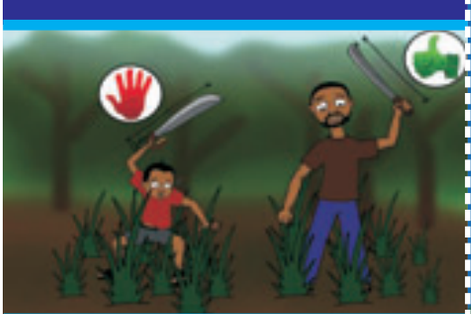
ELIMINATING HAZARDOUS CHILD LABOUR AND OCCUPATIONAL SAFETY, HEALTH AND ENVIRONMENTAL RISKS

A Manual for agents of change in cocoa communities in Ghana

International Labour Organization

GAWU OF TUC - GHANA



International Programme on the Elimination of Child Labour (IPEC)

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ILO-IPEC, GAWU

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Preface

Agriculture is one of the most hazardous economic sectors with many agricultural workers suffering occupational accidents and ill-health. Agriculture employs some one billion, often poorly organised, workers worldwide or more than a third of the world's labour force, and accounts for approximately 70 % of child labour worldwide. It is also the largest sector for female employment in many countries. The demands of agricultural work take their toll on children: they either drop out of school or combine schooling with long hours of work with many falling victims to the risks and hazards of fieldwork. Children are often exposed to toxic pesticides or fertilizers, dangerous blades and tools and suffer from attacks or bites from animals or insects as well as from carrying heavy loads.

Hazardous work can have immediate and long-term impact on workers, including children. These may include injury (e.g. a wound from a blade), disability (e.g. crushed limb from a machine) and even death (e.g. as a result of pesticide poisoning). Children and adolescents are specifically vulnerable to the effects of hazardous work because they are still developing physically and mentally. Exposure of children to dangerous chemicals or physical stress can also harm their proper and healthy development. Some of the physical or psychological impacts of hazardous work may not be obvious immediately, but only begin to appear at a later stage in their lives.

Cocoa cultivation in Ghana is a source of livelihood for over 800,000 families on smallholder farms. Current estimates put the land area under cocoa cultivation at about 1.5 million hectares. This constitutes about 60 per cent of the national agricultural labour force, each producing an average of 1,125 kilogrammes of dried cocoa beans per annum. The incomes of these small holder cocoa farmers have been inadequate to make ends meet and therefore many ignore good agricultural practices including Occupational Safety and Health (OSH) measures. Farmers also resort to family labour, including the engagement of children in the production of cocoa in order to reduce costs.

This Manual was produced by the ILO's International Programme on the Elimination of Child Labour (ILO-IPEC) in collaboration with the General Agricultural Workers' Union (GAWU of GTUC) to serve as an essential training tool for workers in the rural communities, especially farmers, to promote and ensure safety at the work place. It is one of IPEC's strategies in working with workers' representatives and employers' organizations to help ensure that work is safe for all. The production of this farmer-friendly manual fits under a new generation of ILO-IPEC projects in West Africa namely *"Towards Child Labour-Free Cocoa Communities in Côte d'Ivoire and Ghana through Integrated Area-Based Approach"* financed by the United States Department of Labor and *"Combating Child Labour in Cocoa-Growing Communities in Ghana and Côte d'Ivoire"* financed by the Global Issues Group (GIG).

One component to ensure, in eliminating child labour and promoting decent work for adults and children of legal working age, is to increase productivity of our rural-based farmers and other agricultural workers. This is best achieved by promoting good and safe practices of work - a healthy worker is an asset. The point is that enlightened farmers knowledge about good OSH practices will understand the dangers that children in labour are exposed to and the need to exclude them from hazardous activities in cocoa-farming.

Preface (cont.)

ILO-IPEC and GAWU hope production of this Manual will go a long way to help the community and farmers as well as agriculture extension officers in their training efforts. Ultimately, through training and awareness raising, adults and children will recognise the dangers in cocoa farming and the benefits of adhering to good OSH measures.

Corinne Vargha

Chief
ILO Fundamental Principles and Rights at Work Branch

Kingsley Ofei-Nkansah

General Secretary
GAWU

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MODULE 3:
PROTECTING THE HEALTH AND WELL-BEING OF CHILDREN AND FARMERS

List of Acronyms

AIDS	Acquired Immuno Deficiency Syndrome
CCP	Cocoa Communities Project
CCPCs	Cocoa Child Protection Committees
CHRAJ	Commission on Human Rights and Administrative Justice
CIAT	Colombia-based International Centre for Tropical Agriculture
COCOBOD	Ghana Cocoa Board
CLFZ	Child Labour-Free Zones
CLMS	Child Labour Monitoring System
CLU	Child Labour Unit
CSO	Civil Society Organization
DCPCs	District Child Protection Committees
DDT	Dichloro Diphenyl Trichloroethane
FAO	Food and Agriculture Organization of the United Nations
GAC	Ghana AIDS Commission
GAWU	General Agricultural Workers' Union of the Ghana Trade Union Congress
GDP	Gross Domestic Product
HAF	Hazardous Child Labour Activity Framework
HIV	Human Immuno Virus
ICCO	International Cocoa Organisation
IITA	International Institute of Tropical Agriculture
ILO	International Labour Organization
IPEC	International Programme on the Elimination of Child Labour
IUF	International Union of Food, Agriculture, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Association
JHS	Junior High School
LBCs	Licence Buying Companies
LI	Legislative Instrument
MTCT	Mother-to-Child Transmission
NGO	Non-Governmental Organization
NHIS	National Health Insurance Scheme
NLCD	National Liberation Council Decree
NPA	National Plan of Action
NPECLC	National Programme for the Elimination of Child Labour in Cocoa
OSH&E	Occupational Safety, Health & Environment
PAC	Policy and Advocacy Campaign
PPE	Personal Protective Equipment
PPP	Public Private Partnership
RIW	Right in Work Programme
RSI	Repetitive Strain Injuries
RWOP	Rural Workers' Organization Programme
SSNIT	Social Security and National Insurance Trust
STCP	Sustainable Tree Crops Programme
STDs	Sexually Transmitted Diseases
TEP	Training & Education Programme
UN	United Nations
UNCRC	United Nations Convention on the Rights of the Child
HS&E	Health Safety and Environment

List of Acronyms (cont.)

UNAIDS	Joint United Nations Programme on HIV/AIDS
USDOL	United States Department of Labor
WACAP	West Africa Cocoa and Commercial Agricultural Project
WFCL	Worst Forms of Child Labour
WHO	World Health Organization

Trainer's guide

I. INTRODUCTION

Issues related to agricultural child labour are of critical importance in Sub-Saharan Africa where nearly 30% of children under the age of 15 are involved in child labour and 15% in hazardous child labour. In Ghana, most child labourers aged 5-17 years (57%) are found in the agricultural sector with boys dominating [2]. Only one in five children are in paid employment with the majority working as unpaid family workers. Much of the work done by children is harmful and hazardous with devastating consequences for children's health, development and prospects. International media attention in the 1990s shed light on the use of child labour in West Africa cocoa farming and in countries such as Ghana.

In Ghana, agriculture is currently the highest contributor to GDP and provides employment to over 60% of the population. The cocoa sector employs over 800,000 small farm families, constituting about 60% of the national agricultural labour force. A combination of family, hired and communal (Nnoboa) labour is used by farmers in cocoa production in Ghana. Household labour is the main source with children contributing 14 percent. Children's participation in cocoa farm activities increases as they age. The common activities are farm maintenance including weeding (50%-75%); fetching water for spraying (61%-73%); harvesting, pod gathering and heaping (84%-89%). Pods breaking, fermentation, scooping of beans and carting of fermented beans dominate the activities of the children between 13-17 years old.[3]

According to the Tulane University Survey Report of 2008, children often begin working before the legal minimum age of employment. The survey indicated that 997,357 children worked in cocoa-related activities, with average working hours of 10 hours per week and with some older children even working longer hours. The survey confirmed that children are sometimes involved in activities defined as hazardous, including weeding, cocoa harvesting activities and carrying heavy loads with approximately 10% of working children carrying water for spraying which involves pesticides. The survey also reported that 10% of the children were not in school.

The 2009 Report on Weighted Data on Cocoa Labour Survey in Ghana (Scale-Up Study, 2007/2008) by the National Programme for the Elimination of Child Labour in Cocoa (NPECLC) indicated the engagement of children in both cocoa and non-cocoa work with nearly a quarter (23.3%) of the total number of children aged 5-17 years in the cocoa areas covered (1,846,126) engaged in at least one hazardous activity with 10 percent in cocoa-specific hazardous activities. The report estimated a total of 309,224 out of the population of 1,498,303 children below the minimum age for admission to employment (i.e 15 years) engaged in hazardous work. The survey also found that a little more than a fifth of children below 13 years (minimum age for light work) were working in cocoa farms even though the Children's Act, 1998 (Act 560) prohibits children below 13 years from work. About two percent of them (1.7%) were found to be out of school.

Both the Tulane and the NPECLC Survey reports confirmed an enrolment range within 90 percent in cocoa-growing communities with an attendance rate of 71% according to the NPECLC 2007 Pilot Survey results. The illiteracy rate of basic school children was high at 54%.

2. In Ghana, the Ghana Child Labour Survey (2003) recorded 57% of child labourers in the agriculture, hunting and forestry sectors.
3. IPEC Rooting out Child Labour from cocoa farms-Paper No: Synthesis repoer of five rapid assessments, Geneva, International Labour Office.

Finally, the latest “2010 Population and Housing Census” provided further insight into the general number of children in a child labour situation. The following is a quick summary of the main findings:

- 11% of children aged 5-14 years are working (677,089 of 6,044,992).
- Greater Accra, Ashanti and Western regions have the lowest proportions in child labour (3%, 5% and 6% respectively).
- 60 percent of all child labourers live in just four regions: Northern (31% of children are labourers), Upper West (25% of children are labourers), Upper East (23% of children are labourers) and Brong-Ahafo (13% of children are labourers).

Child labour is an obstacle to Ghana's development and economic progress in such a key sector as cocoa. Much of the activities performed by children in cocoa production are unsafe and hazardous and take place in unhealthy environment.

Little attention is paid to OSH preventive measures in Ghana, especially in such informal sectors as cocoa. It is estimated that the proportion of workers who receive comprehensive OSH training in the informal sector is likely to constitute no more than two percent of workers. Ghana's annual occupational injury rates indicates about 11.5 injuries/1,000 persons in the urban areas and 44.9/1,000 in the rural areas. Improving occupational safety and health by strengthening the OSH system in cocoa and other agriculture productions will minimize the risk of exposure and accidents in the sub-sector. It will also help in the elimination of child labour, promote decent work for adults and children of legal-working age (15+), as well as sustainable agriculture and rural development.

II. REASONS FOR THE MANUAL

This manual has been developed by IPEC of the ILO and GAWU to promote the knowledge and uptake of the basics of child labour and OSH&E in cocoa farming.

Although originally developed for Ghana and Ghanaian cocoa farmers, we believe this manual is relevant and applicable to other cocoa-producing countries and scenarios.

Together with a selected group of experts, ILO-IPEC and GAWU have worked extensively to produce a visual, self-explanatory and hands-on training package that will speak directly to farmers and children involved in cocoa farming. It uses extensively illustrations, drawings and pictorial imagery to represent and demonstrate concepts, risks, hazards and good practices.

The manual also adopts a multidisciplinary, cross-cutting approach combining perspectives from OSH sciences coupled with gender, physiological, psychological and economic considerations.

Developed as a training of trainers' tool, the manual's ultimate goal is to influence positively the lives and working practices of mainly farmers and children of legal-working age in cocoa farms. This is done essentially through the action of a particular group of actors likely to act as trainers/agents of change in cocoa communities. These include:

- **Agriculture Extension Officers and Local Facilitators:** These are responsible for the informal education of farmers on scientific research, modern technologies and new knowledge including improving OSH&E. Extension Officers/Agents should integrate the content of this Manual into their routine activities.

- **Labour inspectors:** They have the mandate to inspect both formal and informal workplaces to ensure adherence to Labour Regulations for the protection of both adults and legal working-aged children and that there is no child labour. The manual will serve as a guide in their operations in the agriculture/cocoa sector. Labour Inspectors should take keen interest in aspects of the manual's legal and advisory services.

- **Union educators:** These include union leadership, industrial relations and programme officers and local union representatives, including community level union executives. Their role is to link the Manual to main trade union educational activities to the rank and file members.

- **District/Community Child Protection Committees (D/CCPCs)**: D/CCPCs have a monitoring role to ensure that child labour does not thrive in their coverage areas. They are to ensure the smooth and proper use of the manual in close collaboration with Labour Inspectors and other key players to ensure that children of legal working-age are in safe work.

- **NGOs / CSOs:** They will work in close collaboration with Labour Unions in the areas of field training and advocacy on OSH&E.

- **Employers and related associations (through the Ghana Employers' Association):** Employers will assist in the development of OSH&E-related codes of conduct in cocoa farming, using relevant sections of this manual.

- **License Buying Companies (LBCs):** The manual will be used by LBCs in the education of cocoa farmers on the benefits of improving OSH&E.

- **Department of Cooperatives:** The Department will integrate the contents of the manual into group formation and cooperative educational activities.

- **Formal Agriculture Colleges:** They will use the content of the manual to strengthen their curriculum and training of OSH&E in agriculture.

III. ABOUT THE ILO AND IPEC

The ILO is the international organization responsible for drawing up and overseeing international labour standards. It is the only tripartite United Nations agency that brings together representatives of governments, employers and workers to jointly shape policies and programmes promoting Decent Work for all.

The ILO's IPEC was created in 1992 with the overall goal of the progressive elimination of child labour, which was to be achieved through strengthening the capacity of countries to deal with the problem and promoting a worldwide movement to combat child labour. IPEC is the biggest dedicated child labour programme in the world and the largest single technical cooperation programme within the ILO.

The goal of IPEC remains to be the prevention and elimination of all forms of child labour, with priority targets for immediate action in addressing the worst forms of child labour, including hazardous work.

IV. ABOUT GAWU

GAWU is a registered legal non-governmental organisation providing services for its members in the agricultural sector. GAWU is the biggest Union organising farmers and agricultural employees in Ghana. Formed in 1959 as a Union of formally-employed workers, GAWU started extending organisational coverage to the teeming millions of self-employed in the rural informal economy in Ghana from 1979.

GAWU's pioneering role in organising rural informal economy workers is premised on the fundamental rights of all working people, small-scale farmers included and the recognised need for an organisational vehicle to champion the concern of the poorest sections of the population. The justification of these efforts stems from the growing informal economy and the ILO recognition, since the early 1990s, of addressing poverty, social protection and the interests of informal economy workers and small scale farmers. Thus, GAWU membership extends to waged and non-waged agricultural workers in formal establishment and rural communities, including young workers [4]. Our operations cover all forms of agriculture such as oil palm, cocoa, rubber, rice, forestry and poultry among others. Within the non-wage sector, the union organises members as economic groups. That is, farmers with same crops and farmers within rural communities. To achieve this, GAWU works through four main departments and programme areas namely:

- Rural Workers' Organisation Programme (RWOP)
- Rights in Work Programme (RIW)
- Training and Education Programme (TEP)
- Policy, Advocacy and Campaign Programme (PAC)

Young workers are an important concern of GAWU as they are the community and union leaders of tomorrow but are the most vulnerable workers of today.

Rural Workers' Organisation Programme (RWOP) principally aims at promoting and facilitating the organization of non-wage agricultural and rural workers for the purpose of promoting sustainable agriculture and rural development. **The Rights in Work Programme (RIW)** on the other hand is the framework for pursuing traditional trade union negotiations and representation as well as promote basic human rights of working people in the world of work. The **Training and Education Programme (TEP)** provides education and training support for members of the union. It does this through specific workplace training activities and also by the development of systems and tools that promotes the empowerment of agricultural workers for advocacy and engagement.

4. Young workers refers to children of legal working age i.e 15 to 17 years

And lastly, the **Policy, Advocacy and Campaign (PAC)** Programme promotes people-centred rights-based approach advocacy with the view to influencing policy formulation and implementation in favour of small-scale farmers. It influences the content and direction of policies at all levels in furtherance of the rights of the agricultural and rural population in particular. Advocacy issues include Trade union rights, Trade and development, Food security, Gender equality, Pesticide, the Millennium Development Goals as well as Child labour issues. GAWU is pushing for the creation of child labour-free zones using the integrated area-based approach where such options as unionising informal farmers and communities to increase their bargaining power and access of farmers to such services as credit facilities, extension services, inputs and markets are involved. Currently, GAWU has partnered ILO in its child labour elimination programme by consolidating the organization of cocoa farmers using integrated area-based approach towards the creation of child labour-free zones in Ghana.

GAWU's position on the minimum age for employment and the right to education is in line with the 1992 Constitution and the Children's Act, 1998 Act 560. GAWU, being a member of GTUC, which is on the board of the SSNIT promotes a pension regime that covers all workers, both formal and informal, including agriculture workers. It is in line with this that the third tier has been added to the SSNIT Pension scheme. GAWU is also promoting a process for the full engagement and involvement of cocoa farmers in the determination of cocoa prices through its newly established Cocoa Farmers' Division and in partnership with the IUF based in Geneva.

GAWU seeks to promote the concept of sustainable agriculture and rural development, thus ensuring environmentally-friendly agricultural production systems and practices.

V. CONTENT AND METHODOLOGY

The manual is designed to help trainers run courses for mainly cocoa farmers and children above minimum age for work involved in hazardous child labour. Specifically, the manual is designed to help trainers to:

- plan and run activities with farmers and children above the minimum age for work;
- sensitize the relevant actors through knowledge on child labour & OSH risks in cocoa farms;
- conduct local risk assessments to enable farmers to distinguish between those activities and conditions which are appropriate for young people of legal working-age and those which are too hazardous for them to be involved;
- promote decent work and enable farmers to identify and control/reduce risks, protect the environment and increase productivity in cocoa production.

Additionally, in doing this through a group of well-defined agents of change, the manual indirectly aims at building a community of people committed to the elimination of child labour and OSH risks and to the promotion of child labour-free zones.

The Manual is divided into the 3 Modules as follows:

M1: Child Labour and Hazardous Work in Ghana's Cocoa Farms;
M2: Hazards and Control Measures in Cocoa Production;
M3: Protecting the Health and Well-being of Children and Farmers.

This manual follows a modular format with units and sessions and encompasses approximately 20 hours of training. It may not always be possible or advisable to run all the modules at the same time or at all cost. Specific Modules may be used as stand-alone depending on the situation, time available or group of trainees. In each case, it is recommended that Module 1 which is an introductory module that looks into the basic concepts of child labour and hazardous work is always used before hand to set the scene and facilitate knowledge.

Each Module is divided into Units and each Unit into Sessions. Under each Session, you will find a first section on **"Technical Information"** which you need to read and absorb before preparing and running training activities.

Immediately after, the section on **"trainer's notes"** provides notes for you as trainers on the suggested methodology (exercises, group work, quizzes, etc), tips on how to handle a training session and the **"Key Messages"** that the target group should have learnt at the end of each session. Note that, it may sometimes be necessary to adapt some of the activities if members of the group cannot read or write. There is also reference to the approximate time that each session or unit should last and also the type of materials you may need to have in place to run the training. Appendix 1 of the **"Resources" section** of the manual contains a glossary of the main technical terms employed.

Pictures and drawings are key components of the manual's training methodology and are meant to personalize the issue of child labour and work as "eye openers". They intend to be catchy and make an impact in people's mind that will hopefully be long-lasting. You will find in the **"Resources" section** all the pictures and drawings in a more appropriate size and resolution to be shown to participants during training.

In terms of place of training and sitting arrangements, most session and methodologies have been designed to allow the training to happen anywhere, be it in a classroom or under the shade of a tree. In terms of how to sit people, opt for a circle, semi-circle or horseshoe configuration around you as this eases the distance between you and the participants and also between participants and provides for a much more informal setting. Avoid classroom settings!

Remember also not to overload the group with information or too lengthy sessions. Judge their mood and body language and adapt your training methods to these. Use **"energizers"** (see **"Resources" section**, Appendix 8, whenever you think that's necessary). More training tips will be provided under each session.

MODULE 1

CHILD LABOUR AND HAZARDOUS WORK IN GHANA'S COCOA FARMS

Contents:

UNIT 1.
CHILD LABOUR: SETTING THE SCENE

 3hrs. 45mins.

Objectives

The understanding of the concept of child labour is complex. People from different walks of life understand the concept differently, depending on their cultural, religious and professional orientation. There are different factors that come into play in understanding the concept of child labour. Such factors include the age of the child, the nature and circumstances of work, working tools, time and duration of work. Proper understanding of the concepts puts one in a position to strategically address the problem.

At the end of Unit 1, participants will have acquired sufficient knowledge and skills to:

- identify who a child is and the categories of work at different ages and stages of development;
- distinguish between what child labour is and what child labour is not;
- know the factors that perpetrate child labour;
- understand the key laws and regulations in Ghana concerning the work of children;
- identify what older children of legal working age (15 to 17 years) can do and what they cannot; and
- analyse best approaches of eliminating child labour by looking at the concept of child labour-free zones.

Sessions:

A. Child Labour: What, Why and How?
B. Children and Cocoa Farming: OK and NOT OK Work
C. Child Labour-Free Zones: An Integrated Area-Based Approach

Materials:

- Flipcharts and Stands
- Marker pens
- Beamer to display selected slides or big board to display some of the exercises
- Child labour documentary (Different available), maximum of 5 minutes.
- Newspaper cuttings
- Paper Cards (Different colours)

Session A.
Child Labour: What, Why and How?

2hrs.

Technical information

Who is a Child?

To understand what child labour is we must first understand who are those considered to be "children" and therefore in need of protection. The definition of a child varies from person to person, depending on cultural differences and other factors. For example, some communities perceive children who have given birth to be adults (regardless of age). The following is the only legally-accepted definition and supersedes cultural and any other definition.

> ***Who is a Child?***
> *A child is any person (boy or girl) below 18 years. This is according to the relevant national laws and international legal provisions, including the 1992 Constitution of Ghana, the Children's Act, 1998 (Act 560), the ILO Conventions Nos. 138 and 182 and United Nations Convention on the Rights of the Child (UNCRC).*

While the term "child" covers all girls and boys less than 18 years of age, it does not mean that all "under-18s" must be removed or prevented from all types of work.The basic rules under international and national legal standards distinguish what constitutes child labour and light work for children at different ages and stages of development.

Light Work

Not all work done by children should be considered as child labour and targeted for elimination. Children doing small tasks around the house and on the farms outside school hours and participating in work appropriate to their level of development and age acquire practical skills and learn responsibility. It is therefore acceptable for children to go with their parents and family members to the farms to do light work. Light work is work that is often seen as part of the socialization process and beneficial to the child's development, inter-generational transfer of skills and the future of cocoa production.

Figure 1. Light work

Light work is any work that is not likely to harm the child's health and development and does not interfere with their school attendance or their participation in vocational orientation and training programmes. The minimum age for performing light work in Ghana is 13 years old.

CHILD LABOUR

The term 'child labour' refers to any kind of work which by its nature or the circumstances in which it is carried out, is harmful to the intellectual, physical, social and moral development of the child and undermines his/her education by preventing him/her from attending school, constraining him/her to abandon schooling too soon or requesting them to work long hours under strenuous circumstances and study at the same time.

The 1992 Constitution of Ghana guarantees the protection of children from engaging in any work that is considered injurious to their health, education and development. The Ghanaian Constitution also consecrates the rights of children to access education and not to be engaged in exploitative work. This is considered by the Constitution to be a human right.

Ghana has ratified the main international commitments on child labour, namely ILO Convention Nos. 138 and 182 in 2011 and 2000 respectively and the United Nations Convention on the Right of the Child (1989) in 1990. In addition to this, Ghana has ratified the Safety and Health in Agriculture Convention, 2001 (No. 184) in 2011.

Ghana's laws on child labour: a quick overview

At the national level, Ghana has adopted a number of important laws and regulations on child labour. First and foremost, the Children's Act, 1998 (Act 560) aims to reform and consolidate the laws relating to children, to provide for the rights of the child, maintenance and adoption, regulate child labour and apprenticeship, ancillary matters concerning children generally and to provide for related matters. Other laws relate to domestic violence (Domestic Violence Act, 2007 (Act 732), human trafficking (Human Trafficking Act, 2005 (Act 694), labour issues (Labour Act, 2003 (Act 651), birth registration (Registration of Births and Death Act, 1965 (Act 301), etc. Infractions of some of these Acts constitute a criminal felony (e.g. Human Trafficking).

As far back as 1967, the Labour Decree (NLCD 157) had provisions for the protection of children from labour exploitation. Fondly remembered is also the national policy, dubbed "The Child Cannot Wait", launched in 1992, and the advocacy that led to the enactment of the Children's Act, 1998 (Act 560) and its Legislative Instrument, the Child Rights Regulation, (LI 1705).

Part V of the Children's Act (560) provides that the minimum age for admission to employment or work in Ghana shall not be less than the age of completion of compulsory schooling and in any case not less than 15 years, in order to ensure the full physical and mental development of the child. This is in line with ILO Convention (No.138), concerning the Minimum Age for Admission to Employment (1973).

The main related provisions of Part V of the Children's Act are presented in the following table *(for full versions of Part V of the Act, go to the 'Resources' section,- Appendix 2):*

Section/Part	Text
Section 8. Right to education and well-being	(1) No person shall deprive a child access to education, immunisation, adequate diet, clothing, shelter, medical attention or any other thing required for his development.
Section 12. Protection from exploitative labour	(1) No person shall engage a child in exploitative labour. (2) Labour is exploitative of a child if it deprives the child of its health, education or development.
Part V. Employment of children	Section 87. Prohibition of exploitative child labour. Section 88. Prohibition of child labour at night. (1) No person shall engage a child in night work. (2) Night work constitutes work between the hours of eight o'clock in the evening and six o'clock in the morning. Section 89. Minimum age for child labour. The minimum age for admission of a child to employment shall be fifteen years. Section 90. Minimum age for light work. The minimum age for the engagement of a child in light work shall be thirteen years. (2) Light work constitutes work which is not likely to be harmful to the health or development of the child and does not affect the child's attendance at school or the capacity of the child to benefit from school work. Section 91. Minimum age for hazardous employment. (1) The minimum age for the engagement of a person in hazardous work is eighteen years.

The summary of the acceptable work situations in Ghana, for the different age groups is presented in the table below:

MINIMUM AGE FOR ADMISSION TO EMPLOYMENT OR WORK IN GHANA	
LIGHT WORK	13 YEARS
NORMAL WORK/EMPLOYMENT	15 YEARS
HAZARDOUS WORK	18 YEARS

Child Labour – Not an Option!

Factors that shape children's development include those of economic, environmental and socio-cultural nature and are very crucial in preparing children for responsible adulthood.

Child labour has to be eliminated, because it is work that interferes with compulsory education and damages the health, moral or personal development of the child. A child's place is first and foremost at school as this is where he or she will acquire those basic skills to become a productive, educated and happy adult to contribute positively to society.

Figure 2. A child's place is in school

This will bring benefits to the child, his/her family and ultimately to the country's economy as a whole. Education plays a specific role in shaping the life of children for responsible adulthood. It is also intrinsically linked to child labour as research and practice has showed that those children most likely to be in child labour are not in school. Education also provides the best protection against child labour.

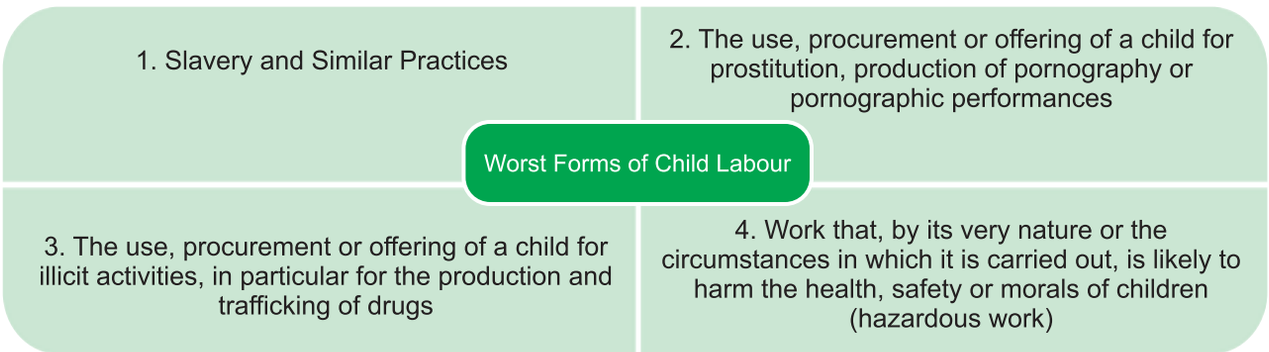
Child labour is also bad for cocoa production and the sector' struggles with productivity, climate change and other issues. Educated cocoa farmers are needed to adapt to new realities including new technologies.

Labour alternatives to child labour include the use of 'nnoboa', labour-saving technology, organising into groups and cooperatives, the use of farm gangs and soft loans to hire adult labour. Another approach adopted by this manual is to focus on improving occupational safety and health in cocoa production. The Children's Act, 1998 clearly states in Section 91 that “The minimum age for the engagement of a person in hazardous work is eighteen years.”

Worst Forms of Child Labour (WFCL)

In 1999, the ILO identified an egregious category of child labour, referred to as the Worst Forms of Child Labour (WFCL), prompting the adoption of Convention No. 182 (1999), to provide an important legal regime towards its elimination drive by all Member States as a matter of urgency. The ILO Convention (No. 182) concerning the Elimination of the Worst

Forms of Child Labour (1999) requires governments to give priority to eliminating the worst forms of child labour which are defined [7] below:



The first three categories of the above are criminal activities that are internationally defined and prohibited for all persons, both children and adults. One of such illegal activities includes the trafficking of children and smuggling of cocoa. (Refer to Appendix 3 'Resources' Section for more information on the trafficking of people in the Human Trafficking Act, 2005 (Act 694)).

WFCL: The Case of Hazardous Work

The fourth category of the WFCL known as 'Hazardous child labour' is work which by its nature or the circumstances in which it is carried out, is likely to harm the health, safety and morals of children. It is work whose dangerous or unhealthy conditions could result in a child being killed or injured, maimed or made ill as a result of poor safety and health standards and working conditions. This type of work is the largest category of the worst forms of child labour with an estimated 115 million children, aged 5-17 affected worldwide. Fifteen percent of all Sub-Saharan African children are involved in hazardous child labour. Most of these children work in agriculture and farming.

In Ghana, approximately 23% (430,595) of the children involved in both cocoa and non-cocoa work engage in at least one hazardous activity, with 10% of the affected children engaged in cocoa-specific hazardous work (more on this in the introduction to the manual).

Figure 3. Child using sharp and inappropriate cutlass

Hazards can be derived from excessive workload, physical conditions, distance and duration of work, even where the activity or occupation is known to be non-hazardous or "safe." The Children's Act, 1998 (Act 560)'s provisions on hazardous work have been revised to define specific hazardous tasks/activities for all sectors including cocoa, in line with ILO Convention 182 and its Recommendation 190.

7. Ghana joined and has been an active member of the ILO since 1957. Ghana has ratified seven (7) of the Core Labour Standards, including Convention nos 138 on Minimum Age for Employment and I82on the Elimination of the Worst Forms of Child Labour which have been translated into national legislation.

HAZARDOUS WORK LIST FOR GHANA (2011)

The hazards stated above may occur in any work occupation or sector. However Ghana has chosen the following work sectors and occupation as priority for development of the Hazardous Child Labour Activity Framework.

These include:
1. Fishing in open waters i.e. sea, river, lake and lagoon
2. Fish processing and sale (fish mongering)
3. Mining and quarrying
4. Crop agriculture- cocoa, rubber, cotton, oil palm, citrus, rice, vegetables and fruits
5. Livestock – cattle herding, goat & sheep rearing
6. Domestic work
7. Porterage and carting of heavy loads e.g.(kayaye)
8. Street hawking
9. Street beggars guide
10. Scavenging garbage dump
11. Working in commercial kitchens i.e. chop bars and restaurants
12. Working in hospitality work such as hotels, drinking bars and night clubs
13. Small scale textile manufacturing e.g. Tie-and-Dye
14. Foundries works: Aluminium and lead smelters, blacksmith
15. Mills and machine shops i.e. saw mills and grinding mills (corn, tomatoes)
16. Transportation of passengers and goods i.e. driver's mate
17. Automobile repairs workshops and garages i.e. Welding & spraying of cars and fitting shops

While adults need to be conscious of health and safety, it is undoubtedly important in the case of children because they are in a stage of rapid physical and psychological development through their teen years. The situation becomes ever more pressing in the case of young girls working in cocoa farms who face a number of additional safety, health and welfare hazards.

Household Work and The Special Case of Girls

Two-thirds of the 776 million illiterate people in the world are female, an indication of the continuing lack of relative value placed on girls' education. The popular view of girls' education as of lesser importance stems from the assumption that educated boys will have better labour market opportunities, while girls' time is better spent taking care of domestic chores in preparation for marriage and motherhood. The inequalities in access to education mean that by the time girls reach the minimum legal age of employment, many are already at a distinct social and economic disadvantage.

What is Gender or Gender Role?
Gender refers to those differences between boys and girls (men and women) that are derived from people's and society's perceptions. Children are taught from an early age that different gender roles mean that boys and girls engage in different activities. For example, a person is not born with the ability to do needlework or cook but acquires such skills over time. In most cultures it is more likely that girls will be taught such "female skills" than boys. Most boys and girls are eventually channelled into what are perceived as male or female work roles. Generally speaking, the role of females is often viewed as being of less importance or value than that of males. Girls are more likely to engage in types of work for which earnings are relatively low. This situation is not different even in child labour activities as there are male and female-dominated areas, with girls mainly into child domestic work. The opportunities that girls encounter early in life may well determine their chances later on. If girls lack basic education and engage in child labour at an early age they may be condemned to a future of poverty.

Moreover, in cocoa farming, much less is known about the risks that girls face. Many young girls work with their parents or are hired without adequate protection from the community or law. A higher percentage of girl-child labourers are unpaid or less paid than boys for undertaking the same activity.

Time spent on household work needs to be taken into account when analyzing if a child is in child labour or not. Girls have to combine family responsibilities with work thus end up working more hours and have less time to benefit from education, leisure and sleep. The term "double burden" is used to describe the workload of those who are not only engaged in an economic activity but also have responsibility for unpaid domestic work in their own households. Women and girls often spend significantly more time on household chores and caring duties, such as child-rearing or attending to the sick, than do their male counterparts. Having to combine domestic work commitments and economic activities can have a negative impact on education. As the number of hours devoted to household chores increases, the capacity of children to attend school diminishes. Whilst working or helping around the house in reasonable conditions, and supervised by those closest to them, can be an integral part of family life and of growing up, concerns arise over certain situations where these workloads might interfere with the children's education or are excessive, and therefore they might be tantamount to child labour. It is important that parents are encouraged to involve both boys and girls in carrying out households chores in order to reduce the over burdening of girls. It will also prepare male children to offer more support to their families in their adult life considering that more women are working now as against remaining as housewives.

Girls also seem to be predominantly involved in "domestic work" that is work done in a household other than the child's own, for another family, person or even employer. Child domestic work warrants particular attention because of the conditions under which the children – many of whom "live in" with their employers – are working. Time and again, child domestic workers report that their daily experience of discrimination and isolation in the household is the most difficult part of their burden. Their situation, and how they got to be there, also makes them highly dependent on their employers for their basic needs. This seclusion and dependency makes child domestic workers particularly vulnerable to child labour (including slavery), and at times can result in physical, psychological and sexual violence.

The following table shows the type of psycho-social risks and consequences faced by girls in cocoa farms:

Psycho- social risks	Consequences
Long working hours; low earnings: sexual violence, verbal abuse and harassment at work	Fatigue, stress, poverty, low morale; teenage pregnancies, abortions, etc. Most girls working in cocoa farms do not have the chance to go through the normal stages of childhood development. Many of them never get the chance to develop meaningful relationships with family members, friends and other people in their community. They do not go to school, they are not disciplined, and sometimes they are physically abused, and suffer permanent disabilities. They tend to feel worthless and their hope is to get married. They end up with pregnancies, or contact STIs and HIV/ AIDS.

