative energy and the existing knowledge of trainees.
- Selecting appropriate techniques to orient the contents of the events to the trainees' problems.
- Motivating the trainees to be interested in the learning activity and the process by means of questions to the trainees.
- Creating a relaxed and informal atmosphere to gain the confidence of the group.
- Exchanging information (no one – way communication).
- Encouraging discussion to reveal hidden issues and opinions in a transparent and accessible manner for better community integration.
- Introducing rules, techniques and cultural norms of participatory approaches as a means of consensus-building.

Characteristics of an effective facilitator

Facilitation involves the use of learner – centred approaches. Effective facilitators have a range of key characteristics. The basic ones are as follows:

- a warm personality, with an ability to show approval and acceptance of trainees.
- social skill, with an ability to bring the group together and control it without damaging it.
- a manner of teaching which generates and uses ideas and skills of trainees.
- organising ability, so that resources are booked and logistical arrangements smoothly handled.
- enthusiasm for the subjects and capacity to put it across in an interesting way.
- flexibility in responding to participants or trainees changing needs.
- knowledge of the subject matter.

Facilitation is a process that incorporates

- Focus
- Involvement
- Trust
- Positivity
- Information
- Ownership

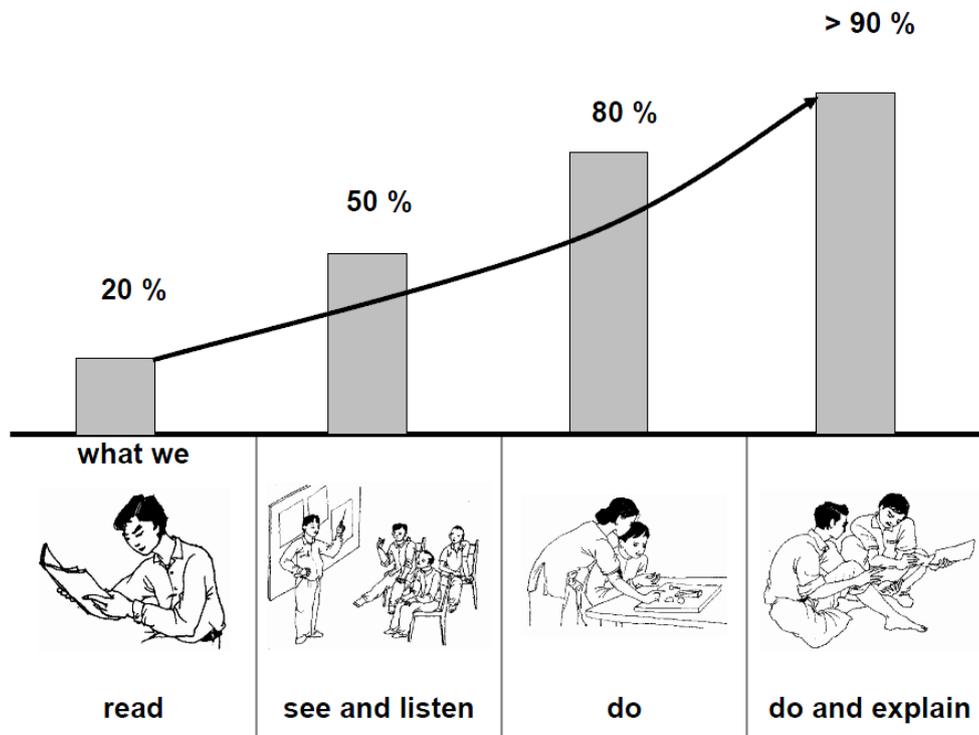
Facilitation is a way of working with people that enables or empowers them to carry out a task

What is good facilitation?

To be a good facilitator one should:

- Show respect for the participants and be gender sensitive.
- Be active, enthusiastic, friendly and confident.
- Display a good sense of humour.
- Be patient with trainees and be ready to help them.
- Ask relevant questions – to get people thinking and talking. Do not talk too much. Encourage active participation by all trainees – to draw out the quiet ones.
- Listen carefully and attentively.
- Encourage constructive criticism and feedback and deal constructively with conflict or tension.
- Monitor and evaluate the learning process to find out if people are really learning.

A good facilitator should know that we remember...



Therefore, the principles for effective training are to:

- facilitate the exchange of experiences among the participants (e.g. small working groups, group discussions).
- create opportunities to gain new experiences (practical exercises, field trips).
- reflect about experiences and what we can learn from it (reflection sessions and feedback).

Every trainer needs to find his or her own style as a trainer, balancing all these different hats. Each of us has his or her own strengths and weaknesses in carrying out these different roles. Some roles will be easier to perform, while on others you will have to work harder.

In any case, the trainer should develop a sincere and genuine devotion to create learning opportunities for the participants, which help them to improve their professional and personal performance.

Facilitator attitudes

- Acknowledge your own weaknesses, strengths and fears. Sometimes it is good to make these known.
- Develop consciousness for peoples' feelings and non – verbal communication.
- Assess the situation of different groups in the community, by being aware of possible false conclusions.
- Accept criticisms, and don't allow defence to generate fruitless discussion.
- Ability to take backstage and restrain own opinions.

Facilitation skills improve with practice. However as a minimum, facilitators should have some knowledge and experience in the following areas:

- Basic principles of communication and facilitation.
- Use of participatory methods that promote collective development of a plan and implementation of a planning process.
- Social inclusion and power relations (particularly related to wealth, gender, age, etc.) and how this affects participation and non-participation in community events and plans.
- Conflict resolution, within a group, or between groups in developing community action plans.
- Ability to document a planning process.
- Project management skills, ability to develop project proposals and to implement and monitor community based projects.

Attending Skills/Behaviours

There are four attending behaviours to consider:

1. Face the learners.
2. Maintain appropriate eye contact.
3. Move toward the learners.
4. Avoid distracting behaviours.

Observation Skills Steps

Look at person's face, body position, and body movements.

Try to determine the person's feelings.

Take appropriate action.

Some common problems in facilitation

When facilitating a process you may encounter certain problems. The point is not for you to shy away from them or overlook them. You should rather address the problems as they come up. One good way of handling problems in facilitation is to always have a facilitators meeting at the end of each day to review the day. By discussing and planning together, you will be able to find solutions to the problems that come up. Below is a list of more common facilitation problems that come up with suggestions for actions to be taken.

What do you do if?

- **People seem confused:** Sometimes people do not understand your question and there is total silence. You may have to rephrase the question in several ways and give an example where possible.

- **Someone talks too much:** You can deal with this problem in many ways but the most effective one is to say politely but firmly “we appreciate your contribution/suggestion, but since you have already contributed many ideas, let us listen to others before you add more”.
- **Few people are talking:** Sometimes people are silent – or part of the audience is not talking. What you can do is to break people into small groups or use buzz groups.
- **People look bored:** One of the important skills of a facilitator is timing and pacing. You will have to judge whether it is time to move on to a new item or whether a short break is needed. Taking a break will give people more energy.
- **Discussion goes off track:** When a discussion goes off track, you can bring it back by repeating the last question. Or you can comment the point and relate it to another topic i.e. “that’s an important point and when we move on, we will talk about it / we will make use of it”
- **People begin to argue:** Disagreement is not necessarily bad. It only becomes a problem when it becomes an argument and people begin to repeat their point. To deal with this, clarify the point of disagreement. Then ask others “do you understand each person’s point of view?” To bring the debate to an end you could say something like “we will need to include both of these points of view in our discussions. Now let’s move on to another topic.”
- **Women do not contribute:** There are several reasons why women do not contribute during gatherings. Most women think that men should take the decision (probably due to traditions and socio – cultural beliefs). Sometimes they are afraid or shy to speak in front of the men. When faced with such a situation, you should make a conscious effort to encourage women to talk, by saying “...and Madam what do you think about this issue?” or “what do you suggest?” You could also use small discussion groups to build the confidence of the women before you ask them to speak in front of a large group. In addition, make sure that meetings are held at times suitable to the women.