For this reason, Ghanaian law protects children, of both sexes, from working in isolation or during the night. It is also because of such issues such as exposure to sexual violence or psycho-social hazards that all work performed by children should be made under adult supervision. More on the special situation of girls will be discussed throughout the manual. It is however important to appreciate that, the protection of girls should not be at the detriment of their male counterparts. This is to avoid the situation where we will get to a similar situation at a point in time where male children will be at the receiving end of discrimination.

Figure 4:Child labour and Girls

Factors that Perpetuate Child Labour

Children are vulnerable and do not have enough information of society, people and things around them to take a good decision, and easily fall victims through manipulation, exploitation and abuse. Children work in cocoa areas of Ghana for many reasons with poverty at the core of the problem. There are other contributing factors, since not all children from poor households engage in child labour. Poor families may send their children to work or ask them to work in the family business such as cocoa farms because the family needs the extra income or unpaid labour that the children provide. Child labour can therefore not be tackled in isolation from the problem of poverty.

Socio-cultural factors such as ignorance and misconceptions about the negative impact of hazardous work on children are important factors to address. Children working alongside adults are considered in some societies as essential element of socialisation. Families place importance on children following in their parents' footsteps. Therefore, if a family has a tradition of engaging in hazardous occupation, there is great likelihood that their children will enter the same line of work. Some employers also prefer children because they are vulnerable and can be paid less without protest.

Lack of decent schooling, including limited access to quality education, low standards of performance and achievement, limited trained and motivated teachers and parents' inability to pay indirect fees such as the provision of uniforms and books are also very important contributing factors. Non-enforcement of child labour laws and regulations facilitate the practice of using child labour especially in rural/agricultural settings where workers are inadequately protected due to limited numbers of enforcement agencies and trade unions are weak.

In addition to that, community attitudes such as not valuing girls' education (partially due to different returns to education for boys and girls) and not considering household chores as work, pose additional challenges to improving the situation of girls in rural areas.

Below is a summary of the factors that perpetuate child labour in Ghana:

Economic	Socio-Cultural	Educational	Limited Institutional Capacity
Poverty	*Outmoded traditional beliefs*	*Limited access*	*Limited enforcement of Laws*
Unemployment/ Underemployment	*Ignorance*	*Low quality*	*Lack of infrastructure for Social Services and criminal justice*
Rural-urban migration	*Large families and single parenting*	*Unattractive School Environment*	
Seasonal Activities	*Conflicts*	*Relevance*	
Employers' preference to increase profit	*Misconceptions*	*Illiteracy of parents /guardians*	

Trainer's Notes

The first session of the training is one of the most important as it sets the tone for the rest of the unit. It is important that participants feel comfortable and motivated to learn. The following steps are recommended:

- Start the session with an ice-breaker, an exercise that helps people connect and interact in a group (go to the 'Resources' section – Appendix 4 - to see a few examples).
- Test the knowledge of participants on the subject (Pre-test). Ask people what they think child labour is and react in accordance to the answers.
- Now introduce the topic and objectives of the session.
- Pass on the message that not all work is considered child labour. You may want to use a short documentary, story and/or the following quiz to steer a discussion. Alternatively, you can start by discussing some of the elements of the "Technical information" and then test knowledge by conducting the quiz. Try to probe people's knowledge and beliefs by asking 'why' and 'why not'. The ideal result is that the group reaches its own conclusions without you having to interfere too much. You will find below the answers to the quiz but remember to read and understand well the 'Technical information".
- To conclude the session and if you still have time you may want to stir more debate on the special situation of girls or the girl-child. Activity 2 below provides some hints on how to do this.

Activity 1.
Quiz [8] "What is Child labour?"

 **30-45 mins.**

This is a quick game to see if the group can distinguish which situations are regarded as child labour and which are not. It also looks at the issue of perceptions and people's opinions on child labour. Show or read the statement or questions (and options) to your group and ask them to choose the right option. You may want to pick and choose which questions you would like to use or come up with next questions that may be more appropriate to the group. At the end of each session always ask if people have any other doubts.

Tip: Try not to be judgemental or critical when analysing people's answers. Knowing who a child is (or not) or what child labour is, is not easy. Remember also that the process of awareness about child labour may be long and touch upon very deep traditional beliefs. Try to have different members of the group read the quiz or intervene in 'correcting" or probing some of the answers (community leaders or women for instance may have a special sensitivity about such issues). The best learning is the one that is done spontaneously by the group.

Q1: Anybody whose basic needs including food, shelter and clothes are provided for by his/her parents is a child

a) Yes, as long as they are not independent to provide for themselves
b) The legal definition of a child is a person below 18 years
c) A child is a person who is yet to complete Junior High School

8. This quiz has been developed using different ILO/IPEC sources such as the "Training resource pack on the elimination of hazardous child labour in agriculture, ILO/IPEC, 2005 and papers 1 to 3 of "Rooting out child labour from coca farms, Geneva International Labour office, 2007

Q2: If a 13-year-old boy helps his mother wash dishes and clean-up after a meal before or after school, is this child labour?

a) Yes
b) No
c) It depends

Q3: What is child labour?

a) The work of any girl or boy under 18.
b) Any work that is damaging to a child's physical, social, mental, psychological and spiritual development.
c) Any work by children above 15 years in non-hazardous work after completion of Junior High School.

Q4. Farmers/plantation owners have children working in their farms because:

a) They know they can pay them lower wages and that the children are too vulnerable to protest
b) Because of certain characteristics of children, they are more suitable (than adults) for performing certain activities
c) They believe that farm work is good for children because they can be outdoors in the fresh air.

Q5. If a 10-year-old girl works in a cocoa field for a few hours after school and on weekends, is this child labour?

a) Yes.
b) No.
c) It depends.

Q6. Some children below 15 years in Ghanaian cocoa farms work for as long as:

a) 23 hours per week
b) 18 hours per week
c) 40 hours per week

Q7. A 15-year-old boy goes to school in the day and then works for more than 3 hours in his family farm weeding grass with a machete, Is this child labour?

a) Yes.
b) No.
c) It depends.

Q8. How does work in cocoa farming affect children?

a) Some children work in the cocoa farms instead of going to school
b) Children working in cocoa farms are sometimes exposed to pesticides that cause skin rashes, intestinal problems and other illnesses.
c) Children are sometimes hurt, or even killed, while operating chainsaw or other machinery they have not been trained to use
d) All of the above.

Q9. A young girl of 10 years accompanies her parents to the farm to take care of her toddler brother during the weekends. Is this child labour?

a) Yes.
b) No.
c) It depends.

Q10. Which of the following group of children are more at risk of being engaged in child labour?

a) Children who are out of school (or never went to school) and engaged in cocoa or other farm work full time
b) Children in school who work regularly or part time on cocoa farms as hired laborers
c) Children who are in school full time and have other siblings assisting their parents on cocoa farms.
d) All of the above

Answer grid:

Question	Answer
Q.1	***Option b)*** Even though different cultures have different definitions for who a child is, there is a legal definition that should guide all in dealing with children, per the 1992 Constitution and the Children's Act, 1998 (Act 560).
Q.2	***Option b)*** In principle, this is not child labour as this does not seem to be the type of activity that by the nature or the circumstances under which it is carried out poses any danger or prevents children from attending school or interferes with the child's psychological, physical or moral development.
Q.3	***Option b)*** Remember, not all work done by those below 18 is child labour and therefore prohibited. It depends on the age of the child, if she/he is still in compulsory schooling (or below 15 years old) and the type of work to be performed. Work that prevents or causes children to quit compulsory school or not benefit fully from education will most likely be child labour though.
Q.4	***a)*** This may be more an opinion answer than a right or wrong answer. The idea is to stir a debate and see what people think. In general though, farm owners, who have authority over the children, know that they can pay them lower wages than adults and that the children are too vulnerable to protest. In some circumstances, children are hired along with their families because the owner does not pay a person a daily or monthly wage, but by amount/weight picked/worked per day. This encourages parents to bring their families to the fields in order to earn money by picking/working as much as possible each day. There may be other reasons why children are hired. These may have to do with shortage of adult labour due to increase in rural urban migration of the youth and economic necessity by the parents.
Q.5	***Option a)*** Yes, the child is under the minimum age for light work. You can ask participants if it would make a difference if the girl was 13 or 14. Think about the circumstances of the work being carried out, in the evening, by a girl, in isolation. A lot of this is about common sense. Although this is the topic of the next unit, you can introduce this by explaining that Ghanaian law states that children below 18 cannot go and return from the farm alone or work in the farm between 6 p.m. and 6 a.m.

Q.6	***Option a)*** Again, more than being correct or incorrect this question is about what people's perceptions are on the matter. Research done by the ILO in 2007 (WACAP) in Ghana's cocoa farms showed that the children in the study worked an average 22.9 hours per week [9]. Highlight to people that this is an average working per week. People may have different views and may actually say that children work more hours, averagely. Consider also that sometimes the issue is not the amount of hours worked but the type of work, circumstances under which the work is done and the age of the child. Children should not work more than 15 hours per week during school periods and not more than 18 hours during holidays and weekends.
Q.7	***Option a)*** Even though the boy is above the minimum age for admission to employment, he is still in school, hence working more than three hours during school days is not acceptable. Moreover, the work he is performing (with machetes) is hazardous.
Q.8	***Option d)*** All of the above. Many children working in cocoa farms do not have the time or ability to attend school (or attend regularly) and they suffer from diseases and injuries related to farm work that they are not educated about or protected from. Even if they are trained on the use of dangerous tools such as chainsaw and other machinery, it is still inappropriate for them to work with such tools until they are 18.
Q.9	***Option b)*** In principle No, as this can be seen as the type of work children do around the house to help out. This is not harmful to the child, if under adult supervision and not during school hours.
Q.10	***Option d)*** All of the above. Under option a) children are probably more at risk and they have to work to support themselves and don't seem to have an option to work (i.e. school). Research has also shown that children depicted in option b) also work to earn the support from their benefactors in the form of accommodation and food. Children in option c) sometimes skip classes to accompany their parents to the farm. This is especially the case during the peak farming season. The majority of children encountered in the past by IPEC projects belong to this last category.

9. Page 14: paper 2, Rooting out child labour from cocoa farms, IPEC

Activity 2.
Group work: A 24-hour clock of a female and a male child labourer  30 mins.

Please consider that changing people's mind concerning gender issues may be a lengthy and phased out process. Your goal here is not to go too deep into the issue or change people's minds at once but to plant a seed and question how reality often is for girls in cocoa/farming settings.

This exercise looks at the context of child labour in cocoa farms. It helps explore the differences between boys and girls in terms of how they spend their time over the course of the day and how these differences can affect, for instance, the children's schooling.

Tell the following story line to the group: let's imagine that the children in this exercise are involved in child labour meaning, they are 13 years old and do about 4 hours of work every day in the cocoa farm. Don't tell anything else to your group about these children, let their imagination flow. Divide the group in two sub-groups and ask them to draw on a big sheet of paper or on a board/flipchart a circle with 24 equal sections (replicating all the hours in a day).

Ask group 1 to imagine what a day looks like for a girl, i.e., the type of activities she does throughout the day, from eating to sleeping to attending school, doing her homework, doing chores, etc. Ask the same of group 2 but this time the idea is to reflect on the day of a boy. Give the group 20-30 minutes to do this.

After the time is up, ask both groups to place the results of their work in the centre of the room or place the boards side by side and ask both groups to analyse the differences between the two clocks. Pose the following questions to the group to guide the discussions:

- How much time does the boy/girl spend sleeping?
- Do both children go to school and do they spend the same time in school?
- How much spare time do they have?
- How much time for homework do they have?
- Does the girl prepare food for her siblings? Does the boy prepare food for his siblings?
- Until what grade do girls usually attend school? What about boys?

During the de-briefing, try to pass on the message that, because girls are usually associated with a certain type of task (often domestic), they end up having less time to dedicate to education, for example. Differences between boys and girls (or men and women) are normal and natural. Also, girls and boys will better opt to do different types of work or labour activity. The problem occurs when those differences jeopardize either the boy or the girl and prevent them from accessing education and better jobs in the future and improving their lives.

Key Messages:

- The legal definition of a child is a person below 18 years.
- Not all activities/tasks by children are child labour and therefore unacceptable.
- Ghana has a number of laws on child labour that are being increasingly enforced.
- To know if a child is in child labour or not, you need to know his/her age, type or nature of work or activity being performed and the circumstances under which that work or activity is being carried out (e.g. late at night, during school hours, in isolation, etc).
- Child labour is a problem because it inhibits children from doing well at school and from developing properly. This will then have an impact on the child's (and his/her family's) future economic, social and psychological prospects.
- Gender roles and differences may affect girls' ability to access education and improve their lives.
- Children aged 15 years and above can be employed but not in hazardous work.

Session B.
Children and Cocoa Farming: OK and NOT OK Work

 **45 mins.**

Technical Information:

As part of the review of the hazardous work list in the Children's Act, the Government of Ghana decided to develop the Hazardous Activity Framework in the Cocoa Sector (Cocoa HAF). This was a truly consultative process which cocoa communities throughout Ghana were consulted on and contributed to its development. Nothing in the Cocoa HAF has been agreed on without the views of those working every day in cocoa fields. Note that the Cocoa HAF even though validated by national partners, including workers and employers' organizations, has still not been turned into a legal instrument in Ghana and is a working document. The HAF is being used because it is in line with ILO Convention 182 and Recommendation 190.

The Cocoa HAF contains information on:

1) hazardous activities prohibited for children's participation (below 18 years old);

2) permissible work in cocoa production and recommendations for children; and

3) general recommendations for children's participation in cocoa farming.

There will be reference to the HAF throughout the rest of the manual, specifically when we start looking at specific activities, hazards and risks. For the purpose of this manual and in consultation with national stakeholders we have selected the recommendations of the Cocoa HAF that are more updated and in line with current practices. The Cocoa HAF is already 6 years old and is set to be revised in the future and to be passed into law to amend Section 91 of the Children's Act, 1998 (Act 560). The following table is an extract from the HAF's general principles and recommendations concerning the work of children in cocoa farms.

Hazardous Cocoa Work List (Prohibited for below 18 years) – General Issues

Prohibited action	Health and other implication of exposure
Working on the farm for more than 3 hours per day or more than 18 hours per week (for children on weekends, holidays and/or have completed school).	Pre-disposition to errors leading to accidents and injuries, increased exhaustion affect education and health (even hired adults work for maximum of 4-6 hours).
For children in school, working more than 2 hours/day on a school day.	Exhaustion and poor school performance
Working without adequate basic foot and body protective clothing (e.g. long-sleeves, trousers and 'Afro Moses')	Injury from thorns, tree stump, snake and other reptile bites, insect bites, contact with toxic irritant plants
A child working alone on the farm in isolation(i.e. beyond visible or audible range of nearest adult)	Prone to abduction, defilement, indecent assault and rape; no help in case of injury or accident.
Going to or returning from the farm alone or working on farm between 6.00 p.m. and 6.00 a.m.	Poor visibility leading to slips and falls, snake bites and injuries
A child withdrawn from school during cocoa season to do farm work	Child losing out on education, leads to school dropouts and failures
Working full time on farm and not attending formal / non formal school (applicable to children under 15 years)	Increases tendency to participate in hazardous work, deprivation of the benefits of education

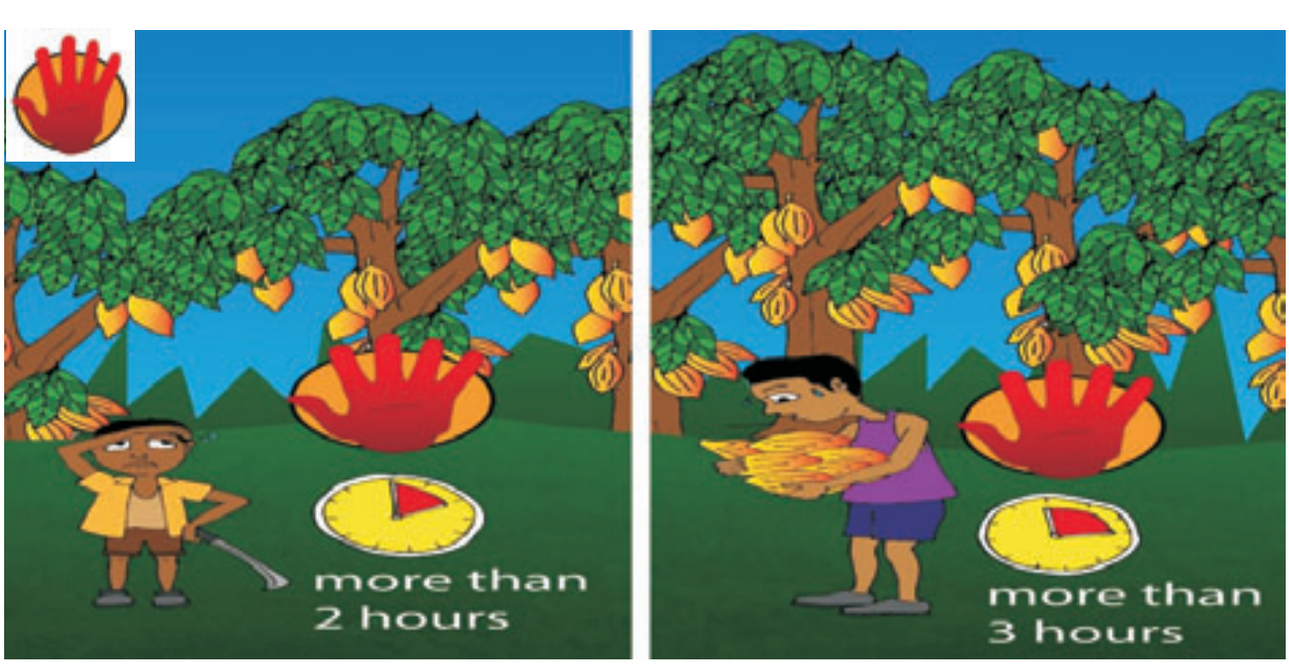


Figure 5: Children and Working Hours

Figure 6: Children should not work in isolation or between 6.00 p.m. and 6.00 a.m.

General Recommendations for Child Participation in Cocoa Production

Figure 7: Child of school-going age working during school period

No.	RECOMMENDATIONS
1.	All children of school-going age (4-15 years) should be in school and are not allowed to go to the farm during school hours or be withdrawn to do farm work in peak seasons. Children should not go to distant farm before or after school as he/she will become fatigued leading to poor attendance and learning in school. Children from age 13 can do light work (age recommended permissible) but not for more than 2 hours and only after school.
2.	Children 15 years and above should be provided opportunity for further training and education. They may work for up to 40 hours per week, but only after training on safe work habits and always strictly under the direction of a responsible adult. They should not do dangerous work: • Handling pesticides (carrying, mixing, applying) • Carrying weight over 30% of their body weight • Use power tools or electrically or gas-powered equipment • Drive powered vehicles, tractors, harvesters, etc.
3.	All children who accompany their parents to the farm to work must wear adequate clothing. This includes a) rubber boots with non-skid soles to prevent snake bites, slips and falls, e.g, children's wellington boots, 'Afro Moses', canvas or other boots that covers the calf. Going to farm barefoot is hazardous and in bathroom slippers is not acceptable.; b) trouser or long dress that cover the knee, shirts with long sleeves; c) and sun hat is recommended on hot and sunny days; d) gloves when handling branches
4.	For children under 15, incorporate at least 10 minutes break hourly with at least 30 minutes break in 3 hours.
5.	For children under 15, no more than 2 hours per day of work on school days, or 3 hours per day on non-school days is permitted. For children over 15, no more than 8 hours per day is allowed.
6.	All children must be fully train on any farm work, even the basic tasks and tools before assigning duties
7.	All children must work in appropriate work under direct observation and supervision of an adult.
8.	Clean water must be provided and all children must drink water hourly to prevent heat stress.
9.	Carrying loads should not exceed 30% body weight if farm is far (2 miles or 3 Kilometres). If the farm is farther, reduce carrying weight or have rest stops. Lifting/handling/carrying loads over short distance (500m) should not exceed 50 percent of body weight. In assigning permissible load to a child, adequate adjustment is required if the terrain is unfriendly. This is particularly the case in hilly and slippery terrains when it rains. It also applies when crossing a river with loads.
10.	No child of any age should work where pesticides are being used. Children should not enter the area where pesticides have been sprayed for at least 12 hours. Only adults using Personal Protective Equipment may handle or work with pesticides.

11.	Children should not wash equipment that has been used to carry, mix or spray pesticides and should stay at distances where they do not smell pesticides. Fetching water for sprayers during day of spraying when sprayers run out of water is unacceptable.
12.	Sick children or adults should not be made to work under any circumstance.
13.	Attaining 18 years is no license to engage in all cocoa activities. Persons 18-24 years as well as those aged 24+ should be well-protected and engagement in any hazardous farm work should be graded until maturity, experience and training permit.

Permissible Work in Cocoa Production and Recommendations

AGE GROUP	ACTIVITY/TASK	RECOMMENDATION
13-14	Filling of nursery bags with black soil	Adequate training Under adult supervision
	Fetching water for spraying and leaving the farm before spraying commences	
	Gathering of cocoa pods	
	Scooping and removal of beans	
	Carting minor loads (see permissible carrying load standard in Recommendation 2 above	
	Watering of Seedlings at the nursery	
15-17	Assisting in planting cocoa Adequate training	Under adult supervision
	Weeding/brushing under growths with age - appropriate cutlass (Sua-ado or small cutlass)	
	Plucking pods within hand-reach levels	
	Breaking cocoa pods with mallet or hitting on the ground	
	Carting load (See Recomendation 2 above)	
	• Seedling for planting	Carrying weight should not exceed 30 percent body weight for more than 2 miles (3 Kilometres)
	• Water for spraying	
	• Cocoa pods for heaping	
	• Fermented beans to drying mat	
	• Dry beans for sale	

Trainer's Notes

It is always difficult to discuss technical issues such as laws and regulations with non-specialist groups. The best in these situations is to keep to essential and simple messages and to try to amuse people by playing a game, doing a quiz, using stories that will bring out the issues, etc. To start this session:

- Do the following group work to get people's attention and pass on important messages.
- At the end of the exercise, compare and complement people's answers with the selected extract (above) of the HAF and of the Children's Act (use the pictures from the resources section as much as you can to demonstrate concepts).
- Also remind people of Ghana's minimum age for employment, light work and hazardous work and discuss how some of these offences can be very serious and imply sanctions.

Activity 3.
Group Work on Cocoa HAF: …
"The Government is Asking Us What We Think…"

 **30 mins.**

Ask the group to pretend that they are being consulted by national authorities about a new law that will dictate the type of work, number of hours, conditions, etc. under which children should work in cocoa farms. This was actually what was done to prepare the HAF so we are trying to recreate reality here.

Divide participants in groups (of 4 people minimum) and ask them to come up with two (2) recommendations (and reasons why) on what the law should say about:

- Children working at night,
- work that children between 13 and 14 years can perform,
- how many hours children should work if they are below 15 and/or still at school,
- children working with pesticides and
- children carrying heavy loads.

Give the group 30 minutes to do this. Each group should select a spokesperson or someone who will present the results to everyone. The rest of the time (15 min) should be spent on de-briefing by the various groups. After the de-briefing, make people reflect if there should be a difference between recommendations for children under the compulsory school age and those above, etc. Try to keep a dialogue open and make people think on why these recommendations make sense. Distribute and go through all the remaining recommendations in the HAF.

Key messages:

- The Cocoa HAF is a specific tool that contains guidance on the type of work that children should and should not do when involved in cocoa farming.

- The Cocoa HAF is the result of an extensive consultation with employers' and workers' organisations as well as cocoa farmers and reflects national consensus.

SESSION C.
Child Labour-Free Zones (CLFZs): AN Integrated Area based Approach  60 mins.

Technical information

Eliminating child labour in a rural community requires addressing all forms of child labour jointly to avoid a situation of children merely shifting sectors and locations and continue to work as a result of interventions. ILO's Integrated Area- Based (IAB) approach promotes a comprehensive programme of interventions to address the root causes of child labour and based on the involvement of local communities and dialogue and cooperation among government, employers' and workers' organizations.

The Concept of Child Labour Free Zones (CLFZ)
Child Labour-Free Zones are (geographical) areas where all children engaged in child labour are systematically withdrawn from work and (re)integrated into formal, full-time schools and those at risk prevented from engaging in such activities, while systems and resilient structures are created to ensure that children are prevented from entering the labour market. No distinction is made between different forms of child labour because every child has the right to be protected from harmful work and given the opportunity to access education. The process of creating child labour free zones involves all stakeholders like teachers, parents, children, unions, community groups, local authorities and employers. In the end, all stakeholders are convinced that child labour is unacceptable and work together to ensure that all children go to school.

Child Labour-Free Zones-Integrated Area-Based Approach
Abolishing child labour in all its forms is possible. The sustainable approach in addressing child labour, especially in the agricultural sector is to adopt an integrated area-based approach through innovations and partnerships. This new strategy is as a result of the recognition of poverty and decent work deficits as the primary root causes of child labour. There is therefore the need to manage the elimination of child labour as a process embedded in the wider national strategies for the elimination of all forms of child labour, the promotion of education and decent work and the reduction of poverty. This integrated approach aims to increase the effectiveness and sustainability of child labour interventions by creating an environment in which children do not simply shift from one hazardous sector or occupation to another, vulnerable families and communities are empowered to address their livelihood and economic situation and the necessary consensus at both community and national levels is generated to garner the ownership needed to support long-term change.

This strategy is implemented through the prevention, removal and protection of children in and at risk of child labour. This is achieved through community mobilisation for local-level initiated actions against the practice; surveillance/monitoring arrangements; making education accessible, attractive and beneficial; improving institutional capacity and social dialogue through improvement in livelihoods and employability of families by the organization of farmers into the agricultural union/groups and providing them with the needed capacity to engage with key authorities. This is to enhance their participation in the implementation of agricultural policies and programmes; continuous improvement in knowledge and enforcement of child labour laws, including OSH standards and enhancing the coordination of all the efforts to yield the necessary results.

Concrete Activities

Concrete activities that can be implemented by local organizations (in collaboration with others) to create child labour free zones are:

- **Awareness Raising:** Emphasise the importance of education and stimulate the demand for education among children, parents, opinion leaders, traditional authorities, farmer groups and the entire members of his the community. Also get the understanding of the populace on the negative effects of child labour, especially hazardous work on the health and development of children, community and the nation.

- **Social Mobilization:** Encourage children's rights activists to organise themselves and promote cooperation among all parties– local organisations, trade unions, governments, employers, teachers, parents and children and form community initiatives to addressing the problem. This is to promote the transition from work to school, decent work for children of legal working age (15+) as well as adults and community development.

- **Improvement in A ccess and Quality of Education:** Engage relevant partners to improve access to education through the establishment of community schools, increasing the number of teachers and teaching and learning materials, teacher motivation and community participation. The establishment of bridge schools and provision of transition and levelling/catch-up classes for children who have never been to school, have left school for a long time or have been irregular. This is to enable them catch up so they can be mainstreamed into more age-appropriate grades in formal school.

- **Support for Improved Socio-economic Situation of Parents:** Assist parents in seeking alternatives to the work their children used to do. Families should be supported through organisation into the union and cooperatives to promote decent work. This will improve the adoption of new labour saving technology, productivity, marketing and farmers' income. Encouraging cocoa households to improve upon cocoa production as well as consider additional livelihood options that will increase the household income is a viable option.

- **Labour Inspections and the Monitoring and Tracking of Children:** Strengthen the role of labour inspectors in combating child labour in a comprehensive framework of workers' protection, based on new approaches with regards to working in partnership in a practical Child Labour Monitoring System (CLMS) framework. It is also very critical to put in place effective community surveillance arrangements to monitor children to ensure they remain in school during school hours and do work appropriate for their age. This approach will ensure that labour inspectors and other inspectorate services such as cocoa and agricultural extension officers, health/safety/education and school inspectors as well as other law enforcement agencies take action against child labour, especially in respect of hazardous child labour and child labour monitoring in cocoa-growing communities. Labour inspectors who are key partners in the Child Labour Monitoring System (CLMS) are the coordinators of the CLMS activities at the district and community levels. They provide technical backstopping and monitor the activities of the CLMS functionaries and volunteers to ensure that they visit and directly observe workplaces to identify children in or at risk of engagement in child labour; determine the risks to which they are exposed; refer them to the appropriate social services; verify that they have been removed and continuously track to ensure that they have been provided with satisfactory alternatives and that the children do not return to work.

- Policy advocacy and guidance: Convince and equip governments and other relevant actors to support the concept of child labour free zones and take action against the practice.

Trade Unions and Child Labour Elimination:

Workers' organisations have the responsibility to:

- Fulfil their mandate in the promotion of tripartitism at national and sub-national levels to oversee the implementation of national policy towards the elimination of child labour;

- Organise to end the exploitation of children in child labour and abusive labour practices at workplaces and communities by ensuring that adults earn decent wages that allow them to send their children to school, and that adult and young workers have decent conditions of work;

- Undertake activities to ensure that multi-national enterprises commit more to work to address child labour in their supply chains including the inclusion of clauses prohibiting the engagement of child labour in collective bargaining agreements and international framework agreements;

- Advocate for better childcare provisions at both public and private workplaces;

- Work to improve occupational safety and health (OSH) for all in agriculture, including advocacy for the ratification and implementation of ILO Conventions e.g 184 on safety and health in agriculture and the development of occupational safety and health policies;

- Engage with key partners to negotiate to expand the remit of legally-required joint worker-employer OSH committees to cover the contract farmers in company supply chains, including the systematic training of farmers on OSH and in particular on how to conduct risk assessments;

- Support the use of innovative OSH outreach programmes e.g. roving safety representatives to address child labour in rural communities;

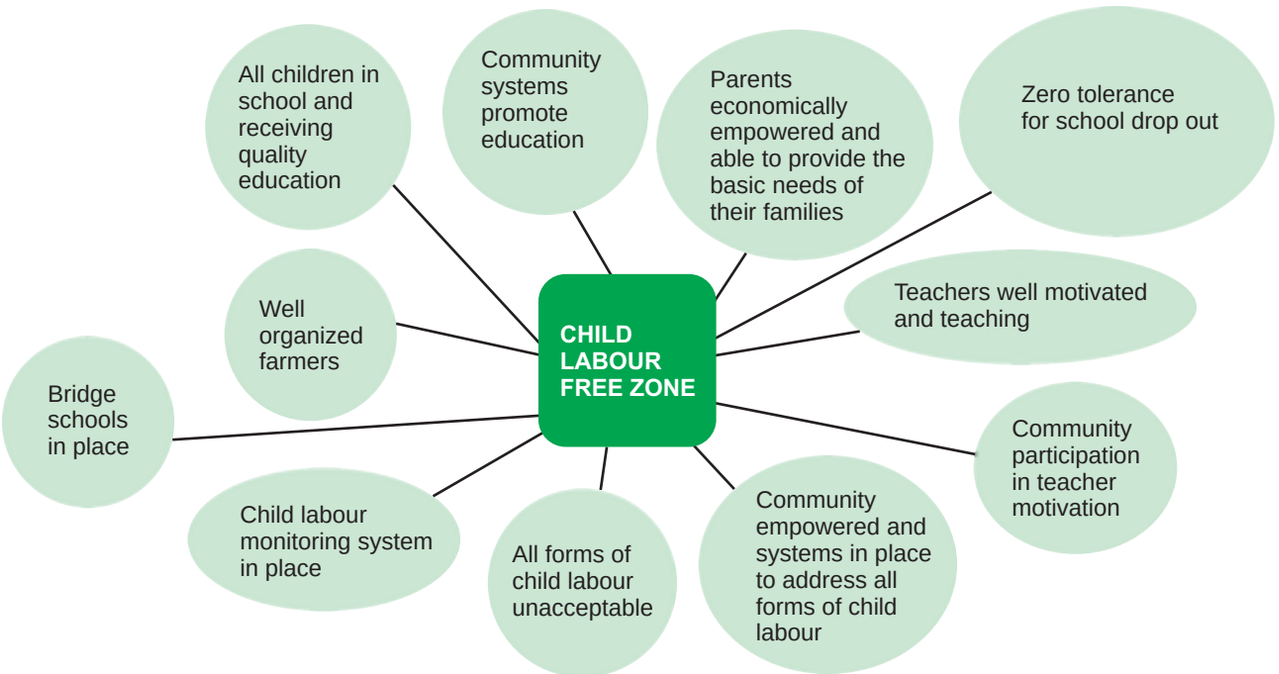
- Work to transform hazardous child labour into decent youth employment;

- Advocate for properly-resourced, effective labour inspection in agriculture and promote an integrated labour inspection system that involves all inspectorates including agriculture/cocoa extension services, education inspections, health inspections and factory inspectorate in the monitoring of children;

- Participate in monitoring the incidence of child labour in agriculture through the engagement in the development and implementation of community-based child labour monitoring systems;

- Eliminate precarious work, outsourcing and piece-rate payments that promote the use of child labour to meet deadlines as well as increase incomes at the detriment of children's health, education and proper development.

Child labour free zone
FIGURE 8:



Courtesy Andrews Tagoe - GAWU Ghana

Trainer's Notes

This section is to provide an understanding of the best strategies in addressing child labour. It is therefore important that participants understand the factors that perpetuate child labour and how best they can be addressed in order to deal with the child labour problem.

- Discuss how the factors above interact and the interventions that need to be put in place to address the problem. (Refer to the table on causes of child labour)
- Consider also an option of providing a table that provides all the factors and allow the group to discuss the interventions and the responsibilities of the key stakeholders, especially unions/groups, cocoa farmers, opinion leaders, children, teachers and parents.
- Launch finally into the activity below using a group approach.

ACTIVITY 4 :
CHILD LABOUR FREE ZONES

 **45 mins.**

In your small group

a) Elect a chair and a secretary who will report at the end of the session.

b) Read and discuss the concept of child labour-free zones and integrated area-based approaches.

c) Using the drawing on the child labour free zone (figure 8) above, discuss and document elements of the CLFZs and agree if the elements are in line with what your understanding of child labour-free zone is.

d) Prepare a group report and present at the plenary.

Key Messages:

- It is the collective responsibility of all to end the use of children in their communities in activities that will take them out of school and impede their development
- All forms of child labour are not good and should be eliminated from communities
- Various forms of interventions should be put in place to holistically address all the root causes of child labour

Sources:

1. International Labour Organisation (ILO). 2005. *"Training Resource Pack on the Tlimination of Hazardous Child Labour in Agriculture"* Turin
2. International Labour Office. 2007. *"Rooting out Child Labour from Cocoa Farms"* Geneva, pp.1-3
3. IPEC, ILO. 2009, *"Give Girls a chance. Tackling Child Labour, a Key to the Future"*
4. IPEC, ILO. 2013. "E*nding Child Labour in Domestic Work and Protecting Young Workers from abusive working conditions"* Geneva
5. Stop Child Labour Campaign (SCL) 2012. Project document, HIVOS/FNV Netherlands

UNIT 2:
HAZARDOUS WORK IN COCOA PRODUCTION

 3hrs.

Objectives

Unit 2 of Module 1 focuses exclusively on hazardous work which is one of the major threats and issues encountered in cocoa production. It is an issue for children as it is for adults. As seen above, one out of every four children in cocoa-producing areas in Ghana is involved in hazardous work. Adults also are painfully afflicted by unhealthy and unsafe practices that can lead to injury, poverty and deprivation as those injured cannot work and ultimately, death. Well-informed parents are more likely to promote healthy and safe work practices for themselves and their children.

At the end of this session, participants will have acquired enough information and knowledge on:

- The most common and dangerous cocoa production activities,
- Why children are more exposed to risks than adults, and
- How to make hazardous work or activities safer for farmers and legally working-aged children to have decent employment.

Sessions:

A. Hazardous Work and Children
B. Why children are more exposed to risks than adults
C. Risk assessment in cocoa production

Materials:

- Flipcharts/board
- Marker pens
- A few copies of the printed table (Activity 1)
- Documentary on Child Labour
- Paper cards
- Newspaper cuttings

Session A.
Hazardous Work and Children

45 mins.

Technical Information

Even though Ghana's annual occupational injury rates are about 11.5 injuries/1,000 persons in the urban areas and 44.9/1,000 in the rural areas, there are no official records on deaths as a result of work. Most of these injuries are in agriculture; mainly from snake bites, injuries and pesticides. The human cost of this daily adversity is vast and the economic burden of poor occupational safety and health practices is estimated at 4 per cent of global Gross Domestic Product each year.