Communication Skills

What is communication?

Communication is an issue that appears so simple; we just do it all day long. And yet it is sometimes so difficult, as we frequently experience misunderstandings, disputes, or verbal aggressions.

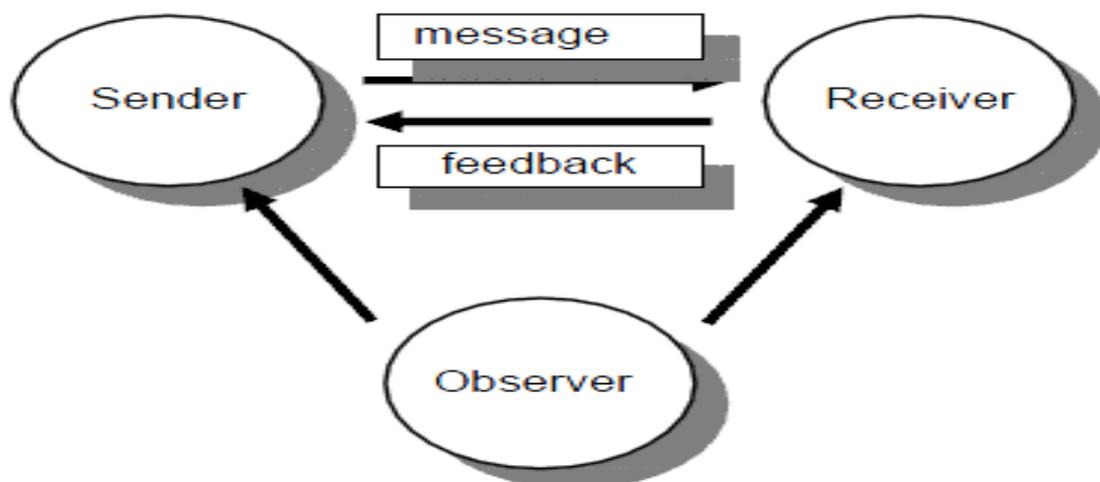
Communication is generally the most important means when working in extension, community forestry, or village development. This is even more the case when working as a trainer to train farmers. It is not only a question of feeling comfortable and having good relations. The understanding and the competence of facilitators and trainers in communication has highest influence in the quality of working results.

But what is good and what is bad communication? And what tools are there to improve our own communication? Few decades ago, a common thinking on the quality of communication was to follow basic rules of what is wrong and right. Messages should be delivered in a “polite shape”. This would be a proper way of communication.

But for instance, frustrated emotions are as well reality, and the question is how to deal with it. How can I perceive my frustration, i.e. realise what is the matter with me. How can I analyze the reason for it, and how to respond, i.e. communicate my feelings? The message “right” does not express the frustration, though it is a reality. Such communication might be applied in a situation that does not allow for an immediate clarification of conflicts. But in the long run, this style does not help for authentic communication and clarification of human relations.

Basic Communication Model

The basics of Communication include a sender, a receiver, a message, a medium and feedback. Since communication is more than a one-way engagement, the sender also becomes a receiver when feedback is given by the receiver on the message sent. Likewise, the receiver becomes also a sender when he/she responds to the message received, by way of feedback.



Good Communication Takes Real Skill

Communication skills have to be developed, honed and added to, on an on-going basis. They are at the heart of interpersonal skills and the greater your awareness of how it all works, the more effective your communication will be.



Forms of communication

Nonverbal & Verbal Communication

Non-verbal: communicating without words - Research has shown that non-verbal communication forms about 65% of communication. As a trainer, it is important to expand your ability to use cues you see to improve communication between you and the trainee. In particular, attention should be giving to areas such:

1. **Posture, eye contact gestures, body movements, and tone of voice.** These indicators can convey vital information that is not put into words. Paying closer attention to trainees' non-verbal behaviours and acting upon them could improve assimilation of information.
2. **Be aware of incongruent behaviours.** If a trainee's words do not match his/her nonverbal behaviours, you should pay careful attention. For example, he/she might tell you he/she is happy while frowning and staring at the ground. The non-verbal sign might show the real message.
3. **Be aware of the tone of voice (both yours and trainees).** Tone of voice can convey a wealth of information, ranging from enthusiasm to disinterest or anger. Start noticing how the tone of voice affects learning and try using tone of voice to emphasise ideas that you want to communicate.
4. **Use good eye contact.** When people fail to look others in the eye, it can seem as if they are evading or trying to hide something. On the other hand, too much eye contact can seem confrontational or intimidating. While eye contact is an important part of communication, it's important to remember that good eye contact does not mean staring fixedly into someone's eyes.
5. **Look for group of signals** - A single gesture can mean a number of things, the key to accurately reading nonverbal behaviour is to look for groups of signals that reinforce a common point.
6. **Ask questions about nonverbal signals.** If you are not sure about another person's nonverbal signals, don't be afraid to ask questions. A good idea is to repeat your interpretation of what has been said and ask for clarification. An example of this might be, "So what you are saying is that..."

Effective Communication Skills Training

- We will deal with communication skills training by unpicking what happens - if you know how the dynamics work, you can be in charge of them.
- Then you can choose from a whole range of tools and techniques that fit your personal style. We're big on personal style because when it comes to communication under pressure you can't be anyone other than yourself.
- Therefore, we like to develop the communication skills people already have and the things they already do well, rather than focusing on what's wrong or what needs to be fixed.
- Being a good communicator is often about feeling confident in those situations where you don't always feel comfortable, so we make life easier for you by enhancing what's already there. In other words, you don't have to learn a whole bunch of radically new things.
- Being an effective communicator means that other people take you seriously, listen to what you have to say and engage in dialogue.

Questioning Skills

There are three skills associated with the questioning process:

1. Asking questions.
2. Handling answers to questions.
3. Responding to questions.

Questioning Skills: Asking Questions

1. Two Basic Types:
 - Closed
 - Open
2. Phrasing: See *Guidelines for Phrasing...*
3. Directing:
 - Group
 - Individual

Questioning Skills: Handling Answers

Maximum learning requires maximum participation.

Questioning Skills: Responding to Questions

Three *acceptable* ways to respond:

1. Provide the answer yourself.
2. Redirect the question to a learner.
3. Defer the question.

Three elements in most communication:

- Words 7%
- Voice 38%
- Body Language 55%

Listening

Speaking is often regarded as the active part and listening the passive part in communication. But in fact “Active listening” is a very difficult skill, and without doubts an essential one for facilitators and trainers. It is not just about listening to spoken words. It is much more to be fully attentive to the sender, trying to understand him/her, with all the aspects that the communication partner likes to express, either explicitly or implicitly, either with words or nonverbally.

Listening Skills

Listening involves two key steps:

1. Listening to the words being expressed.
2. Paraphrasing what was said to demonstrate understanding.

Step 1: Listen to the Words

There are major roadblocks to this step:

- Internal distractions.
- External distractions.

Step 2: Paraphrase

Paraphrasing requires you to verbally interact. The interaction is either to...

- Get additional information.
- Verify what you think was said.

Listening barriers

On-off listening

This unfortunate listening habit comes from the fact that most people think about 4 times faster as the average person can speak. Thus the listener has about 3/4 minute ‘spare thinking time’ in each minute of listening. Sometimes the listener uses this extra time to think about his or her own personal affairs and troubles instead of listening, relating and summarising what the speaker has to say. This can be overcome by paying attention to more than just the speech, but also watching body language like gestures, hesitation, etc.