At the individual level, a farmer that is injured may have to stop work (for short or long periods) with serious consequences for the family's income and survival. Some of the injuries, as we will see throughout the training, may mean that people may be scared for life or may have to abandon work activities early in life.

Figure 9, STCP. Injuring yourself on the farm can cost you money because you may not be able to farm for some time and you will have to spend money on medical care. You may even experience permanent damage from your injury so that you may never be able to farm again.

Farming activities undertaken by cocoa farmers include land clearance and burning, planting cocoa seedlings together with food crops and shade trees, weeding, pruning, removing mistletoe, applying agro-chemicals (fungicide, insecticide, fertilizer and herbicide), harvesting, transporting and breaking pods, fermenting and drying beans and transporting the beans to a storage area or marketing point. Most of the safety and health hazards experienced by cocoa farmers are due to:

- Farmers' lack of knowledge and information about the hazards to which they may be exposed and how to manage the hazards to make the work safe,
- Carelessness in the handling of farm tools and agrochemicals,
- Farmers' inability to afford protective clothing due to low income,
- Long distance to health facilities from farming communities, and
- Injuries that should have been addressed promptly are delayed, endangering the lives of the farmers.

Typical tools used in cocoa production such as machetes, axes, harvesting hooks, pruners, ladders and chain saws could pose hazards to the farmer if not used properly. Cuts, bruises and broken bones are some of the injuries experienced by cocoa farmers.

Figure 10, STCP

Figure 11, STCP

Figure 12, STCP

Figure 13. STCP

Noise and vibrations from chain saws and motorized spraying machines can cause hearing problems and dizziness. Back pains from bending over and lifting of heavy loads and other bodily pains are common complaints among cocoa farmers. Many cocoa farmers are exposed to serious health hazards when they use pesticides. Conditions on farms may be also risky because farmers are exposed to poisonous animals and insects, not to mention falling trees and branches, thorns, muddy conditions, rain and heat. When cocoa farmers are injured, they often have limited access to good medical care.

Most activities in cocoa cultivation are seasonal and need to be completed within a specified period. Farmers are therefore forced to work for long hours together with their children to complete their work on time.

Children are usually involved in all the different stages of cocoa production performing different tasks. They also help with non-farm work (e.g. cooking, fetching water, taking care of siblings), do light farm work after school, on week-ends or during holidays and, in some cases, carry out cocoa production activities on a regular basis.

An ILO-IPEC study completed in 2007 on a sample of Ghanaian (and other West African cocoa producing countries) farms indicated that the most hazardous tasks performed by children were as follows:

1. **Mixing and applying pesticides:** Children prepare and spray pesticides which may come into contact with their skin, be inhaled or contaminate their clothes, etc.

2. **Cutting down large trees to clear land and weeding the plantation (every three months):** Children may be hurt by the machetes they use for this activity. They are also exposed to snakes and insects bites.

3. **Splitting cocoa pods to extract the beans:** 40% of children interviewed considered this to be the most dangerous activity.

4. **Transporting heavy loads:** Children often walk several kilometres to carry heavy loads of cocoa beans back to the village.

According to interviewees in Ghana, cuts to the skin were the major injury or danger associated with the cultivation of cocoa. Snake and insect bites were the next major danger that 65.8 per cent of the groups mentioned. It must be noted however, that while insect bites were common, snakebite was mentioned more as a danger than a frequent occurrence. Other work-related dangers, injuries or diseases included being pierced by thorns (mentioned by 60.3 per cent), waist and general body pains (58.5%), and fractures and sprains as a result of slipping and falling (55.7%). Other dangers, injuries and diseases mentioned were skins diseases, rheumatism, tetanus and chemicals getting into their eyes during the spraying of pesticides.

In situations of children's involvement in hazardous work, children will have to be removed to safety when the nature of the work is hazardous and cannot be made safe. Alternatively, when the child is of legal working age (15-17 years old) where the hazards are associated with the circumstances of work, the hazards can be removed or managed to make the work safe (more on this in the 'Risk assessment in cocoa production section'). There is the need for collective efforts to ensure that agriculture workers, including legal working-aged children, work under healthy and safe conditions.

Trainer's Notes

The next exercise looks at the different stages of cocoa farming and children's roles within each phase and hazards involved. People may feel uncomfortable about admitting children's specific role in cocoa farming. First, it is normal to find some denial of the problem. That is why the first part of module 1 is so important to administer well as it gives a sense of recognition of the issue.

- In any case, assure people that whatever is discussed during the training session stays within the discretion of the classroom and that the purpose of the exercise is not to attack or criticise a particular community but to improve the situation.

- You may start the session with presenting the group with some of the overall figures included under the Technical Information section.

- Ask people why they think there are health and safety accidents in cocoa farming and how often they occur.

- Ask the group to share personal experiences or those by other farmers on injuries and deaths and open a discussion on why a particular situation resulted in injury or death.

Activity 1:
Group work: Child labourers' Farm Activities and Possible Hazards **30 mins.**

This may be a long exercise to do as it implies going through the cycle of cocoa production. Split the group in two or three sub-groups and ask them to fill in the table below. There is a already completed table in Appendix 5 that you may use for your own reference. As usual, ask the group to appoint one person to present the results of their group. Give them maximum 20 minutes to complete the table (print the table to them, leave enough space to write and at least 15 rows) and 15 minutes for presentation. The remaining of the training session should be about you as a trainer complementing the exercise with some elements of the Technical Information and engaging in a dialogue with participants. Discuss also about the costs of medical care, of how many working days are lost because of injuries and the loss of lives and implications to the family.

Make sure to explain to the group that the rest of the training will be about discussing protective measures or practices to minimize hazards for legal-aged children and cocoa farmers in general.

Child labourers' farm activities and possible hazards

Activities	Role of children	Danger/ hazards	Protective measures in place	Suggested protective measures

Key Messages:

- The human and financial cost of occupational health and safety accidents is huge.
- Most accidents happen because people are not aware or prepared to deal with them.
- Children in cocoa farms are exposed to a number of dangerous tasks all throughout the production cycle.
- Adults are equally exposed to hazards and need to manage it to reduce the risks of exposure.
- Some hazards can be managed to reduce the risk for children 15 years and above to be employed in decent work.

Session B.
Why are Children More Exposed Than Adults to Risk?

 45 mins.

Technical Information

Children of legal working-age are susceptible to all the dangers faced by adult workers when placed in the same situation[10]. However, the work hazards and risks that affect adult workers can affect child labourer seven times more strongly. The results of lack of safety and health protection can often be more devastating and lasting for them. It can result in permanent disabilities, and they can also suffer psychological damage from working and living in an environment where they are denigrated, harassed or experience violence.

When speaking of children of legal working age, it is important to go beyond the concepts of work hazard and risk as applied to adult worker and to expand them to include the developmental aspects of childhood with regards especially to the legal working-aged children. Since children are still growing and have special characteristics and needs, these must be taken into consideration when determining workplace hazards and the risks associated with them, in terms of physical, cognitive (thought/learning) and behavioural development and emotional growth.

Some main developmental differences for child workers compared to adult workers are listed below.

General

- Tissues and organs mature at different rates and therefore there is not a specific vulnerable age in general. It depends on the hazard and the degree of risk as to what age the child is most vulnerable

Per kilogram me of bodyweight, children breathe more air, drink more water, eat more food and use more energy than adults. These higher rates of intake result for example, in greater exposure to diseases (pathogens) and toxic substances/pollutants.

10. Extract (pages 14 to 17) of Training Resource pack on the elimination of hazardous child labour in agriculture

Figure 14: STCP. Children absorb chemicals more than adults[11]

- Small physical size, and being asked to do tasks beyond their physical strength may pose additional risks

Younger children especially have greater hand to mouth activity which may affect the intake of harmful substances

Skin

- A child's skin is 2.5 times thinner than adults (per unit of bodyweight) which can result in greater skin absorption of toxins. Skin structure is only fully developed after puberty.

Respiratory

- Children have deeper/more frequent breathing and so can breathe in more substances hazardous to health.

- A resting infant has twice the volume of air passing through the lungs compared to an adult (per unit of bodyweight) over the same time period

11. *Extract (pages 14 to 17) of Training Resource pack on the elimination of hazardous child labour in agriculture*

Brain

- Maturation can be hindered by exposure to toxic substances. Metals are retained in the brain more readily in childhood and absorption is greater (e.g. lead and methyl mercury)

- Gastro-intestinal, endocrine & reproductive systems&-renal-function

- The gastro-intestinal, endocrine and reproductive systems and renal function are immature at birth and mature during childhood and adolescence. Thus, the elimination of hazardous agents is less efficient. Exposure to toxic substances in the workplace can hinder the process of maturation

- The endocrine system and the hormones it generates and controls play a key role in growth and development. The endocrine system may be especially vulnerable to disruption by chemicals during childhood and adolescence.

Enzyme system

- Immature in childhood, resulting in poorer detoxification of hazardous substances.

Energy requirements

- Greater energy consumption because they are growing, and this can result in increased susceptibility to toxins.

Fluid requirements

- More likely to dehydrate as they lose more water per kilogramme of body weight through:

- Lungs-greater passage of air through them

- Skin-larger surface area

- Kidneys-inability to concentrate urine

Sleep requirements

- 10-18 year olds require about 9.5 hours sleep per night for proper development

Temperature

- Increased sensitivity to heat and cold as the sweat glands and thermo-regulatory system are not fully developed.

Physical strain/repetitive movements

- Physical strain, especially combined with repetitive movements, on growing bones and joints can cause stunting spinal injury and other lifelong deformation and disabilities.

Figure 15: Physical strain at a very early age can cause deformations and disabilities for life

Cognitive and behavioural development

- Another key factor is the ability of child labourers to recognise and assess potential safety and health risks at work and to make decisions about them. For younger children, this ability is weak.

Other factors which increase levels of risk include:

- Lack of work experience are unable to make informed judgments,
- Want to perform well and are willing to do extra without realizing the risks,
- Learn wrong health and safety behaviour from adults,
- Have no safety or health training,
- At risk from inadequate, even harsh, supervision,
- Are powerless in terms of organisation and rights.

Reduced life expectancy

- This concept is difficult to quantify, but the earlier a person starts work, the more premature the ageing that will follow. The likeliness of living a good live free of pain and health issues also decreases for those that have been exposed to too much strain and hazards at a young age.

There are also physical differences between boys and girls that may have an impact in the cocoa farm.

These are the more general effects that unhealthy and unsafe working practices and exposure can cause to children. The rest of the training manual will look more specifically into this and in respect to different type of hazards/risks

Trainer's Notes

This is a very technical session so we would suggest that you introduce the session and follow the activity below. Use the pictures as much as possible and try to get some examples from the people in the group, of how children are exposed to a higher OSH risk than adults and why.

Activity 2:
Popular Ghanaian Sayings: Discussion

20 mins.

Show the following popular saying to the group (if you can find more or different sayings that could work very well) and ask what people think the sayings and the drawing below mean. Ask people if they know any other similar sayings. From then on, go through the main technical information indicated above. We have included another optional or complementary activity – body mapping - in case you want to develop this point further.

"A child breaks the shell of a snail but not that of a tortoise"*11*

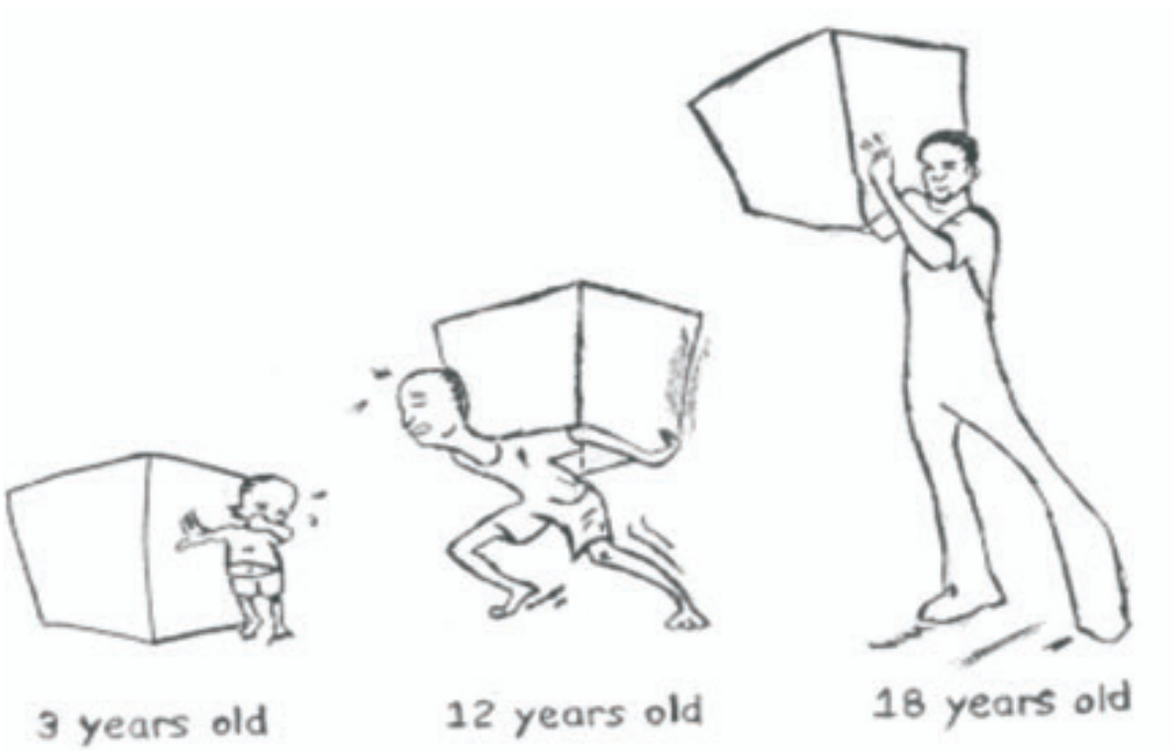


Figure 16: There is Time for Everything

11. Source: Sylvia Hinson - Ekang, Executive Director, FURDEU/Rescue Foundation

Key Messages:

- Children do not have the same constitution, metabolism and capacity as adults
- Exposure to hazards and dangers can be more damaging to children than adults as they are still developing
- Some of the consequences of early exposure to hazards and dangers may affect children for the rest of their life and can, inclusively, shorten their life expectancy
- Tasks should be allocated to children according to their age and physical and mental capacity and based on the allowable ages by Ghanaian laws.

Activity 2a: Body Mapping

 **30 mins.**

In your groups, and using the body map and colour cards provided, indicate the health problems or injuries that children encounter when they engage in agricultural work.

Use different colour card to identify different symptoms of ill health:

- Aches and pains - RED
- Breathing difficulties and coughing - PINK
- Stress-related disorders - GREEN
- Other problems such as skin rashes, runny eyes and nose, dizziness, reproductive disorders and so on - YELLOW

Underline in *blue* the forms of ill-health or injuries which affect only boys and underline in *red* the forms of ill-health or injuries which affect only girls.

Lastly, indicate with an asterisk (*) the dangers to a child's health and safety for which the ill effects may not manifest immediately but rather in the longer term.

Session C. Risk Assessment in Cocoa Production

 **1hr.30 mins.**

Technical Information

As seen above, some hazardous work can be made safe for farmers and children aged 15 years and above to allow people's access to decent employment/work. In the case of children, work can only be made safe if and when:

- The child is above 15 years old and wishes to remain in work and is therefore legally allowed to work;
- The work and activity/ies being done are hazardous by circumstance and OSH measures will reduce risk of exposure to hazardous work

- Other preventive and withdrawal strategies from child labour are being pursued but something needs to be done for that child, rapidly, to reduce the risks he/she is facing.

The best way to deal with occupational safety and health issues is by prevention through reduction in the risk of exposure. Prevention means anticipating risks and hazards and putting the measures in place to prevent accidents from happening. To do this one should follow a certain process and number of steps commonly known as “risk management and assessment”. The risk assessment methodology covered by this session is valid for children, with due adjustments, but also for adults. This methodology and principles should be applied to the hazards as described in Module 2 of the manual.

Although technical in nature, risk assessments can be done by anyone who has been trained to do it. You should nonetheless try to deliver this part of the training together with someone with specific expertise on OSH such as an OSH or labour inspector or a union safety representative to re-inforce some of the practicalities of the topic.

To start off, it is important to distinguish between what hazards and risks are as these are common terms often used when discussing hazardous work or hazardous child labour.

HAZARDS  **RISKS**

“Hazard” is anything with the potential to do harm.

“Risk” is the likelihood of potential harm from that hazard being realized. For example, the hazard associated with power-driven agricultural machinery might be getting trapped or entangled by moving parts. The risk is high if guards are not fitted and workers are not trained to use the machinery or are not instructed properly. If, however, the machine is properly guarded, regularly maintained and repaired by competent staff, then the risk is lower.[10]

What is Risk Assessment and Management: Risk Assessment and management is a health and safety technique applied by a systematic examination of hazards (what in the workplace or the farm could cause harm); weighing the chances of someone being harmed by the hazard; (as in slight, moderate or extreme); deciding what risk control measures should be put in place to prevent/reduce harm and finally taking the necessary action(s) to reduce the risk. Risk assessment is an essential tool in classifying work into the category of the worst forms. The ILO occupational safety and health management system recommends that hazards and risk to workers' safety and health should be assessed on an on-going basis.

Why the Need for Risk Assessment: If hazards are properly controlled, risks can be reduced to acceptable levels. The main aim of risk assessment therefore is to help employers and farmers to systematically assess their workplace activities with a view to protect workers' safety and health by preventing and reducing fatal accidents, injuries and ill health at work. It also helps to minimize the possibility of the environment being harmed due to work-related activities.

It is a legal requirement in many instances. Article 7(a) of the ILO Convention No. 84 on Safety and Health in Agriculture Convention, 2001, provides that: “The employer shall carry out appropriate risk assessments and adopt preventive and protective measures to ensure that under all conditions of their intended use, all agricultural activities, workplaces, machinery,

10. Adapted from “Training resource pack on the elimination of hazardous child labour in agriculture” Book 1, Tainer’s Guide, IPEC

equipment, chemicals, tools and processes are safe."In Ghana, Section 118 of the Labour Act 2003 (Act 651) provides for the prosecution of an employer who 'without reasonable excuse, fails to discharge his/her obligations to 'ensure that every worker employed by him or her works under satisfactory, safe and healthy conditions'. The worker also has the responsibility to report to the supervisor and remove himself/herself from work 'when a worker finds himself or herself in any situation at the workplace which he or she has reasonable cause to believe presents an imminent and serious danger to his or her life, safety or health'.
This is to:

- determine if existing control measures are adequate or if more should be done
- prevent injuries or illnesses when done at the design or planning stage
- prioritize hazards and control measures

How to Conduct Risk Assessment

Assessments should be done by a competent team of individuals who has a good working knowledge of the workplace and has acquired the necessary skills. The team should include both people familiar with the work area, as well as people who are not – in this way you have both the "experienced" and "fresh" eye to conduct the inspection. Small-scale producers such as cocoa farmers and their employers can be trained on how to carry out simple risk assessments in their own business/farm undertakings, and to implement the risk reduction measures identified by them to avoid workers' exposure and danger to the environment.

Identifying the target groups whose risks should be assessed and environmental issues that need to be considered is an important step. As seen above, these can be employees, self-employed, legal working-aged children exposed to special risks and others such as workers visiting the workplace.

Steps to Conduct Risk Assessment:

The five (5) main steps in risk assessment are as follows:

Step 1:

Identify the hazards and those at risk: Using a check list, you need to observe and walk around the farm or workplace to identify the activities or processes that reasonably can cause harm and to identify for each hazard the group or groups of workers (public) and aspects of the environmental that could be harmed, how and what consequences there are for their safety or health. Getting the views and experience of workers will be very useful and think about the long-term health hazards - physical problems, lung diseases, cancer, stress, taking into account the disabled, women and children/young workers.

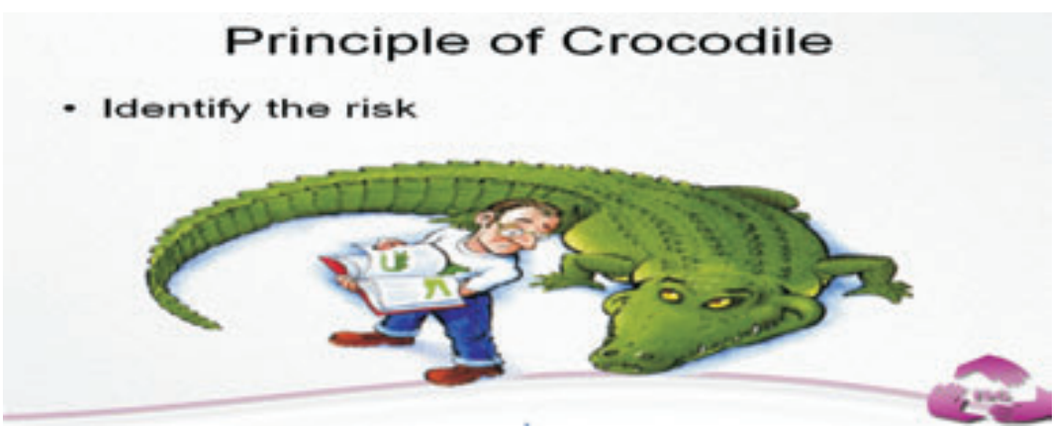


Figure 17

Step 2:
Evaluate and prioritise risk: With risk functioning as both likelihood and consequences, it is important to determine the probability or likelihood of the hazard resulting in injury or harm, how severe the injury is likely to be, the number of people and aspects of the environment likely to be harmed, prioritize each risk by categorizing it and record your findings. There is the need to categorise risk according to the likelihood (very unlikely, unlikely, likely and very likely) and severity of harm (slight, moderate and extreme). Ranking or prioritizing hazards is one way to help determine which hazard is the most serious and thus which hazard to control first. Priority is usually established by taking into account the employee exposure and the potential for accident, injury or illness.

Figure 18

Step 3:
Identify and decide on risk control measures: Now is the time to decide on the control measures including elimination and substitution; working on the tools, equipment, technology and engineering aspects; adopting safe work methods and practices; provision of relevant information and training; hygiene and welfare, health surveillance and finally, the provision and use of Personal Protective Equipment.

Figure 19

Step 4:
Take action - implement the controls: Having decided on the risk controls, the next step is to act by identifying who to take what action, when and start implementation with the high priority risk controls first.

Step 5:
Record your findings, monitor and review, and update when necessary: Documentation of the assessment results including hazards, control measures to protect those at risk is crucial for continuous monitoring, review and update of new work processes, technology and staff.

Options and steps in risk assessment

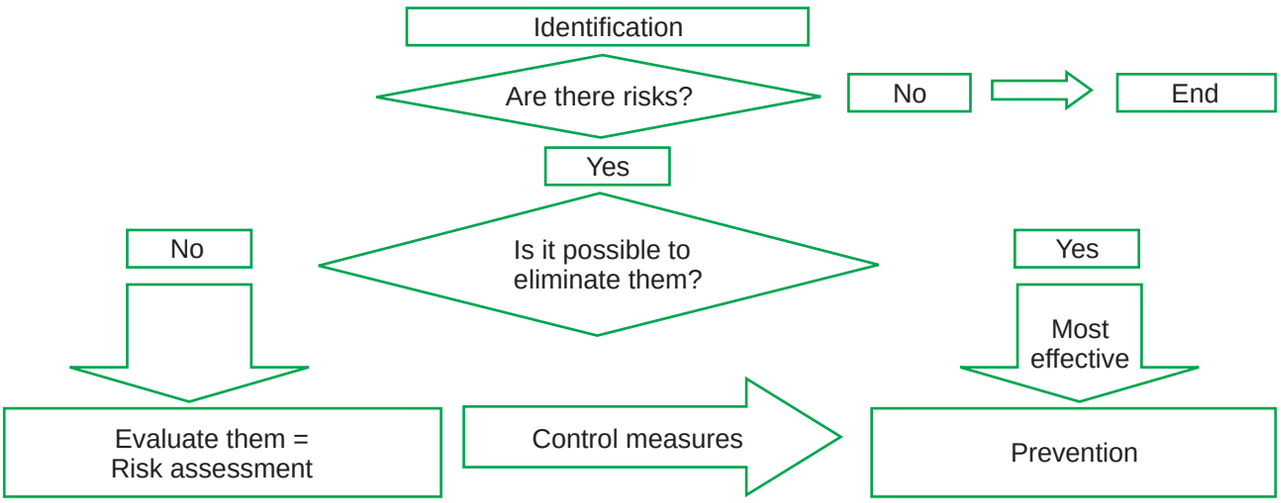


Figure 20

More on Step 3: Identify and decide on risk control measures

Steps for Prevention and Control:
When confronted with a hazard, it is important to approach prevention and control techniques in the following strict order.

1. **Elimination:** Ask whether the hazard can be eliminated. For example, remove the need to use a toxic pesticide by using organic farming methods

Figure 21

Eliminate the risk

2. **Substitution:** If the hazard cannot be prevented or eliminated, consider substitution with a less risky process or substance in the case of chemicals.

Figure 22

Substitute the risk

1. T**echnical/Engineering Control:** Using simple Technology/Equipment to reduce the risk. For example, soundproofing a noisy machine, using dust extracting equipment, or a wheelbarrow or hand cart to carry heavy loads and the use of organic farming. Examples of the crocodile scenario are:

a. Enclosure
b. Isolation
c. Ventilation

Figure 23; isolate the risk

Safe Systems of Work: Using safe work practices, procedures and methods, linked to appropriate information and training for workers. There should be clear instructions and procedures to the workers, especially legal working-aged children on how to carry out a dangerous task in a safe manner.

4. **Personal Protective Equipment (PPEs)**

a. As the last resort, PPE including masks, respirators, goggles and boots should be used by both legal working-aged children and adults. Except in a few cases (e.g. chain saw use) PPE should never be the first way in which to protect workers. PPE supplement the other health and safety measures above which have already been put in place.

Figure 24: Use personal protective equipment (PPE)

Figure 25: Run away from risk

Trainer's Notes

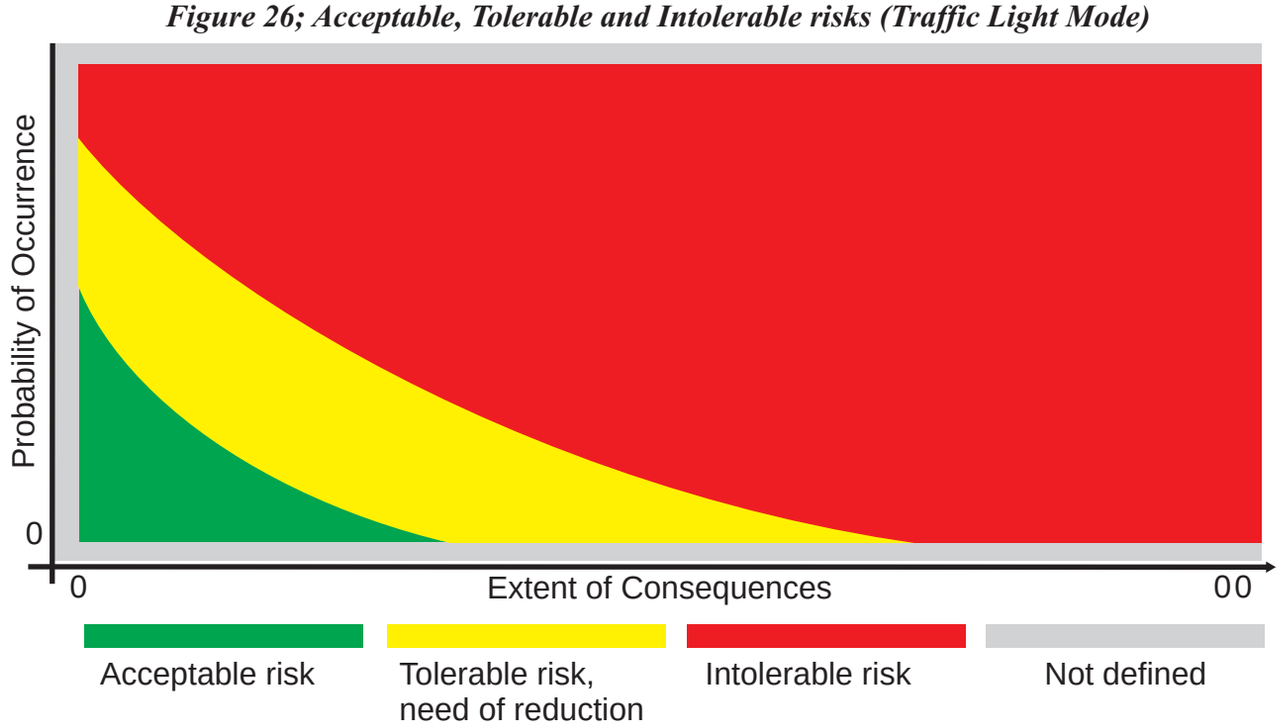
Read or distribute the following case study to the group of participants and ask them to, in small groups, analyse it and do a risk assessment of the situation using the steps presented above. Below is a summary of how the risk assessment should be conducted.

This is a very technical session and requires a lot of interaction with participants especially in the group activity to be able to identify hazards, prioritize them and further recommend control measures. It is suggested that the session is introduced with a presentation having thoroughly read the technical notes and follow the activity below. Use the impact severity and likelihood tables and the crocodile principle to explain how to rank and prioritize risk for appropriate control measures. This is a very interesting and lively session with adequate understanding and preparation by the facilitator.

Ranking and Prioritizing Risk: Impact Severity Likelihood Table

		Impact severity		
		Lightly harmful	Harmful	Extremely harmful
Likelihood	Low	Acceptable/trivial risk	Tolerable risk	Moderate risk
	Medium	Tolerable risk	Moderate risk	Substantial risk
	High	Moderate risk	Substantial risk	Intolerable risk

Figure 26; Acceptable, Tolerable and Intolerable risks (Traffic Light Mode)



Activity 3:
Case study on Risk Assessment

 **45 mins.**

"On a cocoa plantation, there are three 16 year-old workers who have recently been supplied with personal protective equipment (PPE) for use when they are spraying pesticides. The owner of the farm did not consult the young workers on the choice of PPE and told them that they "have to wear it". The 16 year- old workers do not wear the equipment because it does not fit properly and is uncomfortable. The owner takes no notice as he says that it is their choice and that he cannot force people to go against their will."

1. The first step is to identify the hazard which in this case is hazardous substances called pesticides. On looking at this activity it is clear that there is a hazard that could result in harm from spraying pesticides.

2. We now have to evaluate the risk by deciding
   - Who may be harmed,
   - How they may be harmed and
   - Whether the risks from the pesticides hazard can be controlled.

   From the information that we are given in the Case Study, the three sixteen year-old workers may be harmed by spraying pesticides. Pesticides (the suffix '-icide' means killer) are poisons designed to kill or control "pests", so working with pesticides is dangerous. The chemicals chosen to kill pests are selected because their toxic properties make them efficient at poisoning unwanted plants, insects and rodents and so on. These same properties make them potentially harmful to humans as we share many of the same chemical pathways as other natural organisms. All chemicals can be poisonous and cause injury or death- there are no safe substances.

   The risks arising from pesticides use are potentially much greater for children under 18 years of age as we have seen above. From the information we are given, the risks from the use of pesticides are not controlled.

3. We now have to consider preventive and protective measures based on the risk assessment and management principles seen above, to ensure safety and health, and compliance with health and safety standards.

   Before we look at protection measures for pesticides, we have to consider the involvement of the three sixteen year-old workers. Thy should not be involved in spraying pesticides because this is one of "the worst forms of child labour" and Ghanaian laws expressly forbid children from being involved with chemicals. The use of Personal Protective Equipment is irrelevant. They should be removed from work which involves spraying pesticides.

Younger workers (below the age of 18 years) should not be assigned to tasks for which respirators or Personal Protective Equipment (PPE) are required because it implies they are working with hazardous substances.
It is for this reason that respirators are designed to fit only adults and not adolescents or children.

If a farmer wants to introduce protection measures for other adult workers using pesticides, then the approach should follow the hierarchy below. Obviously, the solutions will depend on local circumstances.

STEP 1:
Elimination of the Risk

The aim is to eliminate any possible risk by assessing if it is really necessary to use a pesticide? Check if:

- The weed, insect or disease has been correctly identified, and if the degree of economic damage caused is such that it warrants pesticide use.
- Any other method of dealing with the pest problem is available. For example, integrated production and pest management, use of a non-chemical bio pesticide or an organic approach.
- The pesticide is legally approved and registered for the intended use.

If elimination of the risk is not possible, consider substitution:

- With a less hazardous pesticide.
- With a less hazardous formulation by using granules instead of a liquid which can splash.

STEP 2:
Risk Control

Risk control at source involves the use of what are known as
Technical and Engineering Controls

- Sealed mixing and filling systems for tractor-mounted sprayers.
- Pesticide formulations in dissolvable, water soluble plastic sachets.
- Pesticide tractor cabs fitted with approved, charcoal-based pesticide filters which absorb any pesticide before it enters into the cab.

STEP 3:
Safe Systems of Work, the Introduction of Technical and Organizational Measures and Safe Practices

- Ensure that there is a safe system of work in place, for example, workers are removed away from areas before spraying begins.
- Provide effective supervision.
- Check the spray equipment to see if it is in working order and properly calibrated

STEP 4:
Information and Training

- Ensure that farmers have had the correct training and are well informed of the law and what constitutes good practice.
- Hygiene and Health Surveillance
- Provision of good washing facilities for users to wash after spraying. These facilities should however not be close to ponds and streams.
- Provision of first aid equipment including eye washes
- Provision of health surveillance

STEP 5:
Provision, Use and Maintenance/Replacement of Personal Protective Equipment (PPE)

PPE is the least effective means of protecting the operator, and is the LAST control measure to be adopted, supplementing the other control measures identified above.

Key Messages:
- Prevention is better than cure.
- The best way of protection is to take action before occurrence of a fatality, injury or an illness.
- Identification of the Risk and Hazards is key to appropriate control measures.
- In case every control measure fails, you have the right to remove yourself from imminent danger.
- There are both international and national laws that provide for the protection of workers' safety and health by the employer.
- The workers also have the responsibility to protect themselves by contributing to the risk assessment process, reporting situations which present imminent danger and removing themselves from situations that they believe present serious danger.

Sources:
Ametepeh R.S, 2011 "Occupational Health and Safety of the Informal Service Sector in the Sekondi-Takoradi Metropolitan Area" Kwame Nkrumah University of Science and Technology) Kumasi, Ghana.

International Labour Organization (ILO), 2005. "Training Resource Pack on the Elimination of Hazardous Child Labour in Agriculture, Book 1, Trainer's Guide". Geneva, ILO

International Programme on the Elimination of Child Labour (IPEC). 2007.
"Rooting Out Child Labour from Cocoa Farms, Paper No.1 A Synthesis of Five Rapid Assessments". Geneva, ILO

ILO-OSH (2001) Guidelines on Occupational Safety and Health Management Systems.

MODULE 2

HAZARDS AND CONTROL MEASURES IN COCOA PRODUCTION

Contents:

UNIT 1:
PESTICIDES AND OTHER AGROCHEMICALS

 2hrs. 45 mins.

Objectives

Chemicals are used every day. They are part of everyone's life. Every year, millions of people are poisoned through chemicals. Hundreds of those poisoned die. Children are particularly exposed to such hazards just as the environment is being affected and its viability being reduced.

Unit 1 aims at providing solid technical information on agrochemicals in cocoa farms and proposing good practices and control measures. At the end of this Unit, participants will be able to:

- Give examples of several types of agrochemicals commonly found in cocoa farms,
- Know about the approved agrochemicals recommended for their use,
- Give examples of how agrochemicals can affect people's health and the environment,
- Describe how chemicals enter the body and their effects and
- Recommend good practices and control measures.

Sessions:

A. Most Common Forms and Use of Pesticides
B. Means of Exposure to Agrochemicals and Effects
C. Good Practices and Control Measures

Materials:

- Flipcharts
- Marker pens
- Rough paper for group work
- Copies of the COCOBOD approved list of pesticides
- 1 pair of plastic gloves
- Small amount of fertilizer
- Climate change and cocoa articles

Session A.
Most Common Forms and Use of Pesticides

30 mins.