Red-flag listening

To some people, certain words are like a red flag to a bull. When they hear them, they get upset and stop listening. These terms may be unique to a certain group of participants, but some are more universal such as politics, etc. Some words are so ‘loaded’ that the listener “tunes out” immediately. The listener loses contact with the speaker and fails to develop an understanding of that person.

Open ears – closed mind listening

Sometimes listeners decide quite quickly that either the subject or the speaker is boring, and what is being said makes no sense. Often they jump to the conclusion that they can predict what the speaker knows or will say, so they conclude that there is no reason to listen because they will hear nothing new if they do.

Glassy-eyed listening

Sometimes listeners look at people intently, and seem to be listening although their minds may be on other things and they may drop back into the comfort of their own thoughts. They become glassy-eyed, and often a dreamy or absent-minded expression appears on their faces. If we notice many participants looking glassy-eyed in sessions, we have to find an appropriate moment to suggest a break or change in pace.

Too-deep-for me listening

When listening to ideas that are too complex and complicated, we often need to force ourselves to follow the discussion and make a real effort to understand it. Listening and understanding what the person is saying might result in us finding the subject and the speaker quite interesting. Often if one person does not understand, others do not either and it can help the group to ask for clarification or an example if possible.

Don't-rock-the-boat listening

People do not like to have their favourite ideas, prejudices, and points of view overturned, and many do not like to have their opinions challenged. So, when a speaker says something that clashes either with what they think or believe they may unconsciously stop listening or even become defensive. Even if this is done consciously, it is better to listen and find out what the speaker thinks, and understand all sides of the issue, so that the job of understanding and responding constructively can be done later.

Do's and Don'ts of Listening

When listening we should try to do the following:

1. Show interest.
2. Be understanding.
3. Express empathy.
4. Single out the problem if there is one.
5. Listen for causes of the problem.
6. Help the speaker to develop competence and motivation to solve his or her problems.
7. Cultivate the ability to be silent when silence is necessary.

When listening we should avoid doing the following:

1. Rush the speaker.
2. Argue.
3. Interrupt.
4. Pass judgement too quickly.
5. Give advice unless it is requested by the other person.
6. Jump to conclusions.
7. Let the speaker's emotions affect your own too directly.

Annex 1: Further Readings and Useful Websites

Organisation	Website	Important documents/description
Rainforest Alliance	http://www.rainforest-alliance.org	<ul style="list-style-type: none"> • SAN Sustainable Agriculture Standard (version 4, 2010) • SAN Group Certification Standard (2011) • General Interpretation Guide - Group Certification Standard (2013) • Interpretation Guidelines - Indicators for Sustainable Cocoa Production in Ghana (2009)
Fairtrade International	http://www.fairtrade.net	<ul style="list-style-type: none"> • Generic Fairtrade Standards for small producers' organizations, v1.3 (2011) • FLO training guide 4.0 for small farmers' organizations, developing and implementing Internal Control Systems • Fairtrade Standards for cocoa for small producers' organizations and traders, v1.2 (2011) • Fairtrade Trader Standards • Explanatory document for the Fairtrade Standard for small producers' organizations • Explanatory document for the Fairtrade Premium in small producers' organizations •
FLO Cert GmbH	http://www.flo-cert.net	<ul style="list-style-type: none"> • Certification requirements and compliance criteria
UTZ	www.utz.org	<ul style="list-style-type: none"> • Core Code of Conduct for group and multi-group certification, version 1.1 • Implementation Guide • Code of Conduct Cocoa Module, version 1.1 • Code of Conduct checklists • Internal Management System Guide
GIZ	http://www.giz.de	As a federally owned enterprise, GIZ supports the German Government in achieving its objectives in the field of international cooperation for sustainable development
IDH	http://www.duurzamehandel.com	The mission of the Dutch Sustainable Trade Initiative (IDH) is the acceleration and up-scaling of sustainability within mainstream commodity markets
Solidaridad	http://solidaridadnetwork.org	Solidaridad works on creating sustainable supply chains. This enables producers in developing countries to get a better price for better products and it helps to preserve people's environment
COCOBOD/CRIG	http://www.crig.org	Cocoa Research Institute of Ghana. Has developed a Cocoa Source Book
STCP	http://www.treecrops.org	STCP seeks to generate growth in rural income among tree crop farmers in an environmentally and socially responsible manner in West/Central Africa. Some publications: <ul style="list-style-type: none"> • Cocoa production guide book • Cocoa ICPM training curriculum • Farmer Field School manual • Biodiversity Conservation manual

ACDI-VOCA	http://www.acdivoca.org	ACDI/VOCA is a private, non profit organisation that promotes broad-based economic growth and the development of civil society in emerging democracies and developing countries
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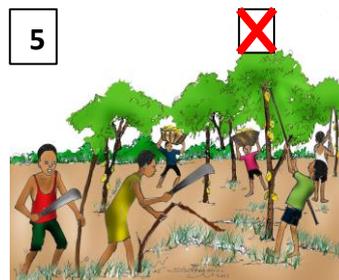
The following CCE partner organisations and companies have contributed to this training manual:

Standard initiatives	Development aid organisations	Private companies
 <p>FAIRTRADE INTERNATIONAL</p>	 <p>idh dutch sustainable trade initiative</p>	 <p>MARS incorporated</p>
 <p>UTZ Better farming Better future</p>	 <p>giz</p>	 <p>ARMAJARO</p>
 <p>RAINFORREST ALLIANCE CERTIFIED</p>	 <p>Solidaridad</p>	 <p>ADM</p>  <p>BARRY CALLEBAUT</p>
<p>Others</p>		
 <p>AGRO ECO LOUIS BOLK INSTITUTE</p> <p>Conservation Alliance</p>	<p>Financial support by:</p>  <p>Federal Ministry for Economic Cooperation and Development</p>	

Annex 2: Overview of Visuals Needed per Topic

You will need the following visuals in your training sessions. All visuals should be printed in colour in A3 format (which is twice as big as an A4 sheet) to ensure that all participants can clearly see what is on the visual. The best is to laminate all drawings so you can use your drawings several times.

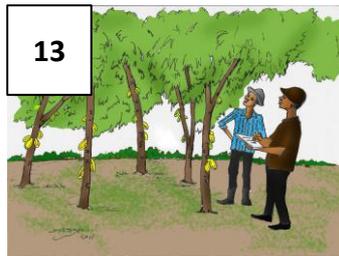
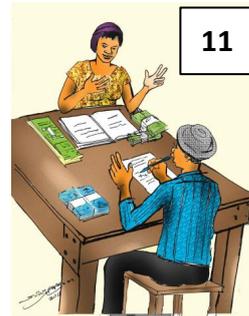
Topic I.1: Introduction of certification:



Drawing 01 is the same as drawing 10 and 45.

Drawing 02 is the same as drawing 19.

Topic I.2: Steps to certification



Drawing 10 is the same as drawing 01 and 45.

Topic I.4: Premiums



Drawing 16 is the same as drawing 41.

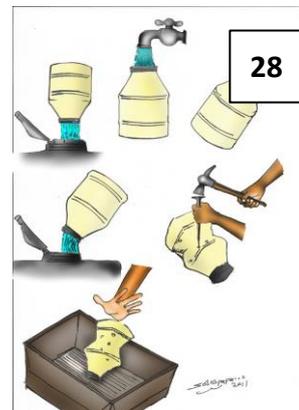
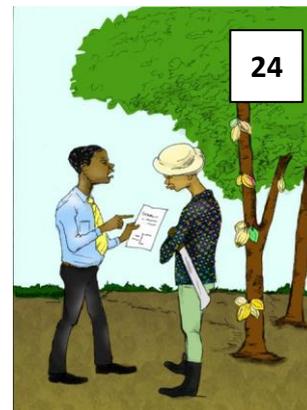
Drawing 18 is the same as drawing 47.