Technical Information

Chemicals have become part of our life in:

- Preventing and controlling diseases,
- Increasing agricultural productivity,
- Providing synthetic fibers for clothing and
- Providing the basic materials to the manufacturing of cars, phones and computers as well as building materials.

The benefits are immense. However, one cannot ignore that chemicals may also damage human health and poison the environment. Organic farming should be encouraged.

Agriculture is one of the three most dangerous industries in the world causing havoc to the environment and agricultural workers face a wide variety of hazards. Health and safety is often linked with the wider environment. For example, the agricultural worker often lives and works in the same environment, and for him/her, occupational health and general health are more closely related than in the case of the factory worker. Agricultural work, and this is one of its most distinguishing characteristics, is carried out in a rural environment where there is no clear-cut distinction between working and living conditions. The many workers and their families who live where they work face extra dangers, for example, exposure to pesticides and other agrochemicals in water, air, contaminated soil and residues in the farm produce they eat. Hazards can also affect the environment and, the wider community. For example,
- Pesticides, animal slurry and silage effluent which can contaminate water sources,
- Smells and noise which can be a problem for the surrounding community and
- Serious depletion of local plant, animal, fish and insect populations and a number of species.

Other negative impacts include climate change and ozone layer destruction from chemicals used in agriculture. Good OSH management including encouraging organic farming can eliminate or reduce many of these problems.

Cocoa Farming and Climate Change

Climate Change is characterized by global warming, increased frequency and intensity of floods and droughts which negatively impact on livelihoods especially in agriculture. Cocoa farming is highly sensitive to changes in climate - from hours of sun, to rainfall and application of water, soil conditions and particularly to temperature due to effects of evapotranspiration. Climate change could also alter stages and rates of development of cocoa pests and pathogens, modify host resistance and result in changes in the physiology of host-pathogen/pests interaction. The most likely consequences are shifts in the geographical distribution of host and pathogen/pests, altered crop yields and crop loses which will impact socio-economic variables such as farm income, livelihood and farm-level decision-making.

Recent studies have indicated that by 2050, rises in global temperatures in Ghana and Ghana's cocoa areas will significantly decrease cocoa production and yields (see appendix 6 for some articles on climate change and cocoa).

COCOBOD is one of Ghana's institutions working in issues of climate change in cocoa. As part of their interventions and programmes with farmers, COCOBOD has put measures in place to mitigate the effects of climate change which include rehabilitation and replanting of old, destroyed and abandoned farms, supply of hybrid planting materials, supply of subsidized fertilizer and pest control programmes for cocoa diseases.

This manual does not aim at training farmers on how to handle climate change threats. The intention is to only sensitize and raise the issue whenever the manual is being applied. Such specialized training will require specific materials and tools and do not fit within the overall objective of this manual.

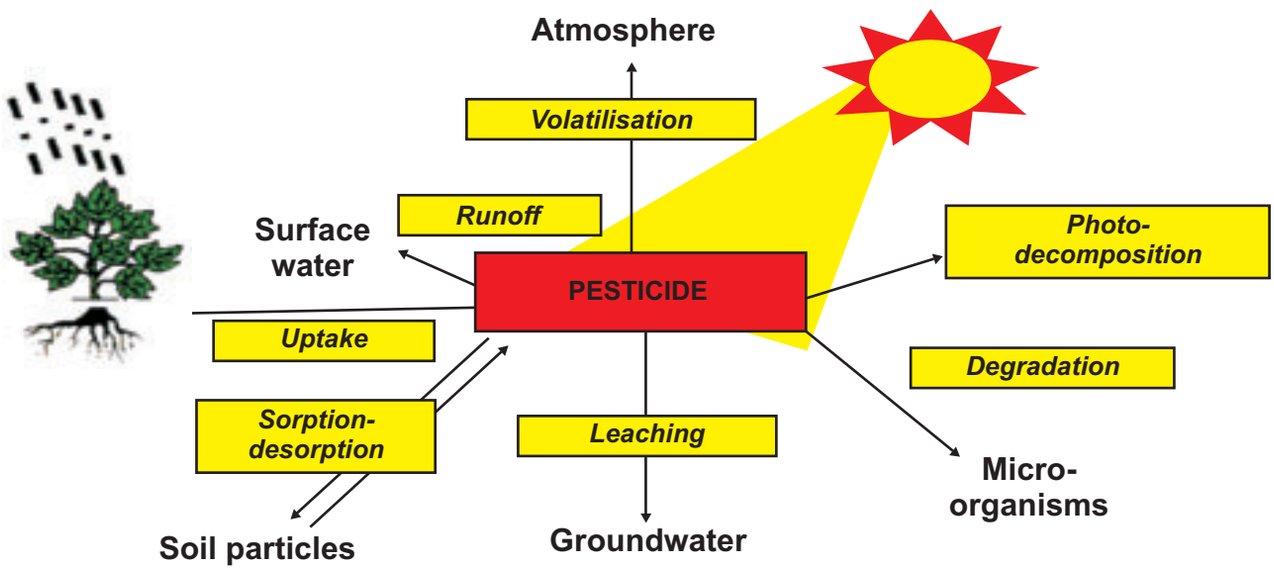


Figure 27. Showing Factors Affected by Pesticide Use

Pesticides and People

The hazards associated with the use of agrochemicals depend not only on inherent toxicity but also on the circumstances surrounding formulation and use such as concentrations used, method of application, absorption and distribution. Even pesticides of low toxicity may cause poisoning if cocoa farmers handle them without precaution and are neglected to prolonged exposure.

Chemicals used in agriculture are called Agrochemicals (chemical fertilisers and pesticides). Pesticides are poisonous or toxic. 'Pesticide' is a general term that includes:

- Insecticides for insect control,
- Herbicides for weed control,
- Fungicides for control of plant disease fungi and
- Miticides for mite control.

Majority of cocoa farm workers who use these pesticides do not know their possible immediate or long - term effects on their health and the environment. The chemical fertilisers come in the form of NPK i.e. Nitrogen, Phosphorus, Potassium.

Most pesticides stay in the environment for a long time and can continue to have harmful health effects long after they have been applied (e.g. DDT). Pesticides' long presence in farming soils can contaminate other future crops. Such pesticides are therefore banned. In Ghana's cocoa production, only those pesticides approved by COCOBOD are allowed to be used (see Appendix 7 in 'Resources' section for COCOBOD's approved list and also of those banned chemicals).

Trainer's Notes

This activity works better if done at the beginning of the session before information on the background session is shared with the group.

Activity 1.
Group Work on: Most Common Pesticides in Cocoa Farming 20mins.

Depending on the size of the group, divide participants into small groups of 5-6 people and ask the groups to examine the questions and prepare their answers. One of the members of the group should be ready to present the results of the group work. Give the group about 10-15 minutes to look into all the questions. The group speaker will be given 2-3 minutes to present the results of the group work in plenary. The other groups should be asked to comment on the previous groups' presentation. If during the groups' presentations, it starts getting too repetitive, ask the successive groups to only present answers or information that is not repetitive. At the end of the exercise, you, as the trainer, should complement as much as possible what have been said based on the 'Technical Information'.

Questions:

1. Make a list of pesticides that you know.
2. Are they solids, liquid-powered or gas?
3. Which types are most commonly used in cocoa farming and in which activities?
4. Which ones are recommended by COCOBOD?
5. Which ones are banned for use in Ghana?
6. What harm or illnesses can agrochemicals cause in humans and the environment?

Complement the information provided by participants with elements of the technical information above.

Key Messages:

- All forms of chemical pesticides, with no exemptions, are poisonous.
- They may harm or even kill if not applied, stored and disposed of properly.
- Pesticides or their incorrect use may harm the environment and future of cocoa in the long term.

Session B.
Means of Exposure to Agrochemicals and Effects

45 mins.

Technical Information

The most direct way farmers come into contact with pesticides is when they mix or spray them without the use of the required personal protective equipment (PPE). This can happen when farmers are in cocoa fields or in the vicinities.

Many child labourers mix, load and apply pesticides. Older children are more likely to spray pesticides, although in some cases children as young as 5 years do such tasks. Very little protective equipment or clothing is used. Even if PPEs are used, it puts the children under higher risk and therefore should be prohibited.

CHILDREN: NO TO CHEMICALS

Research shows that adults are more likely to use protective equipment than children. In Ghana, it has been observed that children use handkerchiefs or cloth to cover their noses while farms are being sprayed and it was noted that children stay in the farm during the exercise. Re-entry periods (the time between spraying pesticides and working in the spraying areas) were short. Even if not directly involved in spraying, children are commonly seen fetching water for the sprayers. Most children suffer from environmental exposure to pesticides by working, living nearby or passing through sprayed fields.

In the course of spraying, the wind can blow the pesticide directly onto the sprayer or onto people working, resting, eating or living nearby (this is called Drift).

Figure 28: Drift. Be mindful of wind direction as you spray to ensure that the drift does not get to you.

Lack of proper pesticide storage and disposal worsens the situation.

In order for agrochemicals to become hazardous to a cocoa farm worker or someone's health, it must first enter or have contact with the body.

Chemicals can enter the human body (routes of entry) through:

- Breathing or Inhalation through the mouth or the nose.
- Contact with the Body or Absorption through the Skin.
- Eating , Swallowing , Ingestion through the mouth or breastfeeding.
- Transfer from a pregnant mother to the unborn child through placenta.

Figure 29: STCP

Modes of entry diagram (Routes of entry of chemicals into the human body/ Organs and tissues that may be affected by particular toxic industrial chemicals)*12*

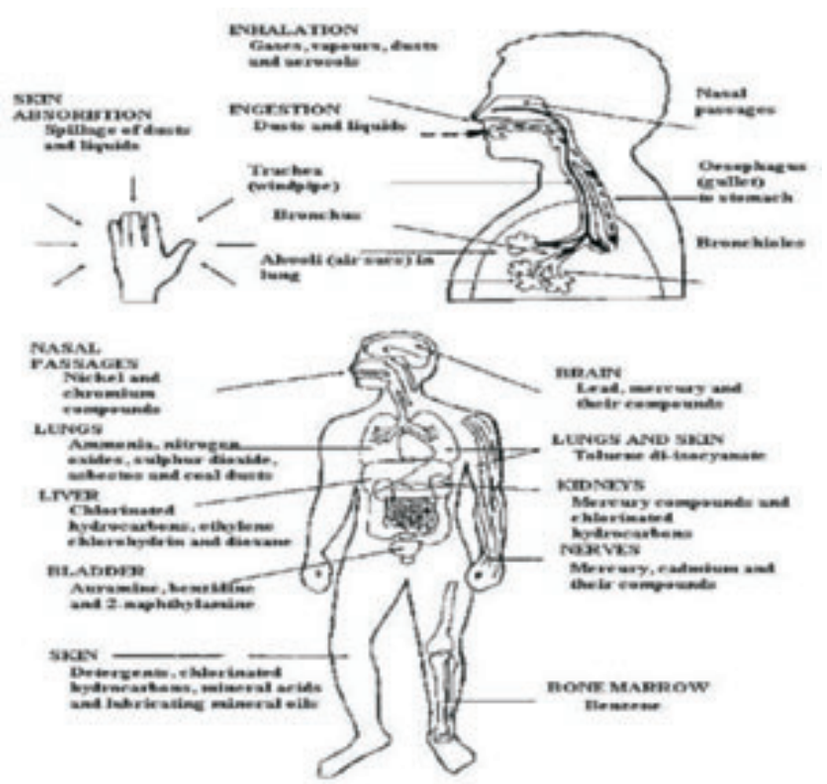


Figure 30

12. www.itcilo.org/english/actrav/telearn/osh/kemi/ciwmain.htm

Some of the effects of improper use of chemicals are
- Cancer,
- Impotence,
- Neurological disorders and
- Ultimately, death.

Exposure to lead, anaesthetic gases, pesticides and biological agents also affects the reproductive system of both males and females. It has a genetic impact with the possibility of transmission to descendants. The exposure of men to agents which affects, the nervous system and hormones regulating sperm production can result in:
- Loss of sex drive,
- Impotence,
- Reduced sperm count and
- Infertility.

If a man produces mutant sperms due to exposure to mutagens or carcinogens, this can result in:
- Spontaneous abortion
- Miscarriages
- Still births
- Defects
- Genetic disease and
- Cancer

The exposure of women to chemicals that affect hormones can adversely affect:
- Menstruation,
- Fertility and
- Development of the baby.

Chemicals can also be absorbed by the mother and passed onto the baby via breast milk, which can result in death, slow development and mental problems.

Once toxic chemicals get into the body, they can cause a variety of harmful effects. The effects can be immediate (Acute) or long-term (Chronic) and in the latter case, these may not show up for a number of years after the exposure has occurred.

Acute Effects:
These are the effects which the victim feels almost immediately after being poisoned by the chemical. Some symptoms are: headache, skin rash or burn, nausea, vomiting, chest pain, stomach ache, blurry vision, dizziness, diarrhoea, loss of concentration, involuntary urinating and many more. Acute effects come about as a result of the farmer being exposed to sudden large quantity of the chemical.

Figure 31: STCP

Chronic Exposure
Chronic exposures occurs when the farmer is exposed periodically to small quantities of the chemical. Chronic effects usually take a long time to appear.

Children are even more vulnerable to such acute and chronic effects than adults. The fact that children's immune systems are not fully developed makes them much more vulnerable to infectious diseases and cancers, thus increasing mortality rates. Also, a substantial number of children admitted that they experienced itching or burning of hands as a result of handling and applying of chemicals on the farms. [13]Children's skin is thinner so toxics are more easily absorbed. Children have also deeper/ more frequent breathing and so can breathe in more substances which are hazardous to their health[14].

Younger workers (below the age of 18 years) should not be assigned tasks for which respirators are required because it implies they are working with hazardous substances and respirators are designed to fit adults, not adolescents or children

Trainer's Notes

Before administering Activity 2 please share with participants the information contained in the technical information. Make sure to use the different images to make your points clearly.

Activity 2.
Demonstration: Exposure to Agrochemicals during Application

30 mins.

Ask for two volunteers. Ask one person to touch powdered chalk (as a substitute for fertiliser) wearing gloves; ask the other person to touch the fertilizer with his/her bare hands. Ask the person wearing the gloves to remove them. Examine the hands of both people with participants and facilitate the discussion using the guide questions. Again, here you may want to do this exercise as an opening session demonstration to introduce the theme and start a discussion or after you have gone through the 'Technical Information'.

Guide questions for discussion:
i. In what ways are farmers exposed to agrochemicals?
ii. What do you see on the hands of the person who did not use gloves?
iii. How do the agrochemicals get into the body?
iv. What are the effects of fertilisers on the body?
v. What have you learned from this exercise?

Key Messages:

- Exposure to chemicals can occur through different ways, you don't have to actually touch chemicals, just being around a sprayed area can be extremely dangerous.
- Children are more exposed to health risks and diseases than adults given their levels of physical development.
- Some effects of chemical exposure can last for life and lead to death.

13. Training Resource pack on the elimination of hazardous child labour in agriculture (Book 3), ILO/IPEC, 2005
14. Training Resource pack on the elimination of hazardous child labour in agriculture (Book 3), ILO/IPEC, 2005

Session C.
Good Practices and Control Measures

45 mins.

Technical Information

Children are not supposed to be in contact with agrochemicals. The Children's Act, 1998 (Act 560) prohibits the work of children (of all ages) with agrochemicals. The Ghana Cocoa HAF however recommends few types of agrochemical-related work that children can do, in accordance to different age limits. See the following table to know.

Ghana Cocoa HAF (extract) – Agrochemicals

Hazardous Cocoa Child Labour List (Prohibited for below 18 years)

Cocoa Farming Stage	Hazardous Child Labour Standards in Cocoa Farming (applicable to all children below 18)	Health and other implications of exposure
Establishment and Maintenance	Working with Agrochemicals i.e. Purchasing, transport, storage, use (mixing, loading and spraying/applying), washing of containers and spraying machine and disposal	Acute poisoning leading to death, chronic exposure with neurocognitive depression, cancer or reproductive problems
	Present or working in the vicinity of farm during pesticide spraying or re-enter a sprayed farm in less than 12 hours	Acute pesticide poisoning or chronic (cumulative smalldose exposures) poisoning problems

Permissible Work in Cocoa Production and Recommendations (various age categories below 18 years)

Age group	Activity/ Tasks	Recommendation
13-14	Fetching water for spraying and leaving the farm before spraying commences	Adequate training Under adult supervision

Figure 32; Application of Chemicals: Children between 12-14 children can fetch water for spraying but should leave the farm before spraying commences.

General Recommendations for Child Participation in Cocoa Farming

1.	No child of any age should work where pesticides are being used. Children should not enter the area where pesticides have been sprayed for at least 12 hours. Only adults using Personal Protective Equipment may handle or work with pesticides.
2.	Children should not wash equipment that has been used to carry, mix or spray pesticides and should stay at distances where they do not smell pesticides. Fetching water for sprayers during day of spraying when sprayers run out of water is unacceptable
3.	All children must work in appropriate work under direct observation and supervision of an adult.
4.	Attaining 18 years is no license to engage in all cocoa activities. Persons 18-24 years as well as those above 24 years should be well-protected and engagement in any hazardous farm work should be graded until maturity, experience and training permit.

Figure 33

Adults, on the other hand, can adopt a number of good practices and protective/control measures that can be put in place to avoid hazards derived from farm work with agrochemicals. It is important to understand and pass on the message that a good culture of occupational health & safety management needs to start with adults, who are farmers but can also be parents. If parents are sensitised and are aware of the risks, effects and know how to act in the face of these, it will be much easier to protect children and young workers.

The main activities involved in using agrochemicals in cocoa farming include:

- Purchasing and transporting,
- Storage,
- Mixing and use of agrochemicals in spraying machines,
- Application spraying,
- Cleaning up after use and
- Disposal of the empty containers.

Chemical Labelling

The purpose of labelling is to protect human health and the environment. Labelling provides chemical users and handlers with the information on the chemical hazards. It uses pictograms, hazard statements and signal words 'Danger “and 'Warning' to communicate hazard information on the product. The labelling will also give you the entry period after spraying

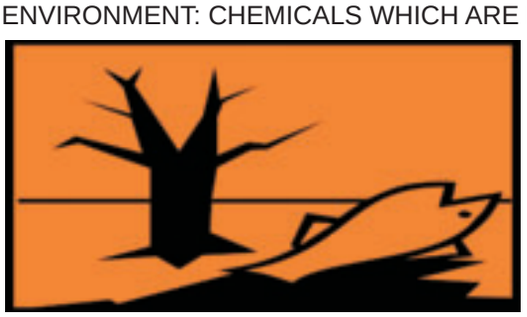
Examples:

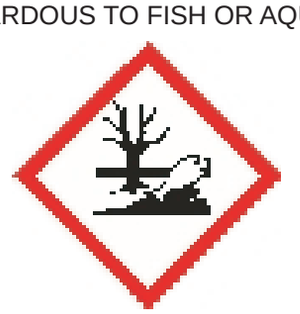
SKULL AND CROSSBONES INDICATES CHEMICAL IS POISONOUS/ FATAL IF SWALLOWED, INHALED OR IF IN CONTACT WITH SKIN

FLAMMABLE OR EXTREMELY FLAMMABLE

EXCLAMATION MARK INDICATING CAUTION IN THE USE OF THE CHEMICAL

ENVIRONMENT: CHEMICALS WHICH ARE HAZARDOUS TO FISH OR AQUATIC PLANTS





SYMBOL INDICATING THAT CHEMICAL CAN DAMAGE ANYTHING IT COMES INTO CONTACT WITH INCLUDING SKIN, EYES, TISSUES UNDER SKIN AND OTHER BODY PARTS

Figure 34

Therefore before you buy any agrochemical and use it in cocoa farms, ensure that:

- it is recommended by COCOBOD (see 'Resources' section),
- there is a label on the chemical container,
- you ask for information if you cannot read,
- children are not allowed to buy, carry, transport, mix, taste, smell or apply agrochemicals and
- the label is in a language that can be read, preferably English in Ghana's situation.

Figure 35: STCP

Transport and Storage

When carrying the agrochemical to the farm/house, ensure that you do not mix it with other food items.

Pesticides (Agrochemicals) should always be provided with separate storage. If large quantities of pesticides are involved, a separate building should be used for this purpose. For smaller quantities, a self-contained section of a building may be used.

The storage area may be located as far as feasible from domestic buildings on land which is not prone to flooding and if possible should be fire-free and fire-proof. It should be secured by lock and key which should be entrusted to a responsible person. Chemicals should be kept out of reach of children.

Figure 36: STCP

Pesticides should not be stored in any container apart from the original. Storing pesticides in different containers and keeping them in bedrooms, kitchens and bathrooms is a high risk for those who may come into physical contact with, or simply by inhalation through dispersion in the air. Accidental poisoning could occur when chemicals are wrongly stored in different containers and are mistakenly taken for food or water.

Figure 37: STCP

Figure 38: STCP Always store agrochemicals in their original containers.
Do not transfer agrochemicals from one container to another container

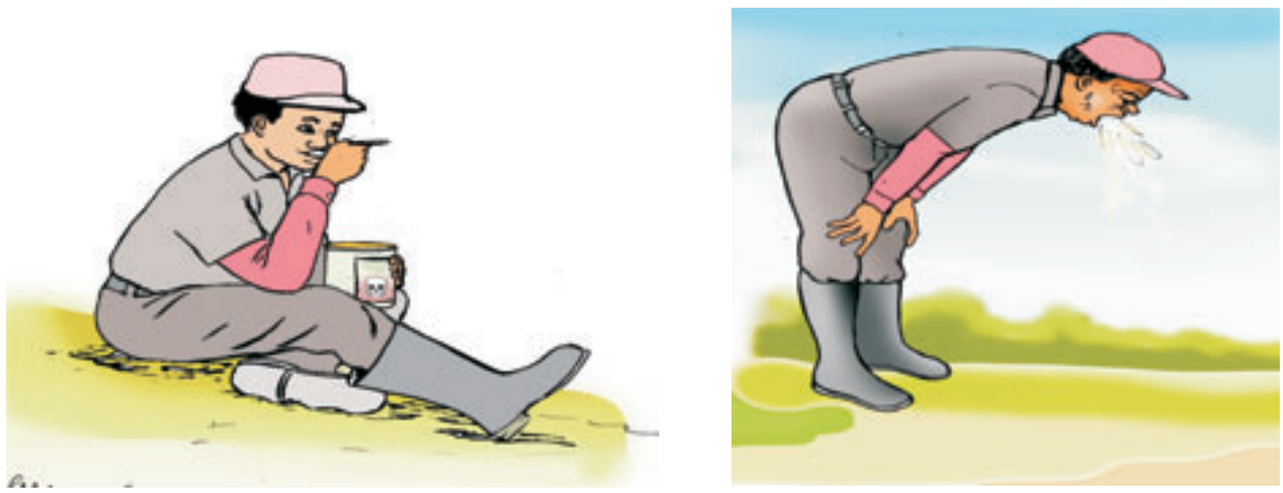


Figure 39: STCP , Never reuse agrochemical bottles as drinking cups or food containers as it is impossible to rinse the entire agrochemical residue out of a container.
Pesticide residues in empty containers may make people ill or even kill them!

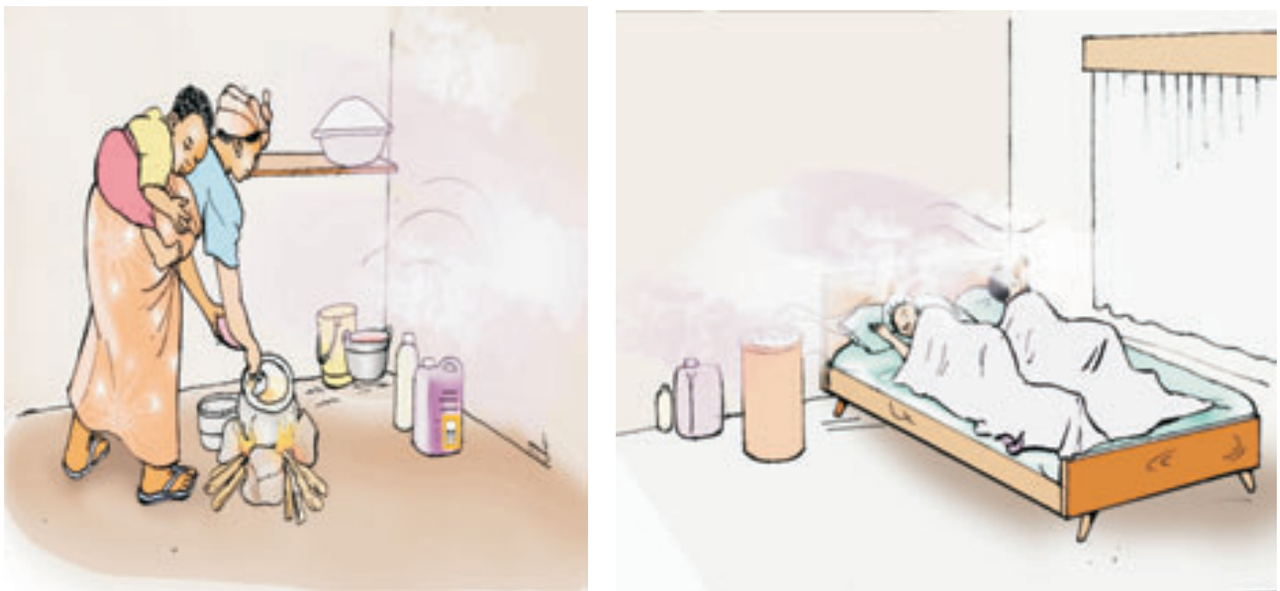


Figure 40: STCP , Never keep agrochemicals in a kitchen because they might contaminate food and drinking water. Do not keep agrochemicals in bedrooms because the vapours or mists are likely to be breathed in by those sleeping in the room.

In addition to that, the use of gloves and proper personal protective equipment are usual measures recommended for adults. Being appropriately trained on fertiliser application, sensitisation and the use of trained spraying gangs or public officials are essential.

Below are some examples and images of advice for adults on handling agrochemicals.

Figure 41: STCP. Wear gloves and use a can (instead of your hand) when applying fertiliser.

Figure 42: STCP Beware of wind conditions and direction when you spray to protect yourself from pesticides

Figure 43: STCP, Take a bath and remove your clothes and wash them separately after spraying

Disposal of Empty Agrochemical Containers

Giving the enormous volumes of waste that are generated in the use of agrochemicals, waste disposal is key in the health and environmental protection. As with the protection of the work place, a hierarchy of controls should be applied when dealing with agrochemical waste.

Empty agrochemical containers should be treated as hazardous waste and buried in a pit at least 50 metres from water sources (rivers, streams, boreholes, wells dams etc. Most pesticides stay in the environment for a long time and its long presence in farming soils can contaminate other future crops. Sequestration for instance can use up scarce land, making it unusable for agriculture. It is the least preferred scheme according to the WHO and FAO International Code of Conduct on the Distribution and Use of Pesticides. It should be buried far away from children's play areas and domestic animals. In all cases, the empty container pits should be covered. Under no circumstance should the container be washed and used for the storage of food or water. Some farmers usually wash and use these containers to store or drink water.

Figure 44: STCP, Bury empty agrochemical containers in a pit at least 50 m from water sources and as far as possible from children's play areas and domestic animals. Put flattened containers in layers of 10-15 cm deep and cover

Trainer's Notes

This exercise works better if done after the technical information is shared as a re-cap or assessment of learning.

Activity 3.
Group Work on Storage, Transfer and Disposal of Agrochemical containers

45 mins.

Divide participants into two groups. Ask one group to discuss how cocoa farmers usually store pesticides. Identify the hazards involved and suggest what can be done to avoid these hazards. Ask the second group to discuss how farmers dispose of empty pesticide containers. Identify the hazards. Each group should write up their answers on a flip chart in a table as shown below.

Group One – Storing Pesticides

Places and ways used to store Pesticide	Hazards involved (if any)	Effects on children and adults	What can be done to lessen/avoid hazards during storage.

Question Guide (Group 1)

- What is important to consider when selecting a place to store agrochemicals?
- What might happen if a farmer transfers an agrochemical from its original container to another container?
- Have you heard of any accident caused by storing agrochemicals in another container? If yes, what happened?

Group Two – Disposing of Pesticides

Ways of using empty agrochemical containers and disposing of them	Hazards Involved (if any)	Effects on children and adults	What can be done to lessen/avoid hazards

Question Guide (Group 2)

- Why should you not re-use empty pesticide containers?
- Do you know of people who use empty pesticide containers for domestic purpose?
- Who are they?
- Have they experienced health problems? What kind of health problems?
- Why is it important to consider where and how to dispose of empty agrochemical containers?
- What is the best way to dispose of empty agrochemical containers?
- What is the effect on land and future crops?
- Why is it important to bury agrochemical containers away from water sources?
- How far away from a water source should they be buried?

Key Messages:

- All chemicals are harmful to health and the environment.
- They should be applied and used as recommended.
- Children as well as adults should not be allowed to come into contact with chemicals since it impairs their health.
- Empty containers should not be used for domestic purposes. They should always be disposed off only through burying.

SOURCES:

International Programme on the Elimination of Child Labour (IPEC). 2007. "Rooting Out Child Labour from Cocoa Farms", Paper No.2: Safety and Health hazards, Geneva, ILO.

International Labour Organisation (ILO). 2005. "Training Resource Pack on the Elimination of Hazardous Child Labour in Agriculture", Book 3, Additional Resources for Trainers, Geneva, ILO.

International Labour Organisation (ILO). 2005. "Training Resource Pack on the elimination of Hazardous Child Labour in Agriculture", Book 1, A Trainer's Guide, Geneva, ILO.

International Institute of Tropical Agriculture (IITA), 2009. "Preventing and Reducing Injuries and ill Health in Cocoa Production - Learning about Sustainable Cocoa Production, Manual No., (Accra, Ghana) pp26.

3.www.itcilo.org/english/actrav/telearn/osh/kemi/ciwmain.htm
Source: STCP "OSH Guide for Farmers", pg. 85, no.1
Source: STCP "OSH Guide for Farmers", pg. 29, no. 7

Cocoa Research Institute Of Ghana/New Tafo Akim, “Vulnerability and adaptation assessment under the Netherlands Climate Change Studies Assistance Programme Phase 2 (NCCSAP2)

Vulnerability of Agriculture to Climate Change - Impact of Climate Change on Cocoa Production by G. J. ANIM-KWAPONG & E. B. FRIMPONG,

http://rafrogblogus.wordpress.com/2013/05/17/community-education-a-key-ingredient-for-the-cultivation-of-climate-friendly-cocoa/

WHO and FAO International Code of Conduct on the Distribution and Use of Pesticides

Unit 2:
Physical Hazards

 2hrs.15 mins.

Objectives

This Unit will deal with physical hazards in cocoa farming activities. These are hazards associated with sharp tools, slips/trips and falls, fires, very high or very low weather temperatures and noise.

At the end of the session, participants will be able to:
- explain the hazards, specifically for children, associated with the different physical hazards;
- identify those who are at risk of injury;
- assess how injury may occur and its effect and
- know what to do in the event of exposure

Sessions:

A. Using Sharp Tools
B. Falls and Safe Use of Ladders
C. Fires
D. High and Low temperatures
E. Noise

Materials:

- Flip chart and easel
- Marker
- Table for the naming game print outs (session A)
- Machete
- Axe
- Harvesting hook
- Other commonly-used sharp tools in cocoa farming
- Matches or cigarette lighter
- Fan for fanning the body
- Warm clothing

Session A.
Using Sharp Tools

 45 mins.

Technical Information

This session deals with hazards associated with the use of sharp cocoa farming tools such as machete, axes, chain saws, etc. The tools are used in land clearance, weeding of cocoa farms, removal of mistletoes, felling of trees, harvesting and in the breaking of cocoa pods. The use of these tools may result in cuts and in extreme cases, amputations. Those at risk include children, the young and inexperienced cocoa farmers, untrained workers, as well as any person close to persons using a sharp tool.

Figure 45

The sharp tool injuries may arise when children, young and inexperienced cocoa farmers:

- Are not trained properly,
- Work too close to each other,
- Handle sharp tools carelessly,
- Use or sharpen such tools when drunk or under the influence of drugs; (See figures 45 and 46) and
- Work without supervision by a more experienced adult farmer or without proper training.

Figure 46: STCP

There may be excessive bleeding which may cause death to farmers, including the young cocoa farmer from loss of blood. If the wound is not treated properly, it may get infected and give rise to serious complications. A poorly-treated wound may heal leaving infections, disabilities and scary scars at the affected body part.

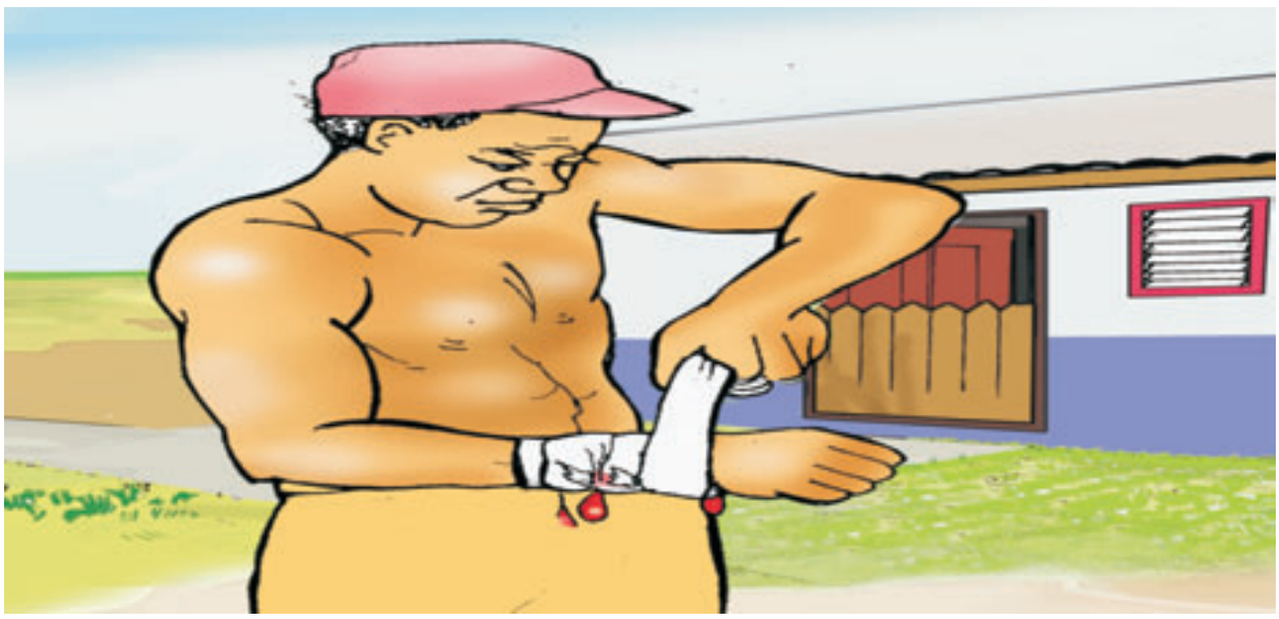


Figure 47

It has been reported that in Ghana, children using dangerous sharp tools suffer cuts and wounds from cutlasses and pluckers, haemorrhage, dislocation of arms and limbs, deformities, tetanus and even death. These dangers and resulting injuries are common and are suffered equally by adult farmers and children[15]. Repetitive and forceful actions associated with cutting can also harm children's musculoskeletal development[16].

Figure 48: A child labourer in Ghana involved in cocoa farming with numerous scars on both legs

15. IPEC Rooting out child labour from cocoa farms-Paper No. 2: Safety and health hazards, Geneva, International Labour Office, 2007
16. Training Resource pack on the elimination of hazardous child labour in agriculture (Book 3), ILO/IPEC, 2005

The Cocoa HAF recommends that, children should not be allowed to use machetes or long cutlass for weeding in cocoa farms. There are also other similar activities that are prohibited to children as can be seen from the extract on Ghana Cocoa HAF below. Only those children between 15-17 years are allowed to use age-appropriate cutlass and under adult supervision.