Topic I.5: Traceability



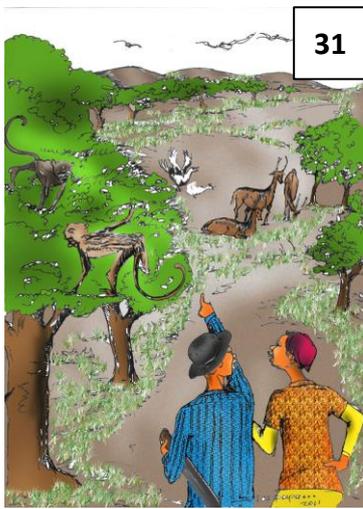
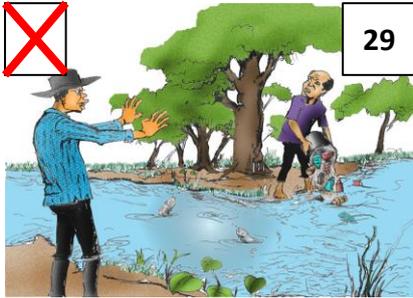
Drawing 19 is the same as drawing 02.

Topic III.2: Safe and responsible use of agrochemicals

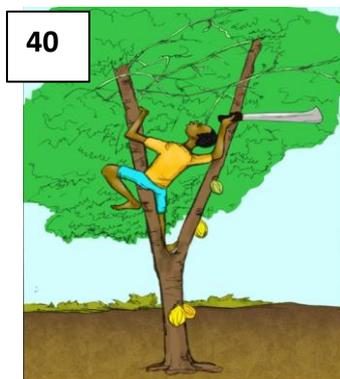
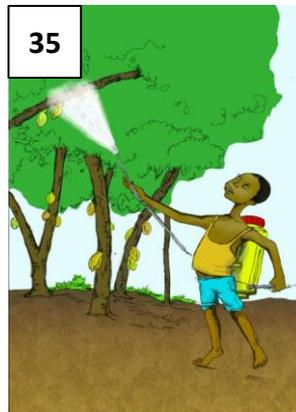
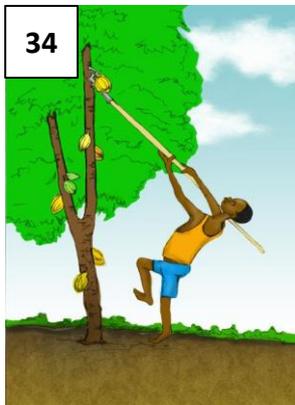
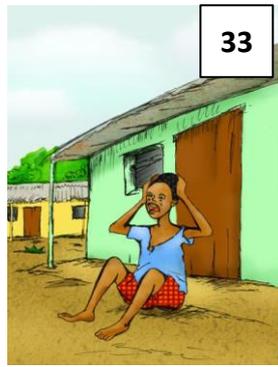
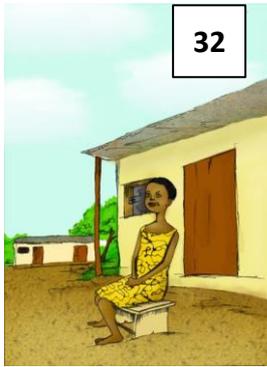


Drawing 27 is the same as drawing 50.

Topic III.5: Wildlife protection



Topic IV.2: Child labour



Drawing 41 is the same as drawing 16.

Topic IV.3: Working conditions



Drawing 45 is the same as drawing 1 and 10.

Topic IV.4: Community relations



Drawing 47 is the same as drawing 18.
Drawing 50 is the same as drawing 27.