Figure 49

Ghana Cocoa HAF (extract) – Sharp Tools

Hazardous Cocoa Child Labour List (Prohibited for below 18 years)

Cocoa Farming stage	Hazardous Child Labour Standards in Cocoa farming (applicable to all children below 18)	Health and other implications of exposure
Establishment and Maintenance	Using machetes/ long cutlass for weeding	Cutlass injury associated with hemorrhage, tetanus, amputations
	Working with motorized mist blower, knapsack sprayers and chainsaw	Noise-induced hearing problems, potential for severe injury from blades of chainsaw, bodily pains; leakage from machine cause skin exposure and itching.
Harvesting and Post-Harvesting	Harvesting overhead cocoa pods with harvesting hook	Injury from falling blades, falling pods or tree-top reptiles, neck and shoulder problems, destroying the budding nodes and reducing yields
	Breaking cocoa pods with breaking knife	Cutlass injury associated with hemorrhage, tetanus, amputations, damage to cocoa beans

Permissible Work in Cocoa Production and Recommendations (various age categories below 18 years)

Age group	Activity/ Tasks	Recommendation
15-17	Weeding/ brushing under growths with age-appropriate cutlass (Sua-ado or small cutlass)	Under adult supervision
	Breaking cocoa pods with breaking mallet or hitting the ground	

Figure 50

General Recommendations for Child Participation in Cocoa Production

1.	All children who accompany their parents to the farm to work must wear adequate clothing. This includes: • a) rubber boots with non-skid soles to prevent snake bites, slips and falls, e.g children's wellington boots, 'Afro Moses', canvas or other boots that covers the calf. Going to farm barefoot is hazardous and in bathroom slippers is not acceptable; • b) trouser or long dress that covers the knee, shirts with long sleeves; • c) sun hat which is recommended on hot and sunny days; • d) gloves when handling branches.
2.	All children must be fully trained on any farm work even the basic tasks and tools before assigned duties.
3.	All children must work in appropriate work under direct observation and supervision of an adult.
4.	Attaining 18 years is no license to engage in all cocoa activities. Persons aged 18-24 years as well as those aged 24 and above should be well-protected and engagement in any hazardous farm work should be graded until maturity, experience and training permit.

What can be done to prevent children and farmers from being injured?

Some of the things that can be done to prevent injury from sharp cocoa farming tools include:

- Training for workers to prevent injury;
- Great care being taken when working with sharp tools;
- Not working too close to each other. Distance between workers should be at least a metre.
- Avoiding the use of sharp tools after taking alcohol or other drugs or medicines that may make one to feel sleepy;
- Wearing closed shoes (e.g. Wellington boots).
- Promptly and properly treating wounds to avoid excessive bleeding and other complications, in case of injury.

Figure 51:Take great care when handling sharp tools. When working in a group, leave a wide distance between people (STCP, App. 2)

Trainer's Notes

The following exercise can work as an ice-breaker to be done at the beginning of the session. You can top up people's answers with some of the technical information above and pictures.

Activity 1.
Sharp Tools: The Naming Game

 30 mins.

Aim:

- The aim of the activity is to determine the understanding of participants of the hazards associated with the use of sharp tools and how these hazards can be dealt with.

Method:

- Trainer introduces the topic and asks participants to name some tools that may be used in cocoa farming.
- Participants are grouped into two or more groups (not more than five in a group). Each group is then given one or two sharp tools.
- Ask each group to describe the hazards associated with the given tools, who may be affected and the consequence(s) when affected, as well as what can be done to prevent injuries.
- Groups should use the table for Naming Game below to complete the exercise.

Each group is to present their results after about ten minutes. Ask participants if they know a young cocoa farmer or child who was injured as a result of using any sharp farming tool and what happened to the person.

Discuss with participants how they handle cuts on the farm. (Avoid talking too much. Allow participants to do most of the talking thus sharing experiences).

The Trainer may use the information under the “What can be done to prevent children and farmers from being injured?” section of the Technical Information in the discussion of the reports of the groups

Table for Naming Game

Name of tool	Why is the tool dangerous?	Injury associated with use of tool	Who can be affected?	What can be done to prevent injury?
E.g. machete	Sharp edge	Cuts and bleeding	The farmer and persons near him	Care and not working close to each other

Key Messages:

- The use of machetes and other sharp tools by children is forbidden under the Cocoa HAF
- Children aged 15 years and above can however use age-appriopriate tool such as ‘sua-ado'.
- Injuries from sharp tools happen often as a result of inappropriate training for farmers on safe use of such tools
- Good control measures to prevent injury are trainings, working not too close to each other, wearing appropriate protective gear (e.g. Wellington boots), not working with sharp tools under the influence of alcohol/drug and treating wounds appropriately

Session B.
Falls and The Safe Use of Ladders

30 mins.

Part I: Falls (10 mins)

Technical Information

Falls may occur on the same level or from a higher height to a lower level. Falls on the same level occur because the place where it occurred is slippery, or uneven, or because the lighting is bad. Falls on the same level can also be due to tripping over objects on the ground or by being pushed by someone. Falls from heights may occur in the use of ladders or in the course of working on trees e.g. climbing trees to remove excess branches and/or mistletoes. The branch on which the young cocoa farmer is standing to perform the work may break causing him/her to fall. Falls may also occur in the cause of repair of roofs of huts or storage facilities. For children and adults, trips and slips that result in falls may cause injuries, such as lacerations, abrasions, fractures and sprains[17].

For this reason, the Cocoa HAF states that children under 18 years cannot climb trees higher than 3 metres (9 feet) to cut mistletoe. See the following table on the Cocoa Farming stage for the type of work that is recommended to children of different ages that assures their protection against falls.

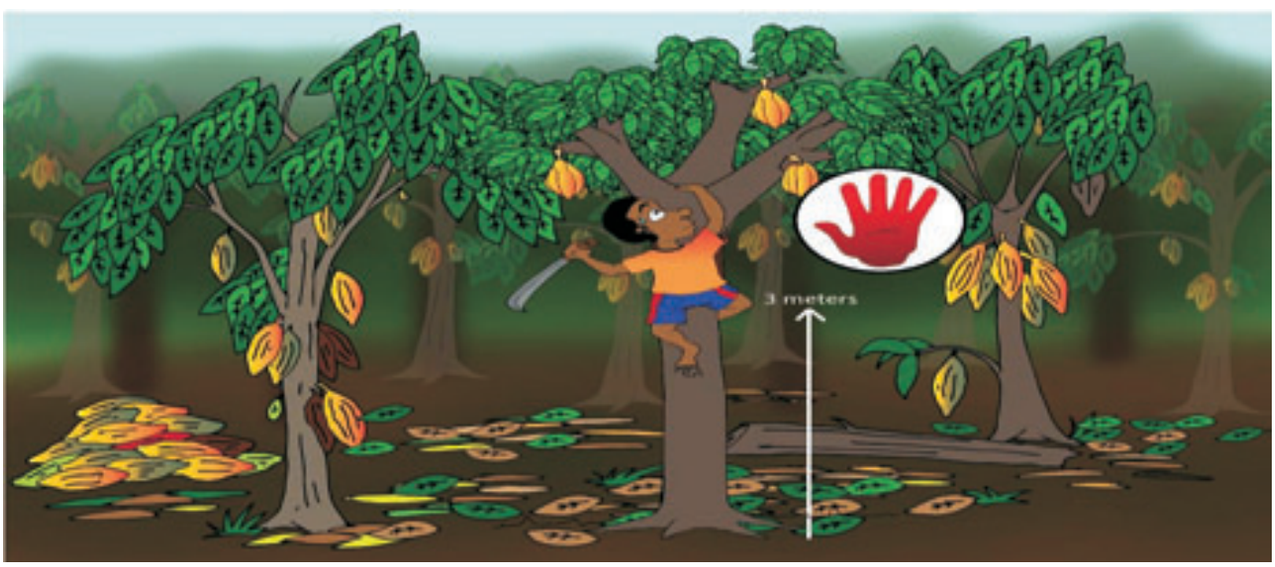


Figure 52: Children should not be climbing tress higher than 3 metres (9 feet) to cut mistletoe with cutlass

Table on Cocoa Farming Stage

Cocoa Farming Stage	Hazardous Child Labour Standards in Cocoa Farming (prohibited to children under 18 years)	Health and other implication of exposure
Establishment and Maintenance	Climbing trees higher than 3 metres (9 feet) to cut mistletoe with cutlass	Fall from height with attendant injuries

17. IPEC Rooting out child labour from cocoa farms-Paper No. 2: Safety and health hazards, Geneva, International Labour office, 2007

Age group	Permissible Activity/task	Recommendations
15-17	Plucking within hand-reach pods	Under adult supervision In assigning permissible load to a child, adequate adjustment is required if the terrain is unfriendly. This is particularly the case in hilly and slippery terrains when it rains. It also applies when crossing a river with load.

General Recommendations for Child Participation in Cocoa Farming

1.	All children must be fully trained on any farm work even the basic tasks and tools before assigned duties
2.	All children must work in appropriate work under direct observation and supervision of an adult.

What about adults? What can be done?

- Avoid working at heights if possible.
- Caution should be taken while working on roofs (especially fragile ones)
- Safe use of ladders
- Caution should be exercised when walking on wet and rocky grounds

Trainer's Notes

Start the session with the following discussion. Complement participants' inputs with elements of the Technical Information.

Activity 2.
Discussion: Do Falls Only Occur From Heights?

 5 mins.

Trainer discusses fall-related injuries and how falls can come about. Encourage participants to describe the conditions under which falls can happen. The trainer writes the answers provided by the participants on the flip chart. Do falls occur only from heights?

- Suggested Answer: Falls also do happen on even grounds due to trips or slips.

Part II: Safe Use of Ladders (20 mins.)

Technical Information

Ladders may be used to attain heights or to enable lower levels to be reached. A young cocoa farmer may climb up a ladder to reach he trees to remove mistletoe or to perform any activity that may require the use of a ladder.

Ladders are made up of two equal upright sides joined by steps (also known as rungs).
The rungs should be parallel and uniformly-spaced. The spaces between successive steps should be between 10 and 14 inches.

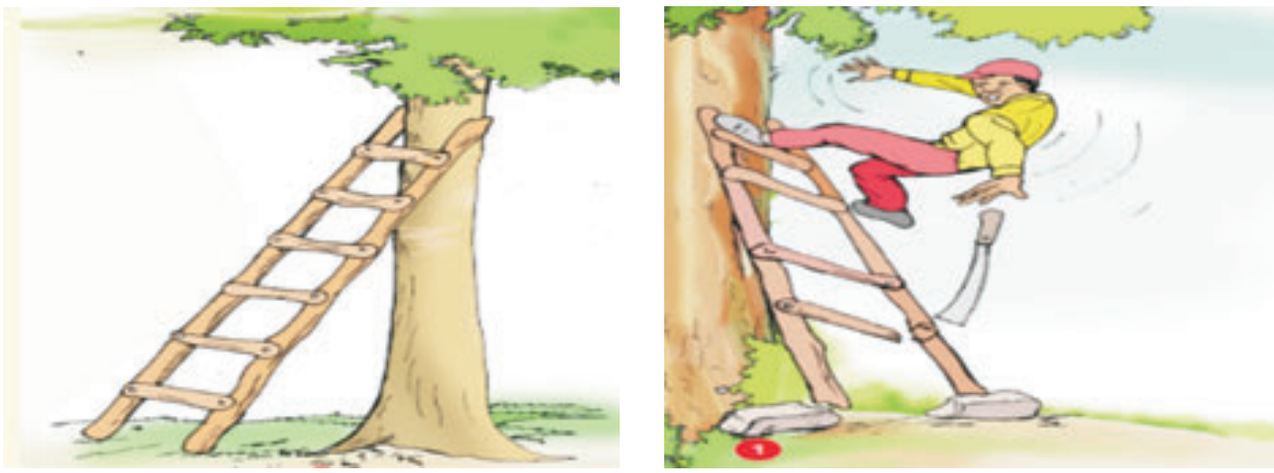


Figure 53: Source: STCP "OSH Guide for Farmers", pg. 9

A good ladder should be stable, have all rungs parallel to each other and should have no missing rungs. Using a ladder incorrectly may result in a fall which may result in broken bones or other injury.

A major risk in the use of ladders is fall from the ladder which may result in such injuries as broken bones and even a fatality. This may be due to such things as:

- The use of weak or damaged ladders. A weak or damaged ladder is one with missing rungs or with a broken side bar (See picture on the right in figure 53).
- The ladder not being properly placed;
- Overreaching while on the ladder;
- Carrying loads while ascending or descending the ladder;
- Two or more persons climbing or descending the ladder at the same time and
- "Horseplay" by other person(s) while the ladder is being used. For example, shaking the ladder to frighten the person on it may cause him/her to fall off the ladder.

What can be done to avoid injury while using a ladder?

It is important to select a good ladder for the work to be performed. Qualities of a good ladder include:

- Adequate strength. The ladder should be strong enough to carry the person and any load that may be required to be carried on it;
- Have all rungs in place i.e, there are no missing rungs;
- Rungs are horizontal when ladder is in the standing position and
- Rungs are free of any greases or oils. Ladders should not be painted or otherwise marked. The paint may prevent the observation of cracks and other defects in the ladder.

Correct Use of ladders

In using ladders: -

- Inspect ladder to ensure that it is not damaged. Ladder should be strong with no broken/cracked side bars and that the rungs are parallel to each other;
- Place the selected ladder on firm solid ground. Do not place ladders on wet ground nor on tables, drums, stones or on any such support. If ground is wet provide appropriate support e.g. a board may provide support;
- Ladder should be long enough with at least three rungs above the highest point to be reached. Do not tie two ladders together to get a longer ladder;
- Ensure that the ladder does not slip from the top or the base by either tying it in place or by being held in place by another person;
- The ladder should be placed such that the distance between the base of the ladder and the base of the object on which the ladder is leaning is one-fourth of the length of the ladder;
- When climbing a ladder, ensure that either two hands and a foot or two feet and a hand are in contact with the ladder at all times. Loads can be passed on when need be. This is the 'three point contact' mentioned earlier (See Figure 54);
- Climb and descend facing the ladder. Do not climb or descend with your back to the ladder;
- Two or more young farmers should not be on the ladder at the same time. It may break. Other people passing near the ladder should not attempt to play with the ladder. For example, people should not attempt 'to frighten' the climber by shaking the ladder and
- Wooden ladder should not be stored under wet conditions nor in damp areas. They should also not be exposed to fires.

Figure 54: STCP, Always ensure that three parts of your body are in contact with the ladder

Figure 55: STCP, To prevent the ladder from slipping, it can be held in place by another person or by tying it to an object

Figure 56: STCP, When carrying a load, make sure you have one hand free to grip the ladder

Figure 57: STCP, Do not overreach while working on the ladder. Overreaching may cause you to fall

Trainer's Notes

Start by sharing with the participants elements from the Technical Information before going through Activity 3.

Activity 3.
Discussion and Demonstration

15 mins.

This activity uses extensively the images and figures contained in the Technical Information. Use these to demonstrate clearly how to use ladders and stir a discussion around this.

Session C.
Fires

20 mins.

Technical Information

Fire is used in cooking and for the clearance of land for cocoa planting. Fire may be used both at home and on the farm. Fire is a good servant but a bad master. It is a good servant when it is under control but a bad master when not under control. A small fire on the farm when not controlled can cause a great havoc to a farm, a house or a whole village and in some cases burn people to death. It is important to realise that most materials on the farm can burn. A small amount of fire left on the farm may grow into a huge fire that can destroy a number of farms.

Consequences of fire hazards:

1. Fire burns to skin or whole body,
2. Destruction of property i.e. owner and neighbouring farms and
3. Smoke inhalation and related respiratory problem.

Children are more exposed to smoke inhalation and other respiratory conditions as they have deeper/more frequent breathing in and so can breathe in more substances hazardous to their health. A resting infant has twice the volume of air passing through the lungs compared to a resting adult (per unit of body weight) over the same period[18].

For this and other reasons, the Cocoa HAF prohibits children from being involved in bush burning as shown below.

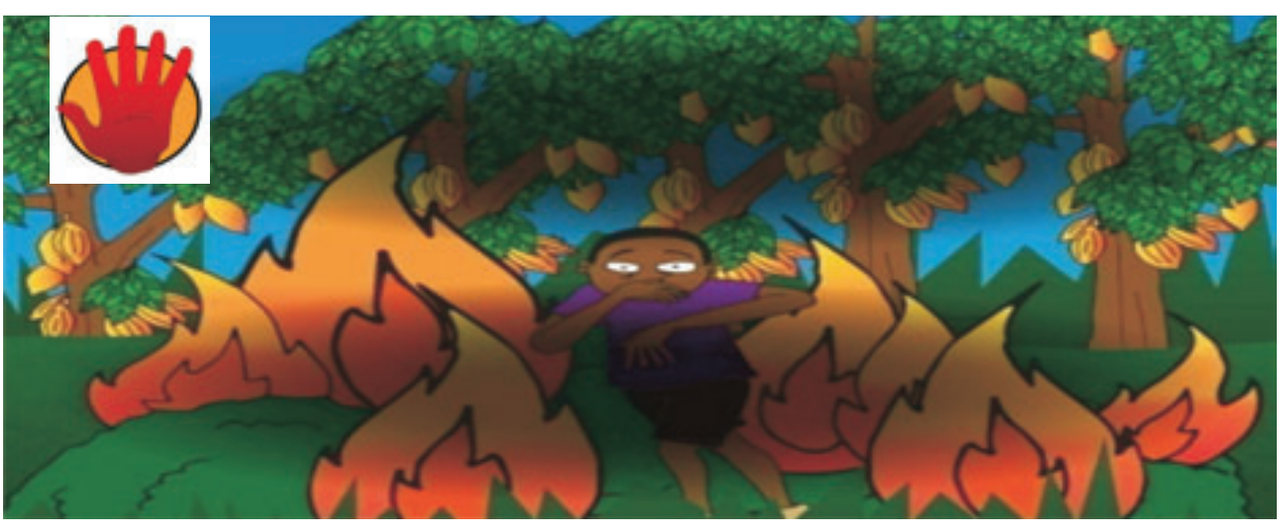


Figure 58: Child involved in bush burning and getting intoxicated

NOT OK FOR CHILDREN

Cocoa farming stage	Hazardous Child Labour Standards in Cocoa Farming (prohibited to children under 18 years)	Health and other implication of exposure
Establishment and Maintenance	Bush burning	Burns, smoke inhalation with chest problems, death, burning of other farms

18. Training Resource pack on the elimination of hazardous child labour in agriculture (Book 1), ILO/IPEC, 2005

OK FOR CHILDREN

General Recommendations for Child Participation in Cocoa Farming

1.	All children must be fully trained on any farm work even the basic tasks and tools before assigned duties
2.	All children must work in appropriate work under direct observation and supervision of an adult.

WHAT CAN BE DONE?

Figure 59

Some of the things that can be done to prevent fire havoc include:

- Consider the wind direction (wind should be from behind you);
- Ensure that no fire is left unattended to on the farm;
- Children should not be allowed to play with fire;
- When clearing land for farming by using fire, ensure that there is an escape route for the young farmer and that he/she is not engulfed by the fire;
- Create a fire belt before clearing land using fire and ensure that the surrounding area is wet before setting the fire;
- Avoid the inhalation of smoke from a fire by ensuring that the wind is always behind you;
- Before leaving the farm, ensure that all fires are put out;
- The local Fire Brigade may be asked to assist in burning bush on farms;
- A branch (not dry) without leaves could be used to beat out the fire.
- *N.B.* A branch with leaves may fan the fire causing it to spread;
- Sand may also be used to blanket the fire;
- Do not run when one's dress catches fire but rather fall to the ground and roll until fire goes out and
- Make sure that the fire is completely out and not smouldering.

Figure 60: STCP, Take care when lighting fires on the farm. Make sure that you are not trapped by the fire by planning an escape route. Avoid inhaling smoke by moving away from the direction of the smoke.

Trainer's Notes

Start the session by administering activity 4. Complement the information with some of the technical information presented above.

Activity 4.
Case study: Fire Safety

15 mins.

The trainer should read the case study out loud or provide copies of the text if possible. Allow people to read or understand the content of the case study and go through the questions below with the group. In your feedback, use relevant elements from the Technical Information.

Kwesi Mensah is a young cocoa farmer as well as a palm wine tapper. Daily, he goes to his cocoa farm and then on to his palm trees to tap his palm wine. One day, he went to the farm with his two daughters, Adjoa and Mansah aged seven and five respectively, because his wife was sick and he did not want the children to disturb her. To avoid starving himself and the children, he decided to prepared some food for lunch. He continued to harvest his cocoa and asked the children to take care of the food on fire. In no time, he could see a smoke emanating from a section of the farm where the children were. He rushed to the place to put out the fire using a branch of a tree. He immediately left the farm with the children for the house. He was in the house when he got information that his farm was on fire. He rallied colleagues and rushed to put off the fire, but it was too late. His entire cocoa farm as well as that of two adjourning farms had been completely burnt.

Questions

1. How was the fire started on Kwesi Mensah's farm?
2. Was it the intention of the children to burn their father's farm?
3. Do you think the method used to put out the fire was adequate?
4. Should children be allowed to engage in activities that involved fire on farms?
5. What precaution should a farmer take to ensure that he is not trapped by fire when clearing the land using fire?

Key Messages:

- Fire is a good servant but a bad master.
- Cocoa HAF prohibits children from being involved in bush burning.
- Good corrective measures concerning fires include ensuring no fire is left unattended to; ensuring that there are escape routes and ensuring that all fires are put out at the end of the day.

Session D.
High and Low Temperatures

 **20 mins.**

Technical Information

High or low temperatures are either to do with hot or cold weather conditions. Farming is normally done in the open. Cocoa farmers are therefore always exposed to all weather conditions.

The body feels hot when the weather is hot. The body sweats in order to cool it. The evaporation of the sweat by heat from the body cools the body. It is advisable not to work in the sun, when the weather is hot. Water makes up about 75 percent of the body weight. Excessive sweating due to working in the sun or extreme hard work will cause the body to lose too much water, which may cause the body to become dehydrated. Dehydration is a condition of the body when it has lost a lot of water. Heat stress is greater in children because their sweat glands are still developing[19].

Symptoms[20] of dehydration include initial thirst to increase water intake accompanied by less urination to conserve water in the body. If there is urine, it is very concentrated and yellowish in colour. With time, the mouth becomes dry and sweating may stop. The body muscles contract and do not relax (muscle cramps). The affected person feels weak and lightheaded when standing accompanied by heart palpitation. There is also a feeling of nausea and person may eventually vomit.

Cold weather occurs during rainy season or when the weather is very windy. During the rainy season, the weather becomes very cold. The body does not sweat as blood flow to the skin is reduced. Exposure to the cold conditions may cause the body to shiver and in some cases the teeth may be chattering. A number of germs like such conditions and will be increased in the environment. Colds are normally upper respiratory infections caused by germs that like the cold weather conditions. The body may therefore catch the 'cold' due to upper tract infection. The affected person starts coughing with the throat becoming sore accompanied by a running nose and a fever. The nose is also congested. There is loss of appetite accompanied by tiredness. The cold can easily be transmitted to others through coughs. Low environmental temperature in children also causes an increase in the consumption of oxygen compared with adults.

The skin becomes dry and may crack unless a cream is applied to the affected skin part. The toes may tingle, become itchy, painful and/or swell.

19. Training Resource pack on the elimination of hazardous child labour in agriculture (Book 3), ILO/IPEC, 2005
20. http://www.medicinenet.com/dehydration/article.htm

Recommendations

- Sun hat is recommended on hot and sunny days
- Ensure adequate intake of drinking water hourly to prevent heat stress.
- Body protection in the form of trousers, long sleeves and long dresses is recommended.
- Sick children or adults should not be made to work under any circumstance.
- All children must be fully trained on any farm work, even the basic tasks and tools before assigned duties.

Figure 61

In addition to this, what else can be done?

- Avoid working in the sun as much as possible. Heavy work like weeding, or carrying of heavy loads, should be done early in the morning or in the evening by adults when the sun is down. Take in as much water as the body may require.
- Take frequent work breaks.
- In extreme cases of dehydration, rush affected farmer to the nearest clinic for attention
- In remote areas where there is no clinic, the affected person may be given water (mixed with sugar and salt, if available) to drink
- The wearing of broad-brimmed hats helps in protecting the head, shoulders and chest areas of the body.
- Ensure your cocoa farms have the recommended shade by leaving a few trees on the farm.

Some of the things that can be done to protect farmers from the cold include: -

- Wearing warm clothing to insulate the skin.
- Wearing closed shoes.
- Applying cream to the skin.
- The affected person covering mouth when coughing.
- Hot baths may reduce the symptoms.
- Washing hands with soap and clean water regularly.
- Creating rain gutters to prevent waterlogging on the farms.

Trainer's Notes

Start the session by having a discussion around the case study under Activity 5. Complement that discussion with some of the relevant elements of the Technical Information.

Activity 5.
Case study: Can't Stop Working!

15 mins.

The trainer should read the case study out loud or provide copies of the text if possible. Allow people to read or understand the content of the case study and go through the questions below with the group. These questions have been designed to test the understanding of participants of the various topics discussed in this session. In your feedback, use relevant elements from the technical information.

Kojo Mensa, a cocoa farmer, left home before daylight to his farm which was two kilometres away from the village. He had with him a gallon of water, a ball of kenkey and some fried fish. It had drizzled in the night and the weather was a bit chilly when he set off. He started weeding as soon as he got to the farm and continued until about mid-morning when he realised that the weather had rather become very hot. He took a break to have his breakfast, drank some of his water and took about fifteen minutes' break.

The weather was very hot but he had to finish the task for the day in order not to miss the rains, which seem to start early that year. He worked hard, sweated a lot and by mid-afternoon, his water was all gone. He continued till evening when he started feeling tired and dizzy. On his way back home, he felt a muscle cramp in the right and he was lucky his friend *Akwasi* chanced on him and helped him home.

Questions
Why was Kojo Mensah sweating so much and drinking so much water?
What do you think are the causes of his cramps?
What are some of the signs of dehydration?

Key Messages:

- Sun hat is recommended for children and adults on hot sunny days. Body protection in the form of trousers, long sleeves and long dresses is also recommended.
- Adequate intake of water during hot periods is vital to avoid dehydration. In extreme cases of dehydration, rush affected farmer to the nearest clinic for attention, Water mixed with salt and sugar may be given.
- To protect farmers especially children from the cold, farmers should: wear warm clothing; wear closed shoes; apply cream to the skin; cover mouth when the affected person coughs; wash hands with soap and clean water regularly.

Session E.
Noise

30mins.

Technical Information

Noise[21] is described as unwanted sound. Sound is needed in communicating between people. However, when the sound becomes too loud, it becomes unwanted and it is then described as 'noise'. Noise is therefore unwanted sound. Sources of noise on cocoa farms include that from chain saws used in the felling of trees on the farm.

21. Grangjean, E, Fitting the task to the man, Taylor Francis, 1998

Noise can affect the farmer in many ways. It can prevent the farmer from hearing a warning message. For example, a farmer may not hear a warning to beware of a falling tree because of the noise from the chainsaw. The major risk to noise exposure is occupational noise-induced hearing loss. A farmer exposed to large noise may not hear when he is spoken to. Noise may be too loud if you cannot hear a person at an arm-length from you in a noisy environment. In studies on noise exposure among young and adult workers, it has been found that young workers are more susceptible to noise-induced hearing loss than adults. Noise exposure limits set for adults would not be adequate for children[22]. Noise may cause:

- *Tinnitus (cricket-like sound in the ear)* – the continuous ringing in the ear due to frequent exposure to noise. This can go on all the time and can become disturbing during sleep.

- *Threshold shif*t – when the ear cannot respond to low level of sound. This may occur when the farmer enters or comes out of a noisy environment. When the noise stops or the farmer comes away from the noisy area, he/she may gain his/her normal level of hearing after some time.

- Temporary hearing loss – noticeable when starting noisy activity. Recovery is possible in a few hour or in a couple of days depending on the extent of exposure.

- Permanent hearing loss (also known as occupational noise-induced hearing loss). When the ear cannot hear sound due to the damage to the inner ear. The damage is described as permanent because it cannot be reversed.

Hearing loss is gradual with no visible signs and is not accompanied by pain. This makes its detection difficult for affected person. The problem is realised only when conversation with family members and friends becomes a problem. The affected may not even hear the singing of neither birds nor noise made by dangerous animals while on the farm.

Some other effects of noise include:
- Increased blood pressure,
- Accelerated heart rate,
- Increased muscular tension,
- Longer time required by digestive system to digest food,
- Reduced quality of life,
- Reduction in level of socialization,
- Stress-related circulatory problems,
- Nervousness and
- Sleeplessness.

Recommendations with respect to children and noise-related hazards.

Cocoa farming stage	Hazardous Child Labour Standards in Cocoa Farming (prohibited to children under 18 years)	Health and other implication of exposure
Establishment and Maintenance	Working with motorized mist blower, knapsack sprayer and chainsaw	Noise-induced hearing problems

22. Training Resource pack on the elimination of hazardous child labour in agriculture (Book 3), ILO/IPEC, 2005

1. General Recommendations for Child Participation in Cocoa Production	All children must work in appropriate work under direct observation and supervision of an adult.
2.	All children must be fully trained on any farm work even the basic tasks and tools before assigned duties
3.	Children should avoid working in noisy environments.

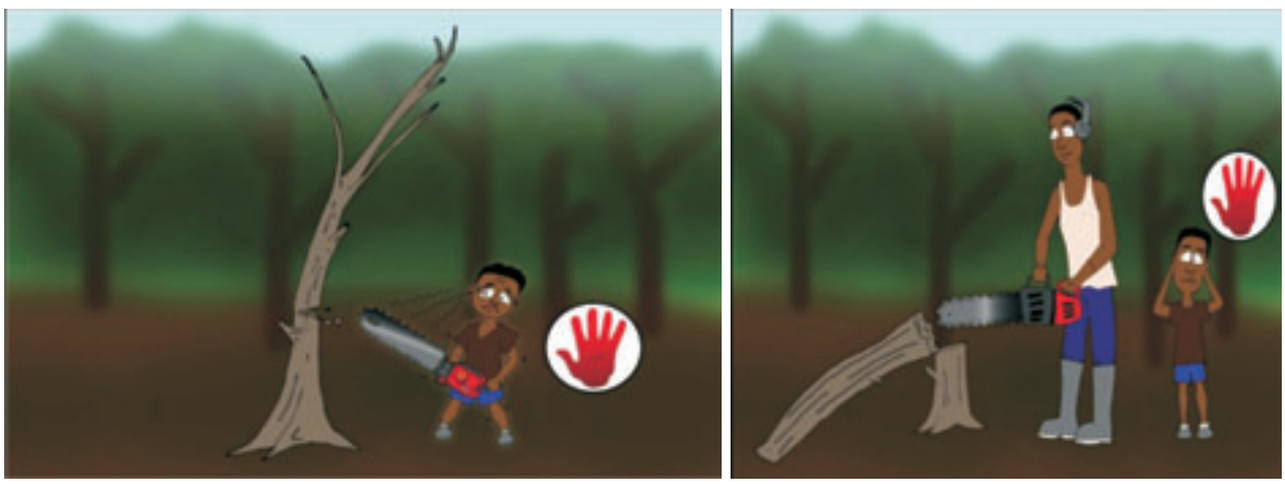


Figure 62: Children are prohibited from working with motorized mist blower, knapsack sprayer and chainsaw due to noise-induced hearing problems and other equipment-related hazards

What about adults? What can be done?

- Avoid working in noisy environment. For example, stay away from the farm if there is the need for a chain saw operation.
- Wear ear protection when working in a noisy environment or with noisy equipment

Trainer's Notes

Start the session by having a discussion around the case study under Activity 6. Complement that discussion with some of the relevant elements of the technical information.

Activity 6.
Case study: The Shouting Family

20 mins.

The trainer should read the case study out loud or provide copies of the text if possible. Allow people to read or understand the content of the case study and go through the questions below with the group. These questions have been designed to test the understanding of participants of the various topics discussed in this session. In your feedback, use relevant elements from the technical information.

Ata Kakra is a man in his early forties. He is a cocoa farmer and has a chainsaw which he uses to remove trees from his farm. For a small fee, he may also cut down trees from farms of other cocoa farmers in his village and the neighbouring villages. When he first bought the chainsaw, he was advised by the vendor to purchase also an ear-protector which he could use to protect his ear when operating the chainsaw. At first, he never operated the chainsaw without first

wearing the ear-protector. However, with time he used the ear-protector as and when he pleased. As the years rolled by, his wife and children realised that conversation with him was becoming difficult. He kept on asking that information should be repeated or that they should speak louder. Some of the time, he complained that they were shouting too much. They had no problem conversing with him when he had not used the chainsaw for some time. The situation got worse when suddenly his family realised that their husband and father was deaf. He kept to himself and seldom went out.

It was also detected upon medical examination that he had high blood pressure and that he seemed to have lost appetite and could not eat much. And the worst of all, he could not sleep at night.

The trainer should use the information in the 'What can be done' session of the Technical Information on noise to assist participants discuss the following questions:-

1. What are some of the hazards associated with chainsaw?
2. Why do you think *Ata Kakra* was advised to buy the ear-protector?
3. Do you think *Ata Kakra* took good care of his ear? Explain your response.
4. Why did conversation with *Ata* become difficult?
5. Why do you think it was easy conversing with him some of the time?
6. Apart from the hearing impairment, what other injuries do you think *Ata Kakra* could suffer from the use of the chainsaw?
7. Do you think his medical problem is due to his use of the chainsaw?
8. What can be done to prevent injury/harm from the use of chainsaw?

Key Messages:

- Noise can affect the farmer in many ways. It can prevent the farmer from hearing a warning message!

- Children should not be working in noisy environment including workwith motorized mist blowers, knapsack sprayers and chainsaw due to noise-induced injuries (as well as other type of injuries).

- Good protective measures for adults are avoiding work in noisy environments and wearing ear protection when working in a noisy environment or with noisy equipment.

SOURCES

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International Institute of Tropical Agriculture (IITA), (2009). Manual on “Preventing and Reducing Injuries and Ill Health in Cocoa Production - Learning about Sustainable Cocoa Production, Accra, Ghana.

UNIT 3:
BIOLOGICAL HAZARDS

1hr. 45mins.

Objectives

This Unit deals with biological hazards on cocoa farms. Biological hazards are living things with the potential to cause injury or ill-health to persons who come into contact with them.

At the end of the Unit, participants should be able to describe:

- What biological hazards are,
- How to avoid contact with them that might result in harm.

Specifically, participants should be able to describe how to reduce the harmful effects of living things commonly encountered in cocoa agriculture.

Sessions:

A. Most Common Forms of Biological Hazards and Effects
B. Good Practices and Control Measures

Materials:

- A Flip chart,
- Easel,
- Paper and Markers or Chalk
- Chalkboard
- Paper/cloth Projector

Session A.
Most Common Forms of Biological Hazards and Effects

45mins.

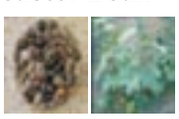
Technical Information

Biological hazards are living things which have the ability to cause injury or ill-health to man under certain conditions. They include animals like rodents (rats, mice), insects and reptiles. On the farm, common biological hazards are reptiles like snakes, arthropods like scorpions and insects such as bees and wasps. Parasites such as intestinal worms and microorganisms (germs not seen with the naked eyes) like bacteria and viruses are also found on farms.

Figure 63

Harm from biological hazards may result in injury or ill-health as outlined in the table below such as -

Biological hazard	Injury or ill-health
Animals	
Snake	Common snakes encountered in the cocoa-growing areas include poisonous ones such as spitting cobra, python and puff adder and the non-poisonous ones such as: green snakes. Snake bites may be sustained often when snakes are disturbed. The bite usually occurs on the unprotected foot or leg and occasionally on the finger or hand. This causes some pain and swelling at the site of the bite. The snake may inject some venom (poison) at the site of the bite. This spreads very quickly through the body if the snake is poisonous. Poisonous venom may cause complications such as the following: • Bleeding, this may be profuse. Failure to obtain help speedily could therefore result in death; • Severe pain and swelling in and around the area of the bite could occur; • Sometimes, the tissues may break up creating a large wound which may take a long time to heal. Snakes such as the cobra may spit into the eyes of their victim. Venom coming into contact with the eyes may cause varying degrees of blindness. A delay in seeking assistance for the victim may have serious consequences, including death, hence the need for an early recognition of the problem and seeking of prompt help.

Scorpions	Scorpions belong to the group of animals called arthropods. The characteristic features of scorpions include a curved tail at the end of which is located a stinger. It constitutes an important farm hazard due to the fact that it can inflict very painful stings on farm workers. The stings tend to occur on the fingers/hands, legs and feet. A scorpion sting can be very painful for days. It may introduce venom into the body leading to a serious reaction that can result in collapse of the victim.
Insects	The insect hazard is constituted by different insects that may bite on the farm including mosquitoes, bees and wasps. Bees are of particular concern as they may inflict very painful stings on farm workers. The introduction of bee venom at the site of the sting may lead to allergic reactions of reddening and swelling of the bitten site. In persons who are allergic to bee stings, a life threatening and severe reaction (anaphylactic shock) may occur – this comprises sudden appearance of (allergic) rashes, nausea and vomiting, difficulty in breathing and low blood pressure. It leads to collapse and could lead to death rapidly if medical attention is not obtained promptly. (For how to handle bee stings see Module 3 Unit 3 Section C on Farm emergencies). Malaria causing mosquitoes breed in stagnant (usually clean) water found in abundance in tree trunks and leaves. They also breed in empty containers scattered around the farm or placed on rubbish dumps. Farmers may therefore sustain mosquito bites very frequently on the farm. This increases the frequency of malaria attacks during the rainy season when the mosquito breeding is at its peak.
MICRO ORGANISMS	
Disease causing organisms (Pathogens)	Disease-causing organisms also known as pathogens are those organisms that cause diseases. They include parasites that can be seen with the naked eyes like intestinal worms, fungi and microorganisms (bacteria, viruses). Pathogens enter the body mainly through the mouth in food and water, and through the nose from the air we breathe. Some enter through cuts and wounds. Many of these organisms are swept into water bodies from the run-off of rainfall as it carries excreta and other contaminated waste.
Diarrhoea causing Microorganisms- Parasites and intestinal worms	Typically on most cocoa farms, there are inadequate latrines or other toilet facilities and farmers tend to use the bush as a place of convenience. This leads to contamination of drinking water sources which may subsequently result in diarrhoeal diseases, other infections and intestinal worm infestations. Inadequate hand washing is a very important means of infection with diarrhoea causing microorganisms.
Microorganisms - Bacteria and Viruses causing chest infections	Bacteria and viruses in the atmosphere can also lead to infections of the respiratory tract/chest like pneumonia and tuberculosis. Farmers are more likely to suffer from the effects of disease-causing organisms through inhalation while working in damp conditions, in the rain and with inadequate clothing cover. The risk of contracting chest infections is increased among people working in dusty conditions, following smoke inhalation from bush fires and smoking.
Harmful Plants: Strychnos castor Bean 	The poison contained in the Strychnos plant found in forest areas is called Strychnine. It has been used in rat poisons. Exposure to it may occur through skin contact or through eating, or may pose risks through the way it is handled. Contact may result in muscle spasm progressing to convulsions. Death occurs within 2 to 3 hours after exposure (Wikipedia; http://library.thinkquest.org) • Another harmful plant is *Nsasono* which causes itching and may result in skin ulceration. • Wild thorns e.g. *Hweremo* may cause deep puncture wounds which when infected can result in tetanus The castor bean is contained in the castor plant. Exposure may occur through skin contact during handling or through eating. Toxic substance contained in it is Ricin which is a purgative. It may come in contact with the body through chewing and swallowing of the intact seeds or ingestion of the broken seeds.

Toxic or irritant/harm generating plants:	This weed was introduced into Ghana in the 1970s and has been described as a destructive alien species and a menace to the country due to its rapid growth and spread and the fact of it serving as fuel for bushfires. Exposure may occur through skin contact or through eating, or may pose risks through the way they are handled.

For these and other reasons the Cocoa HAF prohibits the following activities for those below 18 years old.

Cocoa farming stage	Hazardous Child Labour Standards in Cocoa Farming (prohibited to children under 18 years)	Health and other implication of exposure
Establishment and maintenance	Clearing of forest and/or felling of trees and bush burning	Snake bites, cutlass injuries, crushing by falling trees, too laborious
General issues	Working without adequate basic foot and body protective clothing (e.g. long sleeves, trousers Wellington boots and "Afro Moses plus heavy socks")	Injury from thorns, tree stump, snake and other reptile bites, insect bites, contact/ingestion irritation from toxic plants
	Going to or returning from the farm alone or working on farm between 6.00 p.m. and 6.00 a.m.	Poor visibility leading to slips and falls, snake bites and injuries

Trainer's Notes

Discussion on snakes is best carried out at the beginning of the session. This can be followed by the background information. In conclusion, the Cocoa HAF can be used as an example of what is permissible for children under 18 years. The section on technical information can be taught to participants by first putting it as a question; and then filling gaps left as group members attempt to respond.

Activity 1.
Discussion: Snakes

 **20 mins.**

The trainer asks participants whether while working on the farm or on the way to or from the farm, they have ever seen a snake. Ask them;

a. The different types of snakes found in their surroundings.
b. How those snakes made them feel and how the snakes caused them to react or behave and the result.

Possible answers may include:

- Feelings of fear/fright or anxiety;
- Running to safety;
- Falling and sustaining an injury while running to safety;
- Protecting oneself with protective clothing like boots or arming oneself with sticks (to hit a snake) while walking or working on the farm following the incident.

Explanation for these reactions:
Ask why those reactions or consequences resulted and help provide some explanations - Responses could include:

- Fright and flight (attempt to escape) are natural reactions to the sight of snakes and other reptiles that can bite.
- This reaction occurs because many snakes have the ability to injure people through biting them on the farm particularly when they are disturbed.
- Snake bites could result in serious complications and even death.
- It is possible to reduce chances of snake and other animal bites by putting some safety measures in place.

Key Messages:

- Snakes and other reptiles are hazards in cocoa agriculture which can harm the farmer.
- Bites from poisonous snakes can lead to death.
- You can avoid snake bite if you take adequate precautions.

Session B.
Good Practices and Control Measures

45 mins.

Technical Information

The preferred means of action is to as far as practicable prevent contact with biological hazards as they have the potential to cause disease or injury that may be fatal. Wearing clothing that covers the body properly, especially the hands and feet (e.g. trousers and long sleeved shirts/overalls, boots, gloves) will help to reduce chances of animal bites and insect stings. Should any incidents of injury or ill-health involving exposure to biological hazards occur, provide first aid to the injured and seek medical help as soon as possible. See Unit 3 of Module 3 on “First Aid for Common Farm Emergencies”.

Recommendations

All children who accompany their parents to the farm to work must wear adequate clothing. This includes
- a) rubber boots with non-skid soles to prevent snake bites, slips and falls, e.g children's wellington boots, ‘Afro Moses’, canvas or other boots that covers the calf. Going to farm barefoot is hazardous and in bathroom slippers is not acceptable.;
- b) trouser or long dress that covers the knee, shirts with long sleeves;
- c) and sun hat is recommended on hot and sunny days;
- d) gloves when handling branches.

Figure 64

The following are control measures in relation to the specific hazards:

- **Mosquitoes:** This may be reduced by removing as many breeding sites as possible e.g. by burying empty containers, getting rid of ditches or small dams around the farm. Wearing of trousers and long-sleeved shirts to and on the farm reduces the chances of mosquito bites.

- **Prevention of scorpion stings** is by use of adequate protection;

- For the feet and legs, by wearing of boots in farm work;

- The wearing of gloves for hand protection when engaging in activities that involve touching plants or weeds.

- Shaking out of clothing and shoes placed on farm in order to dislodge any scorpions, snakes or insects that may be hiding in them.

- If scorpion is seen or felt on skin it is better to brush it off quickly rather than slapping it because it is likely to sting if the slap does not kill it[23].

  (For how to handle bee stings, see Module 3 Unit 3 on Farm Emergencies);

To reduce the risk of spread of infections through food and water, there is the need for:

- Prevention of pollution of water bodies through ensuring that basic sanitation facilities like latrines and refuse disposal are available and within easy reach of farms. This will reduce to a large extent the sanitation-related diseases like diarrhoea, cholera and other food and water-borne diseases. Where constructed latrines are not available, burial of excreta in a hole at least one foot deep should be done.

- Hand washing with soap and water prior to eating – will wash off germs from the hands and fingers and prevent them from contaminating food and drinking water.

- Treatment of water meant for drinking if it is from a surface water body like river, stream or dam. This can be done by boiling for 5 minutes alone or in combination with filtering through muslin or a piece of clean cloth/handkerchief.

- Discourage practice of children playing in water bodies and the community from washing in streams and rivers meant for drinking purposes.

Trainer's Notes

We propose that you choose between the two following case studies which should be used with your particular group of trainees. There are time limitations and you may want to choose the one that is more interesting to your target group. This activity should be covered before the technical information

23. (Ref: http//www.emedicinehealth.com)

Activity 2.
Case study: Snake and Other Bites/Stings

 **15 mins.**

Describe the following scenario and ask for some volunteers among the participants to dramatize the setting.

Two (2) brothers in Kojokrom: Egya aged 20 years and Nimo aged 18 years were walking to the farm at about 6.00 o'clock in the morning. For footwear, Egya had on a pair of 'Afro Moses' sandals while Nimo had on a pair of Wellington boots he had bought from the sales of cocoa beans from the previous year's harvest. A few metres away from their farm, Egya felt his right foot sinking into a soft object, followed quickly by a biting pain in the heel of that foot. He screamed and as both brothers turned to look in the direction of a movement to the right of where they were standing, they saw a snake, greenish-brown in colour escape into the neighbouring bushes. They looked at the site of the pain and observed that there was some blood oozing from it. They then realized that Egya had been bitten by the snake. The brothers got really scared, and never having been in such a situation, they started screaming for help until some 'good Samaritans' on a nearby farm heard their cries and came to help convey Egya to the health centre a few kilometres away.

Discuss with participants:

- What led to Egya being bitten by the snake?
- How could it have been prevented?

Responses can include:

- Egya's sandals were open – so his feet were exposed/he did not have the correct footwear needed to protect a farmer from snake bite and other animals on the farm.
- Sandals left Egya's feet open to animal bites and injury from plants and other dangerous items on the ground.

The snake bite could have been prevented:

- If Egya had on the right type of footwear eg , Wellington boots, canvas, trainers
- If he had hit the bushes ahead and near the path as he walked along the path. This would have caused many animals hiding to move or escape making it easier for Egya to see the danger ahead.

To illustrate bites by other farm creatures, the trainer can describe an encounter between the two brothers where they are bitten by a scorpion and stung by bees respectively while on the farm and their reaction. Participants are then asked to role play the setting. Lessons drawn from these case studies can be similar to that drawn from the snake bite episode.

Activity 3.
Case Study: Disease Causing Organisms (Germs/Pathogens)

 20mins.

Cocoa Farmers in Adjoakojo and surrounding communities have no latrines or other places of convenience near their cocoa farm. They therefore resort to the use of the bush (free range) in response to 'nature's call'. Waste material from food eaten on the farm, empty pesticide, fertilizer and other containers are dumped in bushes near the farms.

There is a stream downhill from where most of the farms are sited. This serves as the main source of drinking water for the village. Women and children use it for washing, often washing directly in it. The community dumps their waste close to it. Children are often found playing in the stream. It has been observed that during the rainy season, a lot of food remnants, polythene bags and empty containers are found floating in the stream.

The members of the community have for several years been suffering from diarrhoea with more people being affected in the rainy season. In addition, children in the community particularly those who play and/or swim in the stream constantly pass blood in their stool and urine.

Discussion: Ask participants to discuss the following questions in groups of 5 for 10 minutes and report back to the group in 5 minutes:

- What do you think caused the people in the Adjoakojo village to suffer from diarrhoea?
- Why were children in the village passing blood in their urine and stool?
- How could these conditions be reduced/prevented?

Responses

- Human and other waste dumped in bushes and washed into stream lead to contamination of the water with germs which make people pass watery stools (diarrhoea) when they drink it.
- Passing of blood in urine and stool is a sign of a disease called Schistosomiasis. People with the sickness pass the germ in their urine/faeces into the stream when they defecate / pass urine near or into the water (e.g. while playing).
- Diarrhoea and Schistosomiasis can be prevented by avoiding the throwing of rubbish and human waste all over. Instead toilets/latrines should be built near the farm and rubbish buried. Women should avoid washing directly into and children taught not to play in streams used for drinking.

Key Messages:

- A lot of organisms that cause diseases to man thrive in water.
- It is important to avoid playing and passing urine/ excreta into rivers and streams.
- Treat (boil and filter) your drinking water to avoid cholera and other diarrhoeal diseases.

UNIT 4:
ERGONOMIC HAZARDS

 **2 hrs.**

Objectives

This Unit deals with ergonomic hazards on cocoa farms. Ergonomic hazards are those conditions on the farm that have the ability to harm the muscles and bones of the worker. Conditions requiring the adoption of poor posture, use of heavy and poorly-designed tools, and the repeated use of same body muscles (as in working with a blunt machete/axe) in doing work are examples of ergonomic hazards.

At the end of the Unit, farmers participating in the training should be able to describe to others what ergonomic hazards are and how to avoid or address these hazards. Specifically, participants should be able to deal with such hazards as:

- Poor posture during cocoa farm work,
- Repetitive strain injuries and
- Hazards relating to handling of loads (manual handling).

Sessions:

A. Poor Posture
B. Repetitive Strain Injuries
C. Manual Handling

Materials:

- A Flip chart, easel and paper
- Markers
- Two machetes – one sharp and the other blunt
- Two loads – one small and light, the other large and heavy
- A low kitchen stool
- A blunt axe and a sharp axe
- A moderately large and not too heavy load. (e.g. A 30 kg Load)

Session A.
Poor Posture

30 mins.

Technical Information

Posture is how the body is held while standing up, sitting or lying down or when performing a task. Posture is thus the manner in which the body is held while performing work. Poor posture is the posture adopted by a person which puts undue pressure on spine and body muscles. Carrying heavy bags, sitting with the body hunched over the stomach, lifting of loads off the ground with the back bent or lifting loads above shoulder put pressure on the body. Weeding over long periods can hurt the back as well as muscles of the hand and the palm. Plucking cocoa pods high up the cocoa trees with the head tilted back can cause pain in the neck and shoulders. Lifting loads with the back can result in lower back pain as well as pains in the shoulders. Such injuries may prevent the young or adult farmer from farming until the pain subsides. Poor posture can make the farmer tire[24] easily due to poor circulation of blood. This is further explained by the difference between static and dynamic muscular effort.

Figure 65: STCP

24. Work Safe Australia Training Manual on Manual Handling

Flexion of the neck can result in pains in the neck.

Static Muscular Effort
In the above demonstration (See *Figure 65)*, the shoulders of the hand were working statically to hold the arm in position. Static muscular effort results in extended period of muscle contraction. The muscle contraction squeezes the blood vessels thus reducing the flow of blood to the arm. The affected muscle does not receive nutrients or oxygen and has to rely on its energy reserves. The pain felt in the arm is due to the buildup of waste products in the muscle.

Dynamic Muscular Effort
In this case, there is a continuous change between muscle contraction and relation at regular intervals. In this case, the muscle acts like a pump by allowing blood to be squeezed out when the muscle contracts and allowing fresh blood to flow back when the muscle relaxes. Nutrients are allowed to get to the muscle and waste products are carried away.

There is neither a pure static muscular activity nor a pure dynamic effort as muscles work in groups. For example, in plucking cocoa using a harvesting hook, the hands perform dynamic work while the shoulder and upper back perform static work to maintain the work posture.

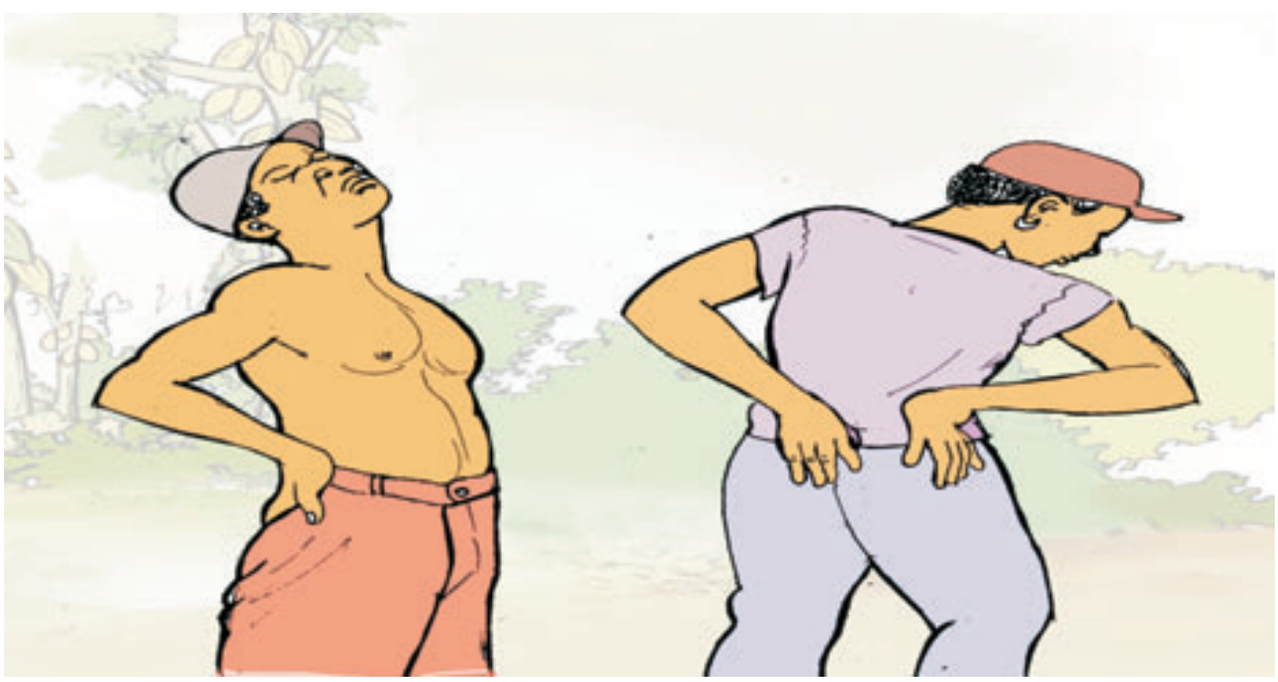


Figure 66: STCP

When it comes to children, physical strain, especially combined with repetitive movements on growing bones and joints can cause stunting, spinal injury and other lifelong deformation and disabilities. Remember that children's bodies are still in development.

Cocoa farming stage	Hazardous Child Labour Standards in Cocoa Farming (prohibited to children under 18 years)	Health and other implication of exposure
Harvesting and Post Harvesting	Harvesting overhead cocoa pods with harvesting hook	Injury from falling blades, falling pods or tree top reptiles, neck and shoulder problems, destroying the budding nodes and reducing yields

Recommendations
For children under 15, incorporate at least 10 minutes' break hourly with at least 30 minutes' break in three hours
All children must be fully trained on any farm work even the basic tasks and tools before assigned duties.
All children must work in appropriate work under direct observation and supervision of an adult.
Sick children or adult farmers should not be made to work under any circumstance.

What can be done?

- Listen to the body when working so as to change posture before body pain becomes too much.
- Change tasks frequently. Change to other tasks that do not require the use of the same muscles or same posture. For example, change from plucking pods up trees using harvesting hook to harvesting on the lower part of the trunk using a machete.
- Use tools that are suitable for the farmer. For example, a heavy machete may not be suitable for a female farmer. A heavy and unwieldy tool may cause the farmer to adopt a poor posture in order to be able to use it.
- Pace yourself and do not rush to finish a day's task.
- The frequency at which one changes task will depend on what the affected body part is able to endure. Change as soon as affected body signals that it is tired.

Trainer's Notes

Start the session by having the discussion/demonstration indicated in Activity 1. Complement that discussion with some of the relevant elements of the Technical Information. Move and finalize the session by going through the case study below (Activity 2).

Activity 1.
Demonstration: Try it Yourself

 **10 mins.**

The trainer asks participants to raise an arm about shoulder high with the palm facing the ground. The position is held for about three minutes. Ask participants to slowly lower the arm. Discuss with participants what they felt.
Expected answers include:

- Heaviness
- Tiredness
- Tingling

Ask why the stated sensations occurred

These are warning signs that there is inadequate blood flowing to the hand muscles and these are at risk of being damaged.

Activity 2.
Case study: The Two Acres of Land

 **20 mins.**

The trainer should read the case study out loud or provide copies of the text if possible. Allow people to read or understand the content of the case study and go through the questions below with the group. These questions have been designed to test the understanding of participants of the various topics discussed in this session. In your feedback, use relevant elements from the technical information.

Kojo Manu is a young cocoa farmer. He had just been given a ten-acre land by his father to start his own cocoa farm after his marriage to Akosua Mansa. They are both seventeen years of age and had completed the Junior High School education. On their first day on the farm, Manu set his target to clear at least two acres of the land before going home. He worked very hard but was only able to clear about an acre of the land. He got home very tired and could hardly eat his sumptuous supper cooked by Akosua Mansa. His wrist was hurting and his waist was giving him pains. By morning he had pains all over his body and could hardly get out of bed. He had to stay away from the farm for three days. Akosua Mansa who cooked food for them to eat on the farm and gathered firewood for the house did not suffer any of the pains experienced by her husband.

It was insinuated that Opanyin Adai, who was in litigation with Kojo Manu's father over the land in question, was the cause as Opanyin Adai was suspected to have planted 'juju' on the land which caused Kojo Manu's sickness.

Questions

1. What do you think caused the bodily pains of Kojo Manu?
2. What other injuries could Kojo Manu have suffered as a result of his tiredness?
3. Why do you think Akosua Mansa did not suffer any of her husband's body pains?
4. How can such bodily pains be prevented?

Key Messages:

- Poor posture injuries may prevent the young farmer from farming until the pain subsides and this may cost the farmer money.
- Children are prohibited from harvesting overhead cocoa pods with harvesting hook due to poor posture reasons.
- Good control measures are: 'Listen' to your body; change tasks frequently; use suitable tools; take frequent breaks; pace yourself and do not rush to finish a day's task.

Session B.
Repetitive Strain Injuries

 **30 mins.**

Technical Information

Repetitive Strain Injuries (RSI) are injuries to a muscle or a group of muscles and related nerves because of overuse of the muscle or group of muscles when working. The repeated use of the blunt machete in the cutting of the wood can cause pains in the hand muscles (and in the palm). The use of unsharpened knives, axes and machetes in breaking cocoa pod, felling tree or in weeding can cause repetitive strain injuries in various body parts. Carrying of heavy loads over long distance can create pain in the affected hand and in the back.

Signs and symptoms of repetitive strain injury include: -

- Tingling sensation in the affected body part (*Ananse*),
- Numbness and dullness,
- Pain and
- Stiffness.

See above for the Cocoa HAF recommendation in respect of posture.
What can be done

- Adults should use well-sharpened tools (e.g. machetes, knives, axes, harvesting hooks).

- Change tasks to avoid using the same muscle or group of muscles over a long period. For example, one may switch from breaking pods (repetitive task) to the collection of pods (non-repetitive) and vice versa.

- Take frequent breaks especially when weeding or chopping wood using an axe or cutting wood using a machete.

Figure 67: STCP, Change the task you are doing from time to time

Trainer's Notes

Start the session by having the discussion indicated in Activity 3. Complement that discussion with some of the relevant elements of the Technical Information. Move and finalize the session with the group work below (Activity 3).

Activity 3:
Group work: Repetitive Strain Injuries

20 mins.

The purpose of this exercise is to help participants understand repetitive strain injuries.
In groups of three or four, ask groups to:

- Give example of at least five tasks on the farm that involve repetitive activities.

- What body muscle(s) are involved in the identified activities? (Point to the area of muscle)

- What injuries are associated with these activities?

In your feedback to the group work presented, use relevant elements from the Technical Information.

The Table below may be used

TASK	BODY MUSCLES INVOLVED	ASSOCIATED INJURIES
Eg. weeding	Hand/shoulder and waist	Pains

Key Messages:

- Repetitive strain injuries are injuries associated with repeated use of a muscle or group of muscles and can have very adverse effects on farmer's capacity to work.
- Children are more vulnerable and should not be involved in such tasks that may cause repetitive strain injuries.
- To avoid these type of injuries, use well-sharpened tools; change tasks to avoid using the same muscle or group of muscles over a long period; take frequent breaks.

Session C.
Manual Handling

60 mins.

Technical Information

Figure 68: STCP

Manual handling[25] is any farm activity performed by farmers that involve the use of force or energy to lift, move, push, carry, hold or restrain any object be it a person or an animal or an inanimate thing. Manual handling also includes the effort needed in plucking of cocoa pods from trees and the repetitive action required in the breaking of pods and so on.

A manual handling injury is an injury caused by lifting, carrying, pushing or pulling a load or doing a repetitive activity or working in an awkward position for a period of time. Manual handing injuries include:

- Sprains and strains to muscles,
- Bruises,
- Cuts and fractures,

25. Work Safe Australia Training Manual on Manual Handling

- Heart strain,
- Hernia and
- Burns.

A number of things can influence the manual handling activities including:

- The load – bulky without handle (bag of cocoa beans), difficult to handle, not predictable (can shift suddenly e.g. a goat on a rope, a baby being carried), hot, etc.

- The task – what was being done at the time e.g. carrying load over a long distance, task that require twisting the back, reaching above the head, stooping, excessive lifting and lowering, lifting over and obstruction, etc.

- The work environment – e.g. carrying load under wet conditions, on rocky farm road (likely to cause falls), when dark, etc.

- The individual – may be too young, recovering from sickness, pregnant or old, etc.

- Clothes worn – too loose and thus be in the way; too tight may prevent easy movement

- Closeness of the load to the trunk – risk of injury is increased if load is held away from the trunks.

Approximately 15 to 20 percent of an individual's height is acquired between the ages of 10 and 20 years. About half that growth occurs during a two-year period that includes the phase of most rapid growth, the peak height velocity. During this period of rapid growth, adolescents are particularly at high risk of injury to ligaments and to bone growth plates[26].

Children's susceptibility to heavy loads is reflected in the following Cocoa HAF restrictions/ recommendations

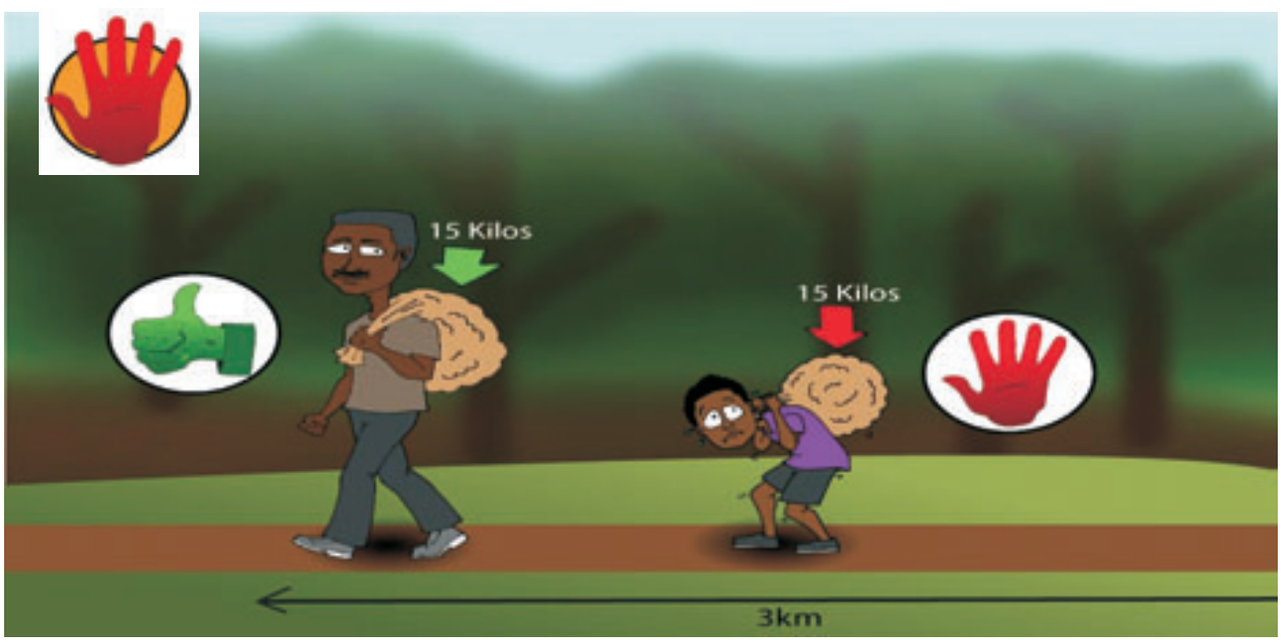


Figure 69. Children cannot carry heavy load beyond permissible weight, i.e., above 30% of body weight for more than 2 miles (3 km)

26. Training Resource pack on the elimination of hazardous child labour in agriculture (Book 3), ILO/IPEC, 2005

Cocoa Farming Stage	Hazardous Child Labour Standards in Cocoa Farming (prohibited to children under 18 years)	Health and other implication of exposure
Harvesting and Post Harvesting	Carrying loads should not exceed 30% body weight if farm is far (>2 miles or 3 km). If the farm is farther, reduce carrying weight or have rest stops	Interfere with skeletal growth, spinal deformity, chronic pain, hip and joint problems in the future.

Age group	Activity/ task	Recommendation
15-17	• Carting load • Seedling for planting • Water for spraying • Cocoa pods for heaping • Fermented beans for drying mat • Dry beans for sale	Carrying weight should not exceed 30% body weight for more than 2 miles (3 km)

Recommendations
Carrying loads should not exceed 30% body weight if farm is far (>2 miles or 3 km). If the farm is farther, reduce carrying weight or have rest stops
Lifting/handling/carrying loads over short distance (500m) should not exceed 50% of body weight.
In assigning permissible load to a child, adequate adjustment is required if the terrain is unfriendly. This is particularly the case in hilly and slippery terrains when it rains. It also applies when crossing a river with loads.

What can be done by farmers to avoid lifting and carrying injuries?

- Ensure a clear path to the load. Lifting loads behind obstacles can create problems for the person doing the lifting.
- Lift and carry loads that you can carry. If the load is too heavy for you, ask for assistance.
- If load is too heavy to lift, break into smaller quantities that can be lifted and carried alone.
- Lift load using legs rather than back.
- Avoid twisting of trunk in lifting of load.
- If it can be avoided do not carry load over long distance under wet conditions.
- Take rest breaks on the way if the distance is considerably long.
- Carry load close to the body.
- The safe region for carrying loads is the region of the body between the knee and the shoulder. Loads below the knee will require bending to lift while that above the shoulder will require raising hand above the shoulder. The hazardous areas are those areas below the knee and above the shoulder.

Figure 70: STCP

Proper Way of Lifting from Floor

Before you lift a load examine it for hazards such as sharp edges. Size up the load. If you cannot lift it alone, ask for assistance or if possible divide the load into sizes you can conveniently lift. In sizing the load, consider the distance to be travelled with the load, the road/path conditions (wet or dry/hilly) and other factors such as age and gender of the person going to carry the load. The health status of the person is also important. A farmer used to lifting and carrying a fifty-kilogramme basket of cocoa beans from the farm to the village may find it difficult doing same immediately after a bout of malaria.

Follow the guidelines below:

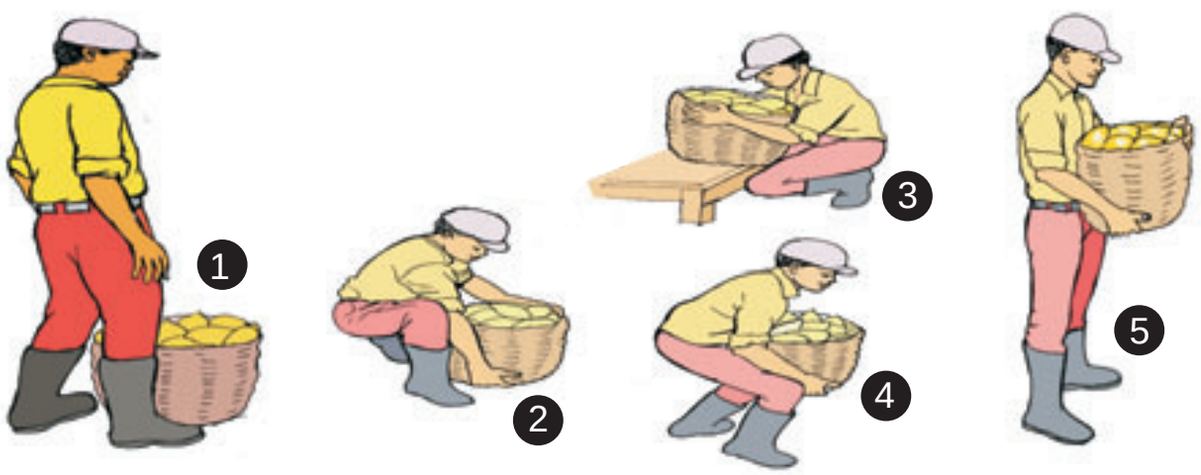


Figure 71: STCP

1. Stand close to the load with feet shoulder-width apart. Move one foot slightly back to ensure stability.
2. Squat by bending hips and knees. Tuck in chin with back as straight as possible.
3. Take a grip with one hand at the upper part of the load and the other at the lower part.
4. Look straight ahead with back straight, chest out and shoulder back.
5. Straighten up using legs to slowly lift the load rather than back. Ensure that the body is not twisted. Keep back straight and look straight ahead. Keep load as close as possible. Greater strain is placed on the spine when the load is farther away from the body.

6. If you must turn while carrying the load, use the legs and not the body. Use your feet to change the direction of the body while carrying the load.
7. In setting load down, stand with legs shoulder-length apart for stability, and shift one leg slightly back. Use your legs to set down the load by squatting.

Figure 72: STCP

Trainer should demonstrate and guide participants to practise the correct lifting technique above.

Lifting load off table/stand (load between waist level and shoulder level)
1. Stand as close as possible to load.
2. Pull load close to body.
3. Grasp with one hand up and the other down.
4. Lift and walk off. If you must bend to lift, bend to legs and not the back.
5. Again if you must turn, turn the whole body by turning the legs rather than the back.

Trainer's Notes

Start the session by having the discussion indicated in Activity 4. Complement that discussion with some of the relevant elements of the technical information. Move and finalize the session with the group work below (Activity 4).

Activity 4.
Group work: Manual Handling

20 mins.

Aim:
The purpose of this group work is to determine participants' knowledge on: -
- Lifting from the floor,
- Lifting a load between knee and shoulder level and
- How to set load down safely.

Ask groups to describe the hazards associated with manual handling.

- How can these hazards be avoided? What factors do you think can influence the lifting and carrying of load? Describe how load on the floor can be lifted without injury.

- Give these questions per group (see below) and reserve time for each group to brief the plenary with their conclusions. Use and see the Technical Information above to complement group work.

Group I
To describe how the load can influence the lifting and carrying of the load.

Group II
Describe how the individual's capability may affect the lifting and carrying of the load.

Group III
Discuss the effect of the environment in which the lifting is done on the lifting operation.

Group IV
Discuss how the task affects the lifting activity.

Key Messages:

- Adolescents are particularly at high risk of injury to ligaments and to bone growth plates.

- Children cannot carry heavy load beyond permissible weight, i.e., above 30% of body weight for more than 2 miles (3 km).

- There are a number of measures to avoid injuries that have to do with knowing how to lift and shift loads, etc.

Sources

CCH Australia, (2006) “Safe Work Australia, Training Manual on Manual Handling”, McPherson Printing Group, Australia

International Institute of Tropical Agriculture (IITA), (2009). “Preventing and Reducing Injuries and Ill-Health in Cocoa Production - Learning about Sustainable Cocoa Production, Manual No.4 A guide for participatory farmer training”, (Accra, Ghana) pp.23

International Labour Organization (ILO) (2005) “Training Resource Pack on the Elimination of Hazardous Child Labor in Agriculture, Book 3, Additional Resources for Trainers”. Geneva, ILO

MODULE 3

PROTECTING THE HEALTH AND WELL-BEING OF CHILDREN AND FARMERS

Contents:

UNIT 1:
HEALTH PROMOTION AND SOCIAL PROTECTION MEASURES

 2hrs.

Objectives

This Unit will deal with measures to promote or enhance overall health and well-being of cocoa farmers including children.

At the end of the Unit, participants should be able to list and describe measures that will enhance the health of farmers and children and promote their well-being and development. Specifically, the Unit will deal with measures for promoting physical health, psychological development and social well-being of cocoa farmers.

Sessions:

A. Key Issues and Risks
B. Key Preventive and Health Promotion/Social Protection Measures

Materials:

- Flip chart and easel or Chalk and chalk board
- First Aid kit
- Samples of food crops containing various nutrients

Session A.
Key Issues and Risks

60 mins.

Technical Information

Young adults and children in cocoa agriculture are not only at increased risk of ill-health and injury, but also run the risk of reduced general well-being which also affects their nutrition, psychological and social well-being.

Social protection of rural households includes old-age pensions, basic health services, maternity benefits, social assistance for vulnerable groups. The creation of a minimum of income security and access to affordable basic health services can reduce pressure on households to generate income from child labour and, at the same time, allow households to spend more on education. It will also allow them to invest in micro-insurance programmes that will cushion them against risks associated with natural disasters and adverse climatic conditions. Such schemes also lessen the burden and protect rural families in the event of loss and disability of breadwinners.

Safety nets, for example, can help vulnerable households to be protected against livelihood risks, maintain an adequate level of food consumption, improve food security and prevent damaging coping strategies such as child labour and assets depletion. In the context of agriculture, they might also reduce financial constraints for smallholders, boost demands for farm products and foster income-generating activities. These are just some of the reasons why it is particularly important to promote access to social protection for workers in agriculture specifically and in the informal sector generally.

Trainer's Notes

The following activity should be covered before the technical section. Use pictures to illustrate the animals described.

Activity 1.
Case Study: The Tale of Two Brothers

45 mins.

Recount the following story to the group. Follow it up with questions as listed below. Introduce the topics in 'background information' as you discuss the responses.

Two brothers, Egya Kweku and Egya Bonso both middle school leavers, work as cocoa farmers. Egya Bonso believes that the most important thing in life is to be rich. He therefore ensured that his son Bonsoba and all of his other five children worked on the farm from the time they attained the age of 6 years. Bonsoba therefore from a tender age had to follow his parents to the farm. Though enrolled in school at the age of 8 years, he missed about a third of the time he should have been in the classroom.

This was as a result of helping his parents to weed, apply pesticides or harvest cocoa pods. Each day he would return home to a meal of fufu or boiled cassava to which a tiny piece of fish was sometimes added. The juicy part of the fish was always reserved for the father. On one occasion, while weeding on the farm, his ankle got caught in a trap that had been set by his uncle Atta Joe to trap guinea pigs. This led to profuse bleeding and multiple deep cuts on his left ankle.

There was a delay in sending him to hospital due to unavailability of money to pay for his care. Unfortunately, this led to Bonsoba getting anaemia (from loss of blood), contracting tetanus, and a severe infection of the blood. When Bonsoba was at the verge of death, Egya Bonso borrowed money from a money lender and rushed him to the district hospital. Fortunately, Bonsoba survived but only after his father had borrowed over GHc 10,000 to pay for all the drugs and tests he received while on admission at the hospital. After about 12 weeks of pain and suffering from his ailments, Bonsoba was finally discharged from hospital with ugly scars on his leg and a limp.

Despite not being completely well, he was expected to help on the farm in order to help pay off the huge debt incurred by the treatment for his injury. Hence, for several months, Bonsoba had to walk the journey of 5 km daily with his parents and siblings to the farm on his crutches.

Egya Kweku, on the other hand believes that the best gifts he can pass on to his son, Kwame are good health and education. He therefore ensured that he started putting aside 10 percent of the profits from his harvests each year for Kwame's education and registration with the National Health Insurance. At the age of 6 years, Kwame got enrolled in the Local Authority primary school and attended classes without interruption up until he left for Senior Secondary school in Koforidua.

Egya Kweku also ensured that his wife always provided adequate portions of beans, meat and fish in the meal for his son Kwame and other siblings. In addition, he enrolled them on the National Health Insurance Scheme. He set aside some money from each cocoa harvest for renewing the family's subscription to the scheme. His children helped him on the cocoa farm when they were on vacation from school or at the weekends. They were therefore quite healthy throughout their years of growing up and each of the three sons was educated up to the highest level. Kwame ended up with a degree in Agriculture from Kwame Nkrumah University of Science and Technology (KNUST) and decided to use his skills to enhance the cocoa farming activities in his community specifically and the country generally. He won the best national cocoa farmer's award for five consecutive times and has become an influential person in the society.

Discussion

The aim of the above case study is to discuss with participants things that prevent the young cocoa farmer from enjoying total health and well-being. Trainer goes through the story and then asks participants what lessons can be learnt. By this process, trainer should help participants to identify specific things that can reduce the physical health and cause anxiety among young farmers. These should include at least the following:

i. Inadequate nutrition (not enough of or wrong type of food),

ii. Lack of access (money to fund) education,

iii. lack of access to healthcare (health advice, clinics, hospitals, money to pay for services) and

iv. inadequate support for the physically-challenged child/ young farmer).

Key Messages:

- The bodies of children are still developing and need more nutrition especially protein than adults.
- All boys and girls of school going age should all be in school.
- Education and health care are key in improving the quality of life of all.
- Setting aside money to pay for healthy diet, education and health care are investments which yield good returns.
- National Health Insurance is one social protection measure that is easily accessible in Ghana and all should endeavour to sign their family members on to it.

Session B.
Key Preventive and Health Promotion/Social Protection Measures

 60 mins.

Technical Information

The following are some means of promoting social protection of children and young farmers:

1. Nutrition

An important component of healthy living is a balanced diet. A balanced diet is one which contains adequate amounts of the essential nutrients required by the body which comprise three main groups of food:

- Energy-giving foods - these contain mainly carbohydrates and fats. They supply the body with energy. Examples of carbohydrates containing foods are yam, plantain, rice, cassava, maize and millet. Foods high in fats include cooking oils, margarine and cheese. Overeating of these accompanied by inadequate exercise results in excess weight gain.
- Body-building foods: These contain mainly proteins and are responsible for growth of the body as well as repair of damaged or worn-out tissues. Examples include fish, meat, eggs, beans, soya beans, groundnuts and *agushie*.
- Protective foods: These contain vitamins and minerals and protect the body from diseases including infections. Examples include fruits like orange, water melon, banana, mango, pawpaw and vegetables like *nkontomire*, tomatoes and garden eggs.

Good nutrition should be complemented with taking adequate amount of REST. If the body does not have enough of any of these nutrients for a period of time, it cannot function properly. No single food item contains all essential substances in the amounts required by the body hence the need to eat food from the above groups in adequate proportions. The recommended proportions for a meal are 1/2 protective foods, ¼ carbohydrates and ¼ body building. The only exception to this rule is breast milk which contains all the nutrients required by the baby from birth to six months.

Figure 73

Every individual needs to drink clean water to maintain good health. It is best to drink three to four litres of water a day i.e. about 3 to 4 beer bottles full or 8 to 10 glasses or 6 to 8 sachets a day. This may be increased in very hot weather and very dry conditions as occurs during the harmattan. Where there is no piped water supply, it is advisable to boil and filter the water.

Figure 74

The diet of the child of school-going age may be sub-optimal due to ignorance of the high nutritional value crops/food, food shortages as a result of various factors including drought from poor rains, lack of improved seed varieties and planting materials etc. The effect is malnutrition, anaemia and poor development of the child. A study conducted in Ghana to understand hazardous child labour in cocoa and agriculture showed that often, the girl child is more affected. The study recorded significantly lower levels of blood among girl farmers (Hb of 5.1 – 14.7g/dl , Average 11.2g/dl) compared to the boys (Hb 8.2-15g/dl, Average 11.7g/dl) involved in cocoa farming.

Measures to improve on nutrition include:

- improved agricultural practices,
- promoting planting of high yielding and
- drought-resistant seeds planting material.

Adding adequate amounts of body-building foods to the diet i.e. protein sources to one's meal can include beans, groundnuts and fish, Meat, eggs and other animal products should be consumed sparingly. A combination of these measures constitutes important means of minimizing anaemia in farming communities. Promotion of food preparation methods that conserve nutritional value of food such as avoiding the overcooking of vegetables.

2. Education

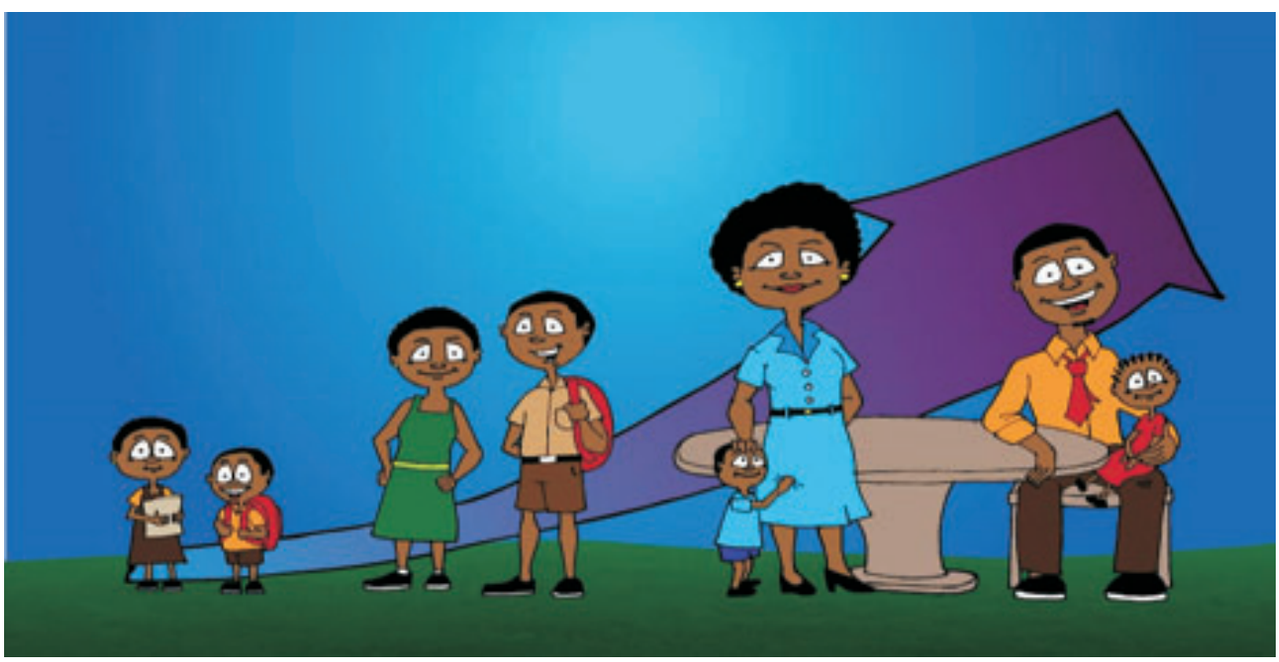


Figure 75

Education of the children and youth in cocoa farming areas apart from empowering them with general knowledge also enhances knowledge of the risks associated with cocoa farming. Education therefore is a social protection measure that needs to be enhanced. Measures that should be considered include Sustainable Financing schemes/educational funds (like *susu* and savings with local rural banks from sales of harvested crops) for farmers towards the education of their children.

The laws of Ghana state that basic education is compulsory for all children. This includes all boys and girls including physically-challenged children. Non-formal education (bridge schools) should be promoted for children withdrawn from child labour who may want to continue their education as young farmers.Vocational training for the youth for the acquisition of skills in various crafts or technologies to enable them gain employment in the job market should be promoted.

Cocoa farmers should also take advantage of other existing social interventions including COCOBOD's Scholarship Scheme for cocoa farmers' children to access higher education. District Officers of COCOBOD could be contacted for assistance in completing the relevant documentations to avoid disqualifications as a result of mistakes.

3. Essential Health Care

In view of risks from injuries and ill health in cocoa farming, there's a need for some special provisions:

- Wounds sustained during farm work may get infected with germs including those that cause tetanus. There is therefore a need for farmers to request for vaccinations against tetanus.

- Health screening activities – These are health examinations carried out regularly, usually once a year that can lead to detection of sicknesses at an early stage. Farmer Co-operative Groups can request and arrange for these examinations for their members from the local health authorities.

- Increasing access to health care through subscribing to the National Health Insurance Scheme (NHIS) – This ensures that the burden of paying for the treatment of ailments is removed from the individual at the time he /she is ill and may least be able to afford care. The NHIS takes care of over 70% of health problems likely to be reported at health facilities. It is advisable for the young farmer to set aside some money at the time of selling their harvested crops or (in the case of workers on wages) when they receive their wages. Similarly, parents are advised to save money from harvesting their crops to subscribe to the NHIS for themselves and their children.

4. Social Security

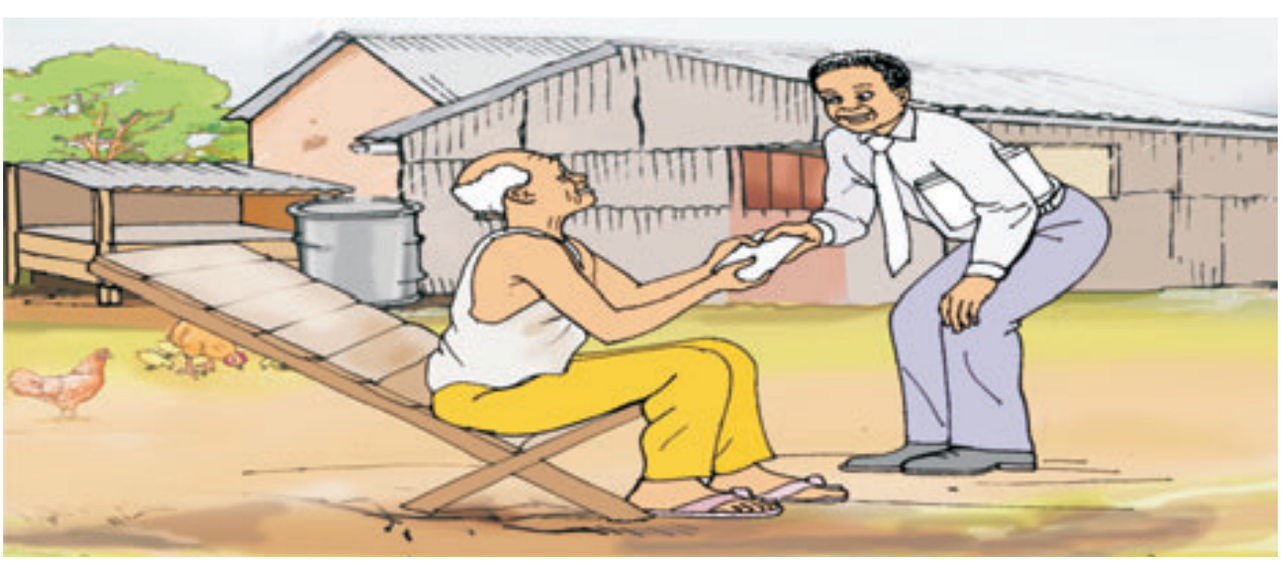


Figure 76: STCP

Social Security Schemes are a means of helping individuals and groups to set aside money on a regular basis, to be paid back to the individual as pension when one is no longer able to work to earn money or a salary. Depending on the agreement made with the Scheme managers, the contributor may also benefit from such monies in times of crisis such as ill-health or disability.

In Ghana, the Social Security and National Insurance Trust (SSNIT) is the governmental organization that runs the social security scheme. It has offices in most district capitals. Information on where to locate a SSNIT office in your district can be obtained from the district assembly. Farmer Co-operative Groups should make enquiries from the local SSNIT office on behalf of their members and negotiate agreements on modalities for payments into the scheme as well as benefits that their members can gain from the scheme. For example, where it is not possible for farmers to make contributions into the scheme on a monthly basis as is done by workers in the formal sector, arrangements can be made for payments to be made at the time of sales from harvests.

The Physically-Challenged

There is a need for farming communities to recognize the special needs of the physically-challenged persons and to put in place measures to protect them. This should include measures to minimize risks from the hazards associated with farming. This includes minimizing risks from snake and scorpion bites as well as injury from slips and falls and from falling objects. It implies that persons with low vision, the crippled and others who lack the ability to move quickly should not travel or walk alone to the farm or work alone on the farm.

Other measures to enhance their safety include looking for appropriate working tools and personal protective clothing for them to work with. Disability should therefore not be used as an excuse for not providing necessary protective measures on the farm or for paying below minimum wages. It should neither be used to deny such children the benefits of acquiring the basic skills needed for a productive adult life just like any other child.

The law also states that anyone who employs a person with disability shall provide relevant working tools and appropriate facilities required by the person with disability for the efficient performance of that individual. (Persons With Disability Act, 2006 Act 715)

Advice may be sought from the local health, agriculture/COCOBOD and social welfare authorities on these working tools and facilities. There is a need to ensure that the physically-challenged like other workers also benefit from social security provisions.

Extra attention should be paid to the needs of the disabled female farmer who may often be subjected to more discrimination in relation to feeding, education and health care, and may suffer sexual abuse.

The Ghanaian law promoting the well-being of the physically-challenged makes it compulsory for parents or guardians of such children of school going age to enrol them in school. Failure to comply is a punishable offence.

Trainer's Notes

This activity works best if done at the beginning of the session followed by presentation of background information to the group.

Activity 2.
Discussion

 **30 mins.**

Participants are put in 4 groups to further discuss the key preventive and health promotion/ social protection measures outlined in Activity.

1. The trainer will recap for participants the important provisions cocoa farmers should make for their children in order to ensure their health and well-being based on lessons from the case study. He/she should together with participants prepare a list of important provisions e.g.

i. Good nutrition,
ii. Education,
iii. Health care,
iv. Social security and
v. accommodation for the disabled or physically-challenged child / young adult).

Each group is to be assigned one subject to discuss (in 10 minutes) and then present findings to the entire group for further discussion and critique. In case there are not enough participants to discuss all the topics in one round, then organize a second round to cover the remaining topics.

Question Guide.

i. Good nutrition:

a. What are the types of food that make up a healthy diet for the growing child and adult farmer?

b. What types of foods are they eating at the moment and in what proportions?

c. How can this be improved?

Possible responses:

a. Energy giving (e.g. starchy foods & fats), protective foods (e.g. fruits and vegetables) and body-building foods (e.g. fish, meat, beans)

b. Mostly starchy foods are served with little body building foods like beans, fish and meat. The food is often prepared with a lot of oil in stews and small amounts of the protective foods e.g. *nkontomire* and fruits.

c. Improvement can be made by ensuring that adequate amounts of all food groups are served to the children including the girl child.

ii. Education:

a. What should cocoa farmers do to ensure that their children get a good education?

b. Compare it to what currently exists in most farming communities.

Responses:

- Ensure that children including the girl child are enrolled in school at 6 years of age. Set aside money for fees, uniforms and other needs for well- being of the child. This could be in an appropriate place e.g. bank, *susu* etc.
- Contribute to the development of education in their communities through participation in communal labour and other community activities to improve education.
- Apply to COCOBOD and District Assemblies' scholarship for their Senior High Education.
- Promote the establishment of Kindergartens as part of the new policy for basic education for children in cocoa areas. Children are to start school at 4 years.
- Communities without JHS at the approved distance should also advocate to the government and CSOs for facilities and teachers to avoid children graduating at an early age onto cocoa farms.

iii. Health care:

a. How can parents of children in cocoa farming ensure that their children have access to health care when they need it?

b. Ask participants to compare this to current practice in the community

Response:

a. Enroll children on National Health Insurance Scheme.(NHIS) and ensure yearly renewals

iv. Social security:

a. What is social security?

b. Why is it beneficial to have social security for young farmers?

Response:

a. Contributions made regularly into a fund that will be paid back to an individual as pension in his/her old age or used to support him/her in times of crisis e.g. sickness.

b. It will help protect the young farmer from suffering in his/her old age and in times of crisis as a result of poverty.

v. Disability:

i. a. What kind of support is available in your community for the physically-challenged child and young cocoa farmer to enable him/her enjoy good quality of life?

b. What can be done to improve the situation of the physically-challenged young farmer?

Response:

a. Participants may list specific measures applicable to their community if any.

b. Appropriate protective clothing, additional help on farm, work with appropriate tools, protection from harm through avoiding working alone, etc.

Key Messages:

- A balanced diet is essential for good health – balanced diet should consist of 50% protective foods, 25% energy-giving foods and 25% body-building foods.
- Education does not only lead to improved general knowledge but also to safety on the farm.
- Social protection measures now available and accessible to the farmer in the informal sector are social security and national health insurance; Sign on to these schemes.
- The laws of Ghana demand that the disabled should not be denied education. In planning for farm work, the needs of the disabled should not be forgotten especially the requirement to have extra help made available for them.

UNIT 2:
HIV AND AIDS


1hr. 45 mins.

Objectives

- To help farmers know more about HIV and AIDS and identify the various means through which these can be spread.
- To understand the consequences of HIV for children
- To recognize and fight discrimination at the workplace and in cocoa communities based on HIV/AIDS

Sessions:

A. Difference between AIDS and HIV
B. Modes of Transmission, Prevention and Protection Measures
C. Discrimination in Cocoa Farms and Communities

Materials:

- Flip charts
- Marker pens

Session A.
Difference between AIDS and HIV

 30 mins.

Technical Information

HIV/AIDS is a disease that does not discriminate. It is found in every age group and race, in children, boys and girls, adult men and women. AIDS is caused by a virus called the Human-Immuno Deficiency Virus (HIV).

HIV Global Epidemic: Facts and Figures

- Over 60 million people have been infected with HIV over the last quarter of the century and 25 million people have died of HIV-related illness.
- More than 15 million children have been orphaned by AIDS.
- In 2009, an estimated 33.3 million people were living with HIV. There were 1.8 million AIDS – related deaths and 2.6 million new infections – that means about 7,000 people become infected and over 5,000 die every day.
- Sub-Saharan Africa remains the region most affected by HIV with 69% of new infections worldwide. In seven countries, mostly in Eastern Europe and Central Asia, HIV infection rates have increased by 25%.
- Five million people are on antiretroviral treatment but another 10 million are still waiting. For every person who goes on antiretroviral treatment two become newly infected - which is why we must keep emphasizing prevention.

UNAIDS 2011 – GHANA

In Ghana the prevalence rate is 1.3%. The regional prevalence rates is as follows:

- Upper West Region 1.3 %
- Northern Region 1.4%
- Ashanti Region 2.5%
- Upper East Region 2.7%
- Central Region 2.8 %
- Volta Region 2.9%
- Greater Accra Region 3 %
- Brong-Ahafo Region 3.2%
- Western Region 3.3%
- Eastern Region 3.4 %

Females are estimated to be 1.3 times more likely to become infected than males. The age range of peak HIV prevalence is 24 to 29 years.

What is AIDS?

AIDS is a disease caused by destruction of the immune system by a virus called HIV. This virus is principally transmitted by sexual secretions and blood.

What does AIDS stand for?

Acquired	Not hereditary but due to an (acquired)virus encountered by the patient during his or her life time
Immuno	Major collapse of the immune system
Deficiency	Lacking Protection
Syndrome	The group of manifestations (symptoms) that characterize a disease

FOUR FACTS ABOUT HIV and AIDS

- AIDS has no cure, but testing and access to specific treatment can ensure a positive and productive life.
- HIV is transmitted in few specific ways.
- The transmission of HIV can be prevented
- HIV does not discriminate

HIV and AIDS Orphans

There are more than 34 million orphans in the region today and some 11 million of them are orphaned by AIDS. Eight out of every 10 children in the world whose parents have died of AIDS live in Sub-Saharan Africa. During the last decade, the proportion of children who were orphaned as a result of AIDS rose from 3.5% to 32% and will continue to increase exponentially as the disease spreads unchecked. As a result, the disease is in effect making orphans of a whole generation of children, jeopardizing their health, their rights, their well-being and sometimes their very survival, not to mention the overall development prospects of their countries. According to the Ghana 160,000 children in Ghana have become orphans since HIV and AIDS was detected in the country in 1986. Ghana AIDS Commission (GAC).

In the cocoa-growing areas children who are infected and affected by HIV and AIDS should be given the needed attention to lead responsible lives to prolong their lifespan and contribute responsibly to the community and the country as a whole. Institutions such as NGOs, District Assemblies, Orphanages like the SOS children homes, Chiefs and Queen mothers can assist in this regard. Children in cocoa farms that have lost their parents to AIDS are more likely to be pressured into working in farming to cover the costs of their subsistence and to pay school fees. There is a very real and immediate danger that these children will be exploited and their health put further at risk by exposure to occupational health and safety hazards.

In cocoa growing areas, people need to work together to provide the necessary care and support to the orphans. The infected orphans should be entitled to affordable health services. The social partners should ensure that they promote prevention efforts particularly in relation to changing attitudes and behaviours. Since HIV infection is preventable, prevention of all means of transmission can be achieved through a variety of strategies.

Figure 77

Activity 1.
Energizer on HIV-AIDs: Walk the Plank

 15 mins.

You need a long plank length for at least six people to stand on. It should not be more than about 30 centimetres wide.

As this involves close physical contact, you need to think about the group. If you have mixed group of men and women some people might feel uncomfortable about doing this.

Get everybody to stand up and form a large circle around the plank of wood. Ask for volunteers to stand on the plank of wood. Get as many as possible standing on the plank. It is good if they hold on to each other.

Now explain that hundreds of years ago there was a practice of forcing people to “walk the plank” on ships. The plank would be stretched out over the sea, and pirates or enemies they had captured, would be forced to walk along the plank until they fell into the sea and get drowned – or were eaten by sharks. Explain that this is such a plank and the floor around it is the sea and you are a hungry shark waiting to eat anybody who steps off the plank.

Now ask the volunteers on the plank of wood to re-arrange them in alphabetical order without stepping off the plank of wood. It is good to circle around pretending to be the shark and pretending to wait to catch those who “FALL OFF”. If anybody does they re-join the circle.

Depending on the group and the names, it usually takes a few minutes. If it is easy, ask them to repeat using last names if they used first names previously or vice versa.

Now, finish off by asking why we do the exercise. The point is that AIDS is a threat to everybody-workers, employers, families etc and we need to help each other in order to defeat it.

Key Messages:

1. AIDS is a threat to everybody-workers, employers, families etc and we need to help each other in order to defeat it.

2. AIDS does not discriminate between race or gender.

Session B.
Modes of Transmission, Prevention and Protection Measures

 60 mins.

Technical Information

How do people get HIV?

HIV is primarily transmitted through unprotected sex including vaginal and oral sex. Certain body fluids including blood, semen, vaginal secretions and breast milk transmit HIV. The virus can also be transmitted through infected blood contaminated in needles used to inject drugs. An HIV-positive woman can pass the virus to her infant during pregnancy, delivery or breast feeding. HIV also can be transmitted through contaminated unscreened blood supplies or donor organs.

For HIV to be transmitted, infected blood, semen or vaginal secretions of infected person must enter the bloodstream of another person.

Primary ways of HIV Transmission

- Unprotected sexual intercourse (anal and vaginal/ or man to man, man to woman) sexual intercourse.
- Blood-to- blood contact
- Mother –to – Child Transmission (MTCT). A mother who is infected with the virus can infect her child during pregnancy or delivery and sometimes by breast feeding.

This virus can be spread by

- Transfusion of blood or blood products if they have not been screened for HIV;
- Sharing
  or reusing contaminated needles and syringes, such as when injecting illegal drugs, injecting steroids or tattooing;
- Having infected blood come into contact with damaged skin (cuts or dermatitis).

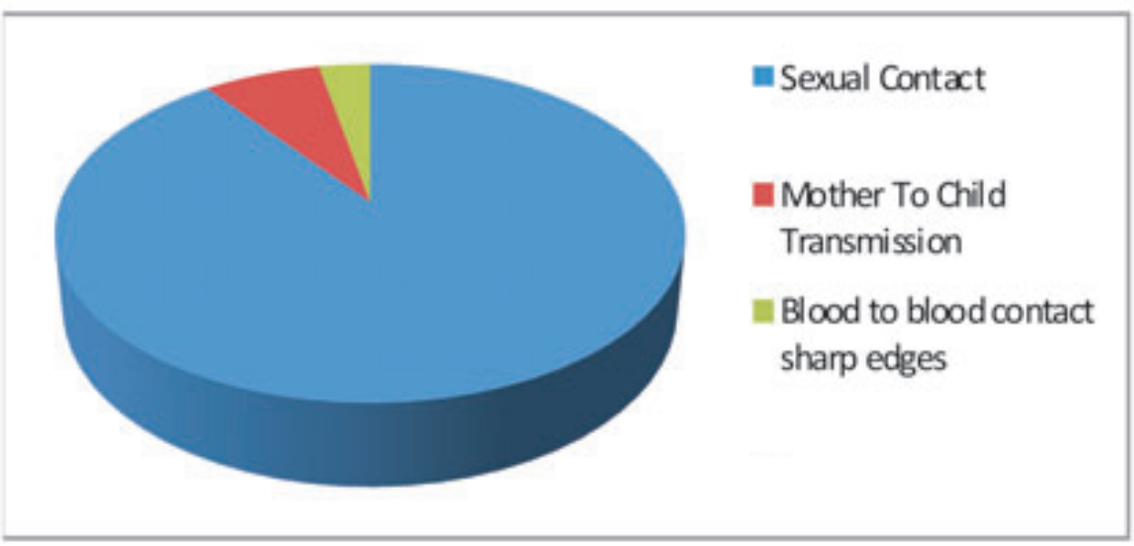


Figure 78

How is Hiv not Transmitted?

HIV is not an easy virus to pass from one person to another. The virus does not survive outside the body. So it cannot be transmitted through

- casual or everyday contact such as shaking hands,
- Sweat,
- Tears, faeces and urine,
- Mosquito and other insects bites,
- Coughing or sneezing,
- Sharing toilets or washing facilities,
- Sharing a cup or plates or
- Consuming food and drink prepared by someone who has HIV.

HIV Incubation Period (Adults)

There may be a long period between the time a person is infected and the time he or she begins to fall sick.

Preventing HIV and AIDS Infection:

There is no known cure for HIV and AIDS. There are medical treatments that can slow down the rate at which HIV weakens the immune system. There are other treatments that can prevent or cure some of the illnesses associated with AIDS. In the absence of cure, the only ways society can be protected against the disease are

A: Abstinence from sex
B: Being faithful to your partner
C: Use condoms (male or female)-protected sex

1st Step: Know Your Status
Most people with HIV don't know it. A test has two big benefits – you can be sure and you can take control:

- If you are negative, you can protect yourself
- If you are positive, you can get access to care and support (i.e treatment) and ways to keep yourself healthy.

The test is not an end but a beginning – it gives you the knowledge you need to live positively and responsibly with or without HIV.

Guiding Principles of Testing:

- It should be voluntary
- Confidential
- Counselling should precede testing

Activity 1.
Role Play: The C and + game

45 mins.

Find a friend

You need plain paper and a pen.

- Every participant is given a plain sheet of paper except two. On an extra piece of paper write a C (for condom) and on another write a + (for HIV Positive). Give them to the two participants but don't tell the others about them.

- Everybody is now asked to walk about in the room, and shake hands with at least three people .They must write down the names of who they shake hands with.

- When everybody has done that for a few minutes, get everybody to sit down.

- Now ask for the person who has the piece of paper with + written on it to stand up. Explain that this stands for a person who is HIV-Positive. Ask him/her to read out the names of the three people he/she shook hands with. Ask them to stand up and read out the names of the people they shook hands with. Repeat the process.

- Almost everybody should now be standing up. Explain that this represents all the people who could be traced back to one individual, who is infected and that they would be at risk of being infected.

- Now ask if anybody has the C written on their piece of paper. Ask that person to hold it up. Explain that because this person used a condom, he/she wasn't at risk.

A. Woman Woman MAN

Diagram C man

B. Woman MAN woman

Activity 2.
CORRECT USE OF CONDOMS

Aim:
To provide participants with the opportunity to practise using condoms.

Technical Information:

If a condom breaks during sex, it is more likely to be because the user has not properly handled or put it on as required or not properly stored or it has expired.

Materials:
- Condoms
  (Model of a penis or substitute).

Step 1
Find a suitable model - ideally a wooden model of a penis – with which to demonstrate how a condom is put on.

Step 2
Explain that participants need to protect themselves and that, condoms, if used correctly, provide excellent protection.

Step 3
Using your model, demonstrate how to put on a condom, while highlighting the following points:

- Check the expiry date; do not use condoms that have passed the expiry date.
- Tear the package carefully along one side.
- Place the rolled – up condom on the end of the penis and unroll the condom down the penis by pushing down on the round rim of the condom. If this is difficult, the condom is probably inside –out.
- When the rim of the condom is at the base of the penis penetration can begin.
- After intercourse and ejaculation, hold the rim of the condom and pull the penis out before it gets soft. Tie the condom in a knot, sealing in the semen.
- Wrap the used condom and dispose of it in appropriate manner- for example, in a rubbish bin. Never flush a condom down the toilet as it will block the plumbing system.

- Follow the '3 Bs' - bin it, burn it or bury it.

- Use a fresh condom if you have intercourse again.

Step 4
Hold out condoms to each of the participants. Have each participant practise putting the condom on the model and recite aloud each of the steps as they go. Ask the participants who are observing to point out any difficulties or omitted steps. If the group of participants is very large, they can be divided up into small groups to practise, and then report what has happened.

Step 5
List the most common difficulties encountered. Ask the participants to suggest how these problems might be resolved. Some common problems include the following:

- Trying to roll the condom down when it is inside – out,
- The condom is not rolled down all the way,
- The condom is placed crookedly on the model,
- The user is too rough when opening the package or uses his/her teeth to open it and
- The air in the tip is not squeezed out.

Activity 3.
Exercise: Why not Take the Test?

Aim:
To encourage people to talk about confidential voluntary testing

Task:
Ask participants to write down why they don't go for a test or the reasons their friends give for not going for a test

- Put all the papers into a hat or a box
- Pick one out and read it – you can also write them up on a flipchart or board
- Then encourage discussion of the different reasons given. Do they agree or disagree with them? Where opinions differ, try to guide the discussion towards positive attitudes to testing and help participants find answers to common objections. Identify participants who are prepared to say they have had the test and why?

Key Messages:

1. Condoms are protective equipment and all protective equipment are not 100% efficient

2. Abstinence

3. Be faithful to your partner

4. Know your HIV status

Session C.
Discrimination on Cocoa Farms

15 mins.

Technical Information

HIV and AIDS Non - Discrimination
Discrimination in employment has been one of the most widespread forms of discrimination. It is contrary to fundamental human rights and also helps the spread of the disease.

In the spirit of decent work and respect for the human rights and dignity of persons infected or affected by HIV and AIDS, there should be no discrimination against people on the basis of real or perceived HIV status. Discrimination and stigmatization of people living with HIV and AIDS inhibits efforts aimed at promoting HIV and AIDS prevention.
Nana to make inputs on people living with HIV, compassion and love

Gender and HIV and AIDS.
The gender dimension of HIV and AIDS should be recognized. Women/girls are more likely to be infected and are more adversely affected by the HIV and AIDS epidemic than men due to biological, social, cultural and economic reasons. The greater the gender discrimination in societies and communities the lower the position of women and the more negatively they are affected by HIV. Therefore more equal gender relations and the empowerment of women are vital to successfully prevent the spread of HIV infection and enable women to cope with HIV and AIDS.

HIV infection is not a cause for termination of employment. Persons with HIV-related illnesses should be able to work for as long as medically fit in the available appropriate work on the cocoa farm(s).

Figure 79

THE AIDS VIRUS IS PRINCIPALLY TRANSMITTED BY SEXUAL ACTIVITY AND VIA BLOOD
YOU MUST KNOW YOUR PARTNER(S) WELL
'I LIKE YOU, YOU LIKE ME, LET'S MAKE LOVE'
NOW YOU MUST THINK TWICE

Having a sexual relationship with another person involves certain consequences which must be taken into consideration.

Activity 4.
Brainstorming: HIV and Discrimination

 10 mins.

Tasks:

In your small groups:

i. Discus and list the various ways of preventing the spread of HIV and AIDS.

ii. Should HIV and AIDS infected worker communities be discriminated against at work or in cocoa? Discuss.

iii. State five ways that HIV and AIDS cannot be transmitted.

iv. Discuss the importance of knowing your HIV status.

UNIT 3:
FIRST AID FOR COMMON FARM EMERGENCIES

 2 hrs.

Objectives

Unit 3 of Module 3 deals with administration of first aid – the initial help given to victims of injuries that may occur on the farm before obtaining professional help. Knowing what to do in an emergency may save someone's life. Objectives for rendering first aid are to:

- treat injuries,
- reduce pain,
- ensure quick recovery for the injured and
- save life.

At the end of the session, participants should be able to list common injuries that may arise from exposure to physical, chemical and biological hazards in cocoa farming. They must also be able to describe and demonstrate immediate initial help to be administered for the listed injuries before more professional help is obtained.

It is important to understand that going through the first aid training covered in this manual does not make participants fully qualified to render first aid. There should be at least one person in each community who has received full training in first aid by a recognized body.

Sessions:

A. Introduction and Handling of Cuts and Bleeding
B. Handling of Fractures (Broken Bones)
C. Handling of Animal Bites
D. Handling of Acute Poisoning From Pesticides and Other Dangerous Agrochemicals

Materials:

- Flip chart and easel
- Markers or chalk and chalk board
- First aid kit where available
- Improvised tools for rendering first aid - bandages, scarves, ropes, sticks, etc
- Improvised hanging cloth and paper board

Session A:
Introduction and Handling of Cuts and Bleeding

30 mins.

Technical Information

Common injuries that occur on cocoa farms include cuts (and in extreme cases, amputations), resulting from exposure to sharp implements/tools e.g. machetes, cutlasses, harvesting hooks and chain saws. Cuts are often accompanied by bleeding. Other injuries include fractures (broken bones) and sprains that may occur as a result of falls from heights and following slips. In addition, injuries may arise from exposure to chemicals such as pesticides, fertilizers and other agrochemicals.

The important areas that the first aider needs to know about in handling farm emergencies are:

i. Handling of cuts and bleeding,
ii. Handling of fractures (broken bones) ,
iii. Handling of animal bites and stings and
iv. Handling of acute poisoning from pesticides and other dangerous agrochemicals.

It is important to stay calm in an emergency so that you can think clearly and take the right decisions and actions. In all cases, observe as far as possible the following measures:

- Reassure the injured person that you are around to offer assistance and that he/she will be fine;
- Do not behave in a manner that may frighten the injured person;
- Remove him/her from the place where the injury occurred to the nearest safe place and
- Administer first aid if you are qualified to do so. If not, call for more help.

Handling Cuts and Bleeding

Bleeding may be excessive and may result in death of the cocoa farmer. Wounds that are not properly treated may get infected resulting in complications like severe infection of the blood which could lead to death. It may heal leaving ugly scars at the affected body part.

Steps for Handling Cuts and Bleeding

- Wash the wound with clean water only (do not use soap) and cover it with a clean cloth, Handkerchief or bandage to avoid infection. If you do not have a clean bandage or cloth, cover the cut with non-poisonous leaves that have a smooth surface which have been washed. Hold the leaves in place by using a bush-rope which has been washed.

Figure 80: STCP

- If the cut is more than 3 inches (7.5 cm) long, take the injured person to a health centre as the cut may need stitching and proper dressing and the person may need to be given antibiotics against infection.

Figure 81: STCP

Where there is bleeding, stop the bleeding by applying pressure to the cut for about 20 minutes with a clean piece of cloth or handkerchief. Bare hands may be used only if none of these are available. If using bare hands, make sure to first wash your hands with soap and water. Do not keep checking to see if the bleeding has stopped. This may damage or dislodge the fresh clots that are forming and cause bleeding to start all over again.

Figure 82: STCP

- If there is a deep, long cut on the leg, accompanied by profuse bleeding, raise the leg higher so that the wounded part is higher than the person's heart by placing it on something (e.g. pillow or stone). The injured person should not sit with the wounded leg hanging and should avoid walking on it to reduce blood loss and so that the wound heals quickly.

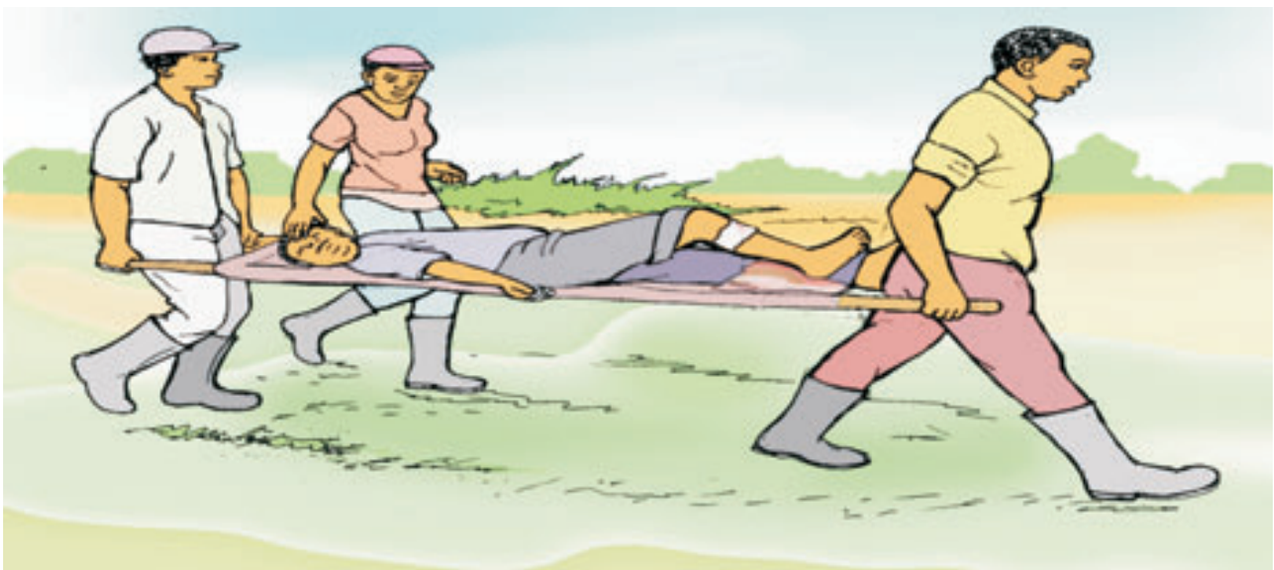


Figure 83: STCP

- If the wound is on the arm, use a sling to hold the affected arm
  Pay attention to all types of cuts, even small ones, as they could become infected if not properly treated and develop into a serious problem such as tetanus

Trainer's Notes

The session should start with the trainer introducing the topic by asking participants to list some injuries that may occur on cocoa farms requiring urgent attention (Activity 1). Complement this discussion with relevant elements from the Technical Information. Continue with the specific questions concerning cuts and bleeding and complement as adequate. The trainer should facilitate the process and assist participants to understand the factual basis for the responses, correcting wrong impressions that participants may have.

Activity 1:
Discussion on First Aid; Cuts and Bleeding

20 mins.

'Guiding Questions' for discussion:

i. What are the causes of cuts to cocoa farmers?

Response:
Injury from sharp objects e.g. hoes, cutlasses, plucking hooks (go to hell), falls from slips and from heights

ii. Which types of cuts are severe and require immediate attention?

Response:
Deep cuts, those more than a few centimetres in length and bleeding cuts

iii. What will happen if the cut is left without immediate action being taken?

Response:
- Bleeding will lead to anaemia (shortage of blood), and if severe, could result in collapse and possible death.
- Germs will enter the cut causing it to get infected. This may spread into the blood and cause severe sickness in the blood, which could end up in death.

iv. Describe the kind of help that you will give to or obtain immediately for a fellow farmer with a cut bleeding heavily.

Response:
- Wash cut with clean water
- Cover with a clean cloth or handkerchief
- Stop bleeding by applying pressure
- Seek urgent medical help

Key Messages:

- There should be at least one person in each community who has received full training in first aid by a recognized body. e.g. Red Cross.
- In case of an emergency, stay calm. If you are not able to provide first aid, call a qualified person.
- In case of an injury due to a cut, the first thing to be done is to:
- wash the cut with clean water; cover with a clean cloth or handkerchief; stop bleeding by applying pressure and seek urgent medical help.

Session B.
Handling of Fractures (Broken Bones)

 **30 mins.**

Technical Information

When dealing with factures and broken bones, the first thing is to move the victim from danger, that is, to try to move him/her to a health facility where more assistance can be obtained (see instruction below on how to move injured people). Call for help if you are alone.

Symptoms arising from broken bones include swellings, bruises and/or a change in the shape and size of the affected area. The injured person may have pain and loss of movement or power in the affected limb. A sharp, unpleasant noise may be heard when the ends of broken bones rub together. In some cases, the broken bone may stick out of the skin. The injured person may feel dizzy or cold from shock.

Avoid moving or putting weight on the broken limb. It may make the fracture worse

- Place two pieces of wood (called splints) on the two sides of the affected part and hold them in place with a bandage or bush-rope. This will prevent the broken limb from moving.

- If the fracture is in the upper leg, make sure that the splints go from the armpit to the legs to prevent the whole body from moving.
- Hold a broken arm in place with a sling made from a piece of cloth (for example a head tie/scarf) or a rope.
- Carry the injured person to a safe place so as to remove him/her from further danger.
- Transport the person to the nearest health centre on a stretcher if he/she is unable to walk as shown below.

Figure 84: STCP, Avoid moving or putting weight on the broken part

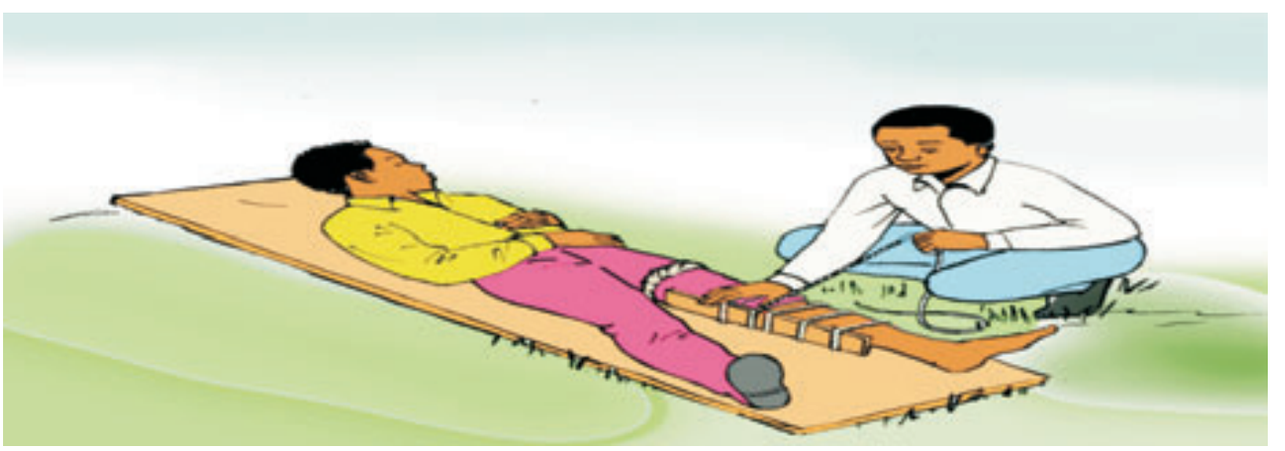


Figure 85: STCP, Place two pieces of wood (called splints) on the two sides of the affected part and held them in place with a bandage or bush-rope. This will prevent the broken limb from moving

Figure 86: STCP, If the fracture is in the upper leg, make sure that the splints go from the armpit to the legs to prevent the whole body from moving

Figure 87: STCP, Hold a broken arm in place with a sling made from a piece of cloth (for example a head tie) or a rope

Figure 88: STCP, Carry the injured person to a safe place on a stretcher if he/she is unable to walk

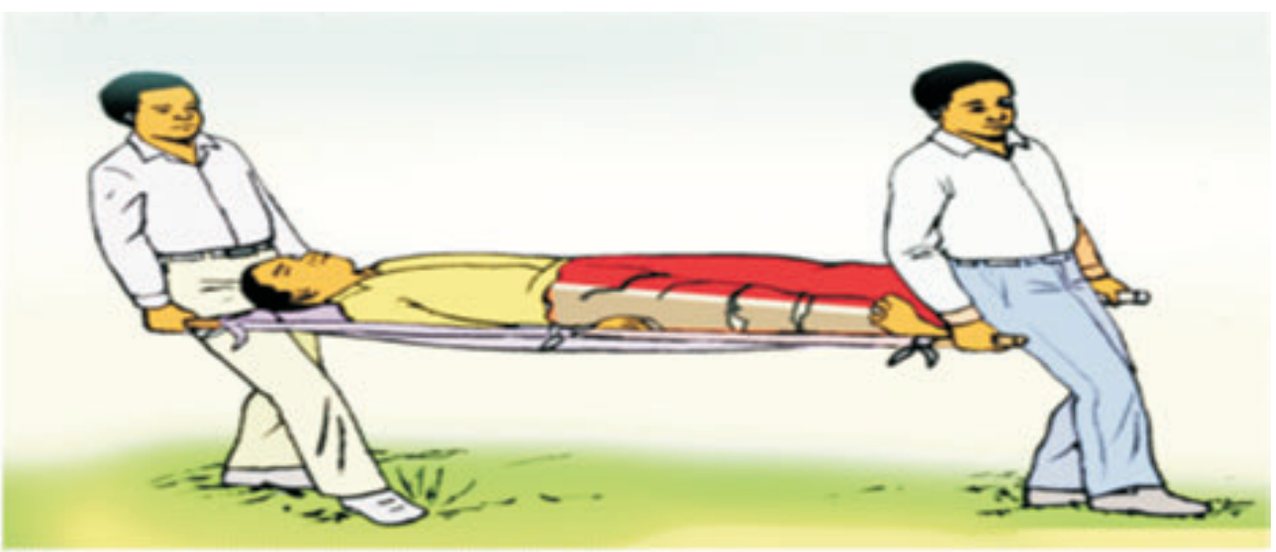


Figure 89: STCP, Transport the person to the nearest health centre on a stretcher to remove him/her from further danger

Transporting the Injured Person

You can transport an injured person by carrying them on the back or in the arms of another person or on a stretcher.

How to Make an Improvised Stretcher

Use a strong cloth and two poles (about 7 feet long) to make a stretcher. First, fold the cloth into two lengthwise and tie up the two overlapping ends. Put the poles into the fold. It may be necessary to tie the mid portion of the cloth to prevent the person from falling off the stretcher.

You can also use a board or a hammock as a stretcher to transport an injured person. When using a board, make sure to tie the injured person down using bush-ropes.

Two people, one holding the upper part of the body, the other person holding the legs, should carefully lift the injured person onto the stretcher. Use at least two people to carry a cloth or board stretcher.

If you are alone, place the injured person on his/her side and put the improvised stretcher at his/her backside. Roll the injured person onto the stretcher and tie him/her, using bush rope, onto the stretcher. Lift one end of the stretcher and pull it. If the injured person is conscious and can walk a little, transport him by having him put his arms around the shoulders of two people.

Another way is to have two people make a seat for the injured person with their hands. (This method should however be avoided if the victim is suspected of having an injury of the back or spine). Have two people, who are about the same height assist the injured person. Face each other. Ask each person to use his right hand to grip his left wrist. Ask each person to grip the right wrist of the other person with their left hand to form a seat. Have the injured person sit on their knitted hands with his/her hands over their shoulders.

Dangers of Improper Moving and Handling

Lifting an injured person in the wrong way could result in pains and other injuries. For example, spinal cord injuries could become worse if the injured person is not lifted properly. Fractures, if not properly handled, may lead to deformation of affected body parts e.g. this may appear as twisting of affected arms and legs.

Trainer's Notes

The session should start with the trainer introducing the topic by facilitating a discussion on fractures (Activity 2). Complement this discussion with relevant elements from the technical information specifically the pictures concerning the topic. Try to demonstrate as much as possible some of the concepts and advice included in this session. The trainer should facilitate the process and assist participants to understand the factual basis for the responses and correct wrong impressions that participants may have.

Activity 2:
Discussion on Fractures

 **20 mins.**

i. What are the causes of fractures (broken bones) to cocoa farmers?

Response:
- Falls from heights or from slips
- Object falling on limb (s)

ii. How does one identify a fracture (broken bone)?

Response:
- The area around fracture appears deformed; sometimes swollen.
- There may be a cut at site of fracture. In severe cases (compound fracture), the broken bone may be sticking through or can be seen through the cut.

iii. Describe the kind of help that you will give to a fellow farmer who has fallen from a tree and is found lying down in severe pain, with a swollen right leg and unable to move the leg.

Response:
- Reassure the injured farmer.
- Splint the affected leg or arm.
- Safely transport farmer to a health facility.

Key Messages:

- Lifting an injured person in the wrong way could result in pains and other injuries.
- One of the first things to do is to safely transport farmer to a health facility.
- One of the most important first aid measures is to splint the affected leg or arm in accordance to the instructions above.

Session C.
Handling of Animal Bites

 **30 mins.**

Animal Bites include those from reptiles like snakes and arthropods such as scorpions, insects such as bees and wasps encountered on farms. A delay in seeking assistance for victims may cause venom (from the animal) to spread very quickly through the body if the snake is poisonous and may lead to serious consequences, including death.

Snake bite should be considered in any severe pain or swelling of a limb (arm, hand, leg , foot) or in any unexplained illness presenting with bleeding, drowsiness or other nervous symptoms. Cobra (a type of snake) may spit venom into the eyes of victims causing pain and reddening of the affected eye. Complaint of headache, vomiting, collapse, sweating and darkening of affected part may signify poisoning of body.

Other observations may include swelling in the region of the bite that may gradually extend up the bitten limb, and bleeding from gums and wounds. Bleeding may also occur internally and so may not be visible. Difficulty in breathing, weakness in limbs on one or both sides of body, difficulty in swallowing and talking, muscle pains and dark urine may also be observed.

Figure 90: STCP

Figure 91: STCP

Figure 92: STCP

Make sure that the injured person remains as calm and quiet as possible.
Anxiety and moving around a lot causes the venom from the bite to spread quickly through the body.
Don't cut the area near the wound and suck out the venom as this does not work.
The affected person should try not to move the bitten arm or leg but should hold the affected limb close to the body.

1. Rendering First Aid for Snake and Other Animal Bites

- Splint the limb to reduce movement and absorption of venom.
- Apply a firm bandage to affected limb from fingers or toes to area above / proximal to site of bite. (Use strips of cloth where bandages are not available)
- Clean the wound or bite site by washing with clean water.
- If any of the above signs are observed, transport the victim to a clinic or other health facility as soon as possible.
- If snake has already been killed, take this with victim to the clinic.
- Avoid cutting the wound or applying tourniquet or band.

Figure 93: STCP, Tie a piece of cloth or bush-rope fairly tightly just above the affected spot to prevent the snakes venom from travelling up the body. Don't tie the cloth or rope too tightly (to the extent that you cannot feel a pulse) as this may cause gangrene in the affected limb.

Figure 94: STCP, Transport the injured person as soon as possible to the nearest health centre.

2. Handling Scorpion Sting

A farmer who has been stung by a scorpion will present varying degrees of pain at the site of the sting. This can be very painful for days or the pains may persist for days. There may or may not be any swelling at the sting site. Sting may cause tingling, burning or numbing sensation.

A sting may lead to introduction of venom into the body leading to a serious reaction. This may lead within minutes to generalized effects which tend to be more common in children. These includes the:

- widespread numbness,
- blurred vision,
- salivation,
- Shock (collapse with sweating, fast and irregular pulse, due to heart failure or respiratory failure muscle twitches and spasms), nausea, vomiting, abdominal pain, breathing difficulty.

3. Bee Stings

Bee stings may be identified from the following features:

- Usually, only the part of the body near the sting is affected with immediate pain, redness, swelling and itching. This may extend to a wider area greater than 4 inches across.

- Parts of the body away from the sting may be affected and this is described as systemic or allergic reaction. This can be recognized by;

    - Hives (raised itchy bumps on the skin) and itching all over the body ,
    - Swelling of the mouth or throat or both ,
    - Wheezing,
    - Shortness of breath or other breathing difficulty
    - Nausea and vomiting,
    - Chest pain
    - In very severe cases, weakness or fainting, marked difficulty in breathing, unconsciousness, and even death may occur.

First Aid Measures

Measures taken for bee stings also apply to wasp stings. Immediate medical attention should be sought if the person has any of the following symptoms that suggest an allergic reaction:

- Trouble breathing or wheezing
- Feelings of faintness or dizziness
- Hives
- A swollen tongue
- Tightness in the throat or a feeling that the airways are closing
- Hoarseness or trouble speaking
- A history of severe allergy reaction to insect stings or a history of severe allergic reactions (anaphylaxis), even if there are no symptoms:

If the person does not have severe allergy symptoms:

i. Remove the stinger. Scrap the area with a fingernail or use tweezers to remove it. Don't pinch the stinger - that can inject more venom.

ii. Control swelling by placing a cold pack on the area of the sting (icing the area).

iii. If you were stung on your arm or leg, elevate it.

iv. Remove any tight-fitting jewelry from the area of the sting. As it swells, rings or bracelets might become hard to get off.

v. For pain, take a painkiller like paracetamol. Do not give aspirin to anyone under 18 years.

vi. Apply a mixture of baking soda and water or calamine lotion for the itchiness.

4. Follow-Up

It might take 2-5 days for the area to heal. Keep it clean to prevent infection.

Prevention of Stings

Ways to avoid stings include the following:

- Avoiding known areas of concentration of bees such as hives and nests.
- Avoiding tampering with bee hives and nests and leaving the area when insects are flying around.
- Taking care when using motorized equipment such as chain saw because they may provoke the insects.
- Wearing long pants and long-sleeved shirts because they may also provide some protection
- Bees may be attracted to strong fragrances or perfumes and brightly coloured clothing, so it is best to avoid these when outdoors on the farm. Other insects may be attracted to sugary drinks, so it is important to clean and/or cover cups or receptacles after consuming such drinks.

If you have had a previous significant allergic reaction to a bee or wasp sting, it is very important that you make this known to all close contacts who should ensure that in case of a sting, you are immediately transferred to a clinic. You should also inform your doctor.

Trainer's Notes

The session should start with the trainer introducing the topic by facilitating a discussion on animal bites (Activity 4). Complement this discussion with relevant elements from the technical information specifically the pictures concerning the topic. Try to demonstrate as much as possible some of the concepts and advice included in this session. The trainer should facilitate the process and assists participants to understand the factual basis for the responses and correct wrong impressions that participants may have.

Activity 4:
Discussion on Animal Bites/Stings

 20 mins.

i. List animals and other living things that may cause harm to young workers on cocoa farms.

Response:
- Snakes and other reptiles
- Scorpions
- Insects e.g. bees, wasps

ii. List the types of harm that may be caused by contact with farm animals/ organisms and which will require immediate attention.

Response:
- Snake bite
- Scorpion sting
- Bee and wasp stings

iii. Describe measures that will prevent injury caused by farm animals.

Response:·
- Wearing clothes that cover as far as possible the entire body, especially the trunk, arms, legs and feet
- Avoiding working in poor light i.e from dusk to dawn

Key Messages:

- A delay in seeking assistance for victims in the case of venomous animal bites may lead to serious consequences, including death.
- Aim to transport the victims to the hospital as soon as possible.
- To prevent stings:
  - avoid known areas of concentration of bees;
  - avoid tampering with bee hives and nests and leave the area when insects are flying around;
  - take care when using motorized equipment as it can provoke the insects;
  - wear long pants and long-sleeved shirts

Session D:
Handling of Acute Poisoning From Pesticides and Other Dangerous Agrochemicals

30 mins.

Poisoning of farmers may occur from contact with hazardous chemicals like pesticides, fertilizers and other agrochemicals. These can be absorbed through the skin, ingested or inhaled.

Inhalation is the most common means and may occur through inhaling spray drift following spraying of chemical or during mixing prior to application. Skin contact may occur through handling or touching of the chemical, through spray drift and walking on soil sprayed with the chemical. Ingestion of the chemical may occur through eating or smoking (touching of cigarettes) with unwashed hands following contact with chemicals or with spray drift.

Farmers may complain of symptoms of acute poisoning which include vomiting, diarrhoea, blurred vision or weakness. The farmer may also experience salivation, sweating and tearing (from eyes). In severe cases, weakness, twitching (convulsions), paralysis, involuntary passing of urine and shallow breathing may be observed.

Figure 95:. STCP, If the agrochemical container is available, read the label for information about what to do

Figure 96: STCP, If the clothes of the affected person are heavily soaked with pesticide, remove them and

Figure 97: STCP, If some of the chemical has gone into the person's eyes, flush out the affected eye with water for 10-20 minutes

Figure 98: STCP, If the person has lost consciousness, move him/her to a cool, shaded and airy place that is not contaminated

Figure 99: STCP, Place the person on his/her side with the head low and the tongue stretched to prevent them from swallowing the chemical

Figure 100: STCP, If the person has lost consciousness, seek immediate medical attention. If possible, take the pesticide container along to the hospital

First Aid Measures (check with trained professional):

- Remove poisoned farmer from the source of exposure (spayed area) and away from direction of spray drift (to well-ventilated area).
- Do not induce vomiting.
- Where poison is in contact with skin or eyes: Remove poison by washing eye or skin (if in eye or on skin) with water.

For skin contamination: Remove all clothing and personal effects and thoroughly flush all exposed areas with copious amounts of tepid water. Use soap and water for oily substances. First aiders should take care to protect themselves from contamination with the pesticide by wearing gloves and covering their clothing with a plastic apron or sheet. Removed clothing and personal effects should be stored safely in a plastic bag that can be sealed, for later washing or disposal.

For eye contamination: Rinse the eye for 10-15 minutes with clean running water (or from a clean receptacle like a cup), taking care that the run-off does not enter the other eye.

- Transport victim to hospital as soon as practicable. If unconscious, transport with head turned on the side to avoid choking in case of vomiting.
- Take along a sample of the pesticide being sprayed in its original container if available.

Trainer's Notes

The session should start with the trainer introducing the topic by facilitating a discussion on animal bites (Activity 4). Complement this discussion with relevant elements from the Technical Information specifically the pictures concerning the topic. Try to demonstrate as much as possible some of the concepts and advice included in this session. The trainer should facilitate the process and assist participants to understand the factual basis for the responses and correct wrong impressions that participants may have.

Activity 5:
Discussion on Agrochemical Poisoning

 **20 mins.**

i. What are the dangerous chemicals commonly used in cocoa farming?

Response:
- Pesticides – used in killing insects e.g,akate
- Weedicides
- Fertilisers

ii. A farmer has just sprayed his cocoa farm against insects and inhales the insecticide. How will this farmer who is poisoned from the pesticides appear or look like?

Response:
- May complain of headache, dizziness, diarrhoea (frequent watery stools), coughing
- May be seen vomiting or bringing up a lot of saliva or frothing at the mouth
- May have breathing difficulty
- May be found collapsed

iii. What immediate help will you give to such a farmer who is poisoned with pesticide?

Response:
- Move him/her from the area of spraying into an area where there is fresh air away from the direction of the wind and spray drift.
- Wash his/her body /area of contact with pesticides with clean water and soap
- Wash his/her eyes with water if contact was with eyes
- Seek medical help

Key Messages:

- Avoid poisoning by following the rules from the previous module.
- In case of chemical poisoning, move the victim from area of spraying into an area where there is fresh air away from the direction of the wind and spray drift.
- Wash his/her body/area of contact with pesticides with clean water and soap.
- Wash his/her eyes with water if contact was with eyes.
- Seek medical help.

Sources

International Institute of Tropical Agriculture (IITA), 2009. “Preventing and Reducing Injuries and Ill Health in Cocoa Production - Learning about Sustainable Cocoa Production, Manual No.4, A Guide for Participatory Farmer Training”, Accra, Ghana.

Resources

APPENDIX 1.
GLOSSARY OF KEY TECHNICAL TERMS

TERMINOLOGY	MEANING
Allergic	To react strongly on coming into contact with some substance(s) or condition(s) or have a strong dislike for something.
Anaemia	A medical condition in which somebody has too few red cells in the blood making them look pale and feel weak.
Anaphylactic (Anaphylaxis)	A hypersensitivity state that may develop after introduction of a foreign protein or other antigen into the body tissues.
Arthropods	An invertebrate animal that has its skeleton on the outside of its body and has joints on its legs. e.g. insect.
Bacteria	Microorganisms that exist in air, water, soil, living and dead creatures and plants and are often a cause of disease.
Biological	Pertaining to living organisms.
Breadwinner	A person who supports his/her family with the money he/she earns.
Contaminate	To make something or place dirty or no longer pure by adding a substance that is dangerous to it.
Convulsion	A sudden shaking movement of the body that cannot be controlled.
Crutches	A walking aid (not necessarily used in a pair) whereby the weight of the body is borne primarily by the arms and shoulder girdle.
Dehydrated	Process of losing too much water from a body.
Dehydration	The excessive loss of water and salts essential for normal body function from a body.
Depletion	To reduce something by a large amount so that there is not enough left.

Diarrhoea	An illness in which waste matter is emptied from the bowels much more frequently than normal and in liquid form.
Disability	A physical or mental condition that means you cannot use a part of your body completely or easily hurt physically or emotionally.
Episode	An event, situation or a period of time in somebody's life.
Exposure	An act a person being subjected to the influence of a hazard.
Excreta	Solid and liquid waste matter passed from the body.
Fang	Two long sharp teeth at the front of the mouth of some animals.
Fungiude	A chemical used for killing fungus.
Fungus (Fungi)	Any plant without leaves, flowers or green coloring usually growing on other plants or on decaying matter.
Germ	A very small living thing that can cause infection and disease.
Hazard	Any condition that has the ability to cause injury to a worker.
Heart palpitations	The feelings of rapid, fluttering or pounding heartbeats normally triggered by stress, exercise, medication or some unknown medical condition.
Horseplay	Boisterous or rough play that can result in unintentional physical injury.
Latrine	A toilet made by digging a hole in the ground.
Liquidity	The state of owning things of value that can easily be exchanged for cash.
Malnutrition	A poor condition of health caused by lack of food or lack of the right types of food.
Maternity	The state of being or becoming a mother.
Muscle cramps	Sudden, involuntary contractions or spasms in one or more of your muscles. They often occur after exercise or at night, lasting a few seconds to several minutes. It is a very common muscle problem.
Muscle tension	Refers to the conditions in which the muscle of the body appear to be in a partial state of contraction over an extended period.
Noise	Undesired sound that has the potential to cause hearing loss.

Nutrition	The process by which animals and plants assimilate and utilise exogenous substances for synthesis of new tissue and production of energy.
Parasite	A small animal or plant that lives on or inside another animal or plant and gets its food from it.
Pathogen	A thing that causes disease.
Pesticide	A chemical used for killing pests.
Physical hazards	Any condition in the environment of workplace that has the potential to harm the worker without necessarily coming into contact with the worker. Examples include noise and vibration.
Poisonous	Anything that causes death/illness if swallowed or absorbed into the body.
Pneumonia	A serious illness affecting one or both lungs that makes breathing difficult.
Posture	This refers to how the body is held while standing up, sitting or lying down or when performing a task.
Profuse	Produced in large amounts.
Proportion	A part or a share of a whole.
Protozoan	A very small living thing usually with only one cell that can only be seen under a microscope.
Purgative	A substance (usually medicine) that causes your bowels to empty.
Remnant	A part of something that have been used removed or destroyed.
Reptile	Any animal that has cold blood and skin covered in scales and that lays eggs.
Respiration	The act of breathing.
Risk	This is the likelihood of potential harm from a recognised/identified hazard.
Rodent	Any small animal that belongs to the group of animals with strong sharp front teeth e.g. rats.
Schistosomiasis	A disease of humans caused by parasitic blood flukes.
Tetanus	A disease in which the muscles become stiff caused by bacteria entering the body through cuts or wounds.

Tuberculosis	A serious infectious disease in which swellings appear on the lungs and/or other parts of the body.
Vaccination	The administration of vaccine by injection /orally in order to produce active immunity to diseases.
Venom	Poisonous liquid that snakes etc produce when they bite.
Viruses	A living thing too small to be seen without a microscope that causes infectious disease in people, animals and plants.
Vulnerable	Something or somebody that is weak and easily hurt physically or emotionally.
Weedicide	A chemical used for killing weeds.

APPENDIX 2.
PART V OF THE CHILDREN'S ACT ON EMPLOYMENT OF CHILDREN

PART V. EMPLOYMENT OF CHILDREN

Sub-Part I. Child Labour

Section 87. Prohibition of exploitative child labour.
(1) No person shall engage a child in exploitative labour.
(2) Labour is exploitative of a child if it deprives the child of its health, education or development.

Section 88. Prohibition of child labour at night.
(1) No person shall engage a child in night work.
(2) Night work constitutes work between the hours of eight o'clock in the evening and six o'clock in the morning.

Section 89. Minimum age for child labour. The minimum age for admission of a child to employment shall be fifteen years.

Section 90. Minimum age for light work.
(1) The minimum age for the engagement of a child in light work shall be thirteen years.
(2) Light work constitutes work which is not likely to be harmful to the health or development of the child and does not affect the child's attendance at school or the capacity of the child to benefit from school work.

Section 91. Minimum age for hazardous employment.
(1) The minimum age for the engagement of a person in hazardous work is eighteen years.
(2) Work is hazardous when it poses a danger to the health, safety or morals of a person.
(3) Hazardous work includes:
- (a) going to sea;
- (b) mining and quarrying;
- (c) porterage of heavy loads;
- (d) manufacturing industries where chemicals are produced or used;
- (e) work in places where machines are used; and
- (f) work in places such as bars, hotels and places of entertainment where a person may be exposed to immoral behavior.

Section 92. Application. For the avoidance of doubt, this Sub-Part shall apply to employment in the formal and informal sector.

Section 93. Registration of children and young persons in industrial undertakings.
(1) An employer in an industrial undertaking shall keep a register of the children and young person's employed by him and of the dates of their births if known or of their apparent ages if their dates of birth are not known.
(2) An industrial undertaking is an undertaking other than one in commerce or agriculture and includes:

(a) mines, quarries and other works for the extraction of minerals from the earth;
(b) undertakings in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adopted for sale, broken up or demolished, or in which materials are transformed including undertakings engaged in ship building or in the generation, transformation or transmission of electricity or motive power of any kind;
(c) Undertakings engaged in the transport of passengers or goods by road or rail including the handling of goods at docks, quays, wharves, warehouses and airports.

Section 94. Offences under this Sub-Part.
(1) Any person who contravenes the provisions of this Sub-Part commits an offence and is liable on summary conviction to a fine not exceeding c10 million or to imprisonment for a term not exceeding two years or to both.
(2) Notwithstanding subsection (1) of this section, any person who contravenes section 93(1) commits an offence and is liable on conviction to a fine not exceeding ¢500,000.00.

Section 95. Enforcement in formal sector.
(1) A district labour officer shall carry out any enquiry he may consider necessary in order to satisfy himself that the provisions of this Sub-Part with respect to labour by children and young persons in the formal sector are being strictly observed.
(2) For purposes of this section any person may be interrogated by a district labour officer.
(3) If a district labour officer is reasonably satisfied that the provisions of this Sub-Part are not being complied with he shall report the matter to the police who shall investigate the matter and take the appropriate steps to prosecute the offender.

Section 96. Enforcement in the informal sector.
(1) The Social Services Sub-Committee of a District Assembly and the Department shall be responsible for the enforcement of the provisions of this Sub-Part in the informal sector.
(2) For purposes of this section any person may be interrogated by a member of the Social Services Sub-Committee or by a member of the Department.
(3) If the member of the Social Services Sub-Committee or the Department is reasonably satisfied that the provisions of this Sub-Part are not being complied with he shall report the matter to the police who shall investigate the matter and take the appropriate steps to prosecute the offender.
(4) Where the offender is a family member of the child whose rights are being infringed under this Sub-Part, the Social Services Sub-Committee or the Department shall request a probation officer or social welfare officer to prepare a social enquiry report on the matter.
(5) The social enquiry report prepared under subsection (4) of this section shall be considered by the police before any action is taken against the offender.

Sub-Part II. Apprenticeship

Section 97. Act to apply to apprenticeship in the informal sector. This Act applies to child apprentices in the informal sector.

Section 98. Minimum age for apprentices. The minimum age at which a child may commence an apprenticeship with a craftsman is fifteen years or after completion of basic education.

Section 99. Responsibilities of craftsman. The responsibilities of a craftsman towards an apprentice under his care shall be as follows to:

(a) train and instruct the apprentice in a trade to the best of the ability, skill and knowledge of the craftsman and to the best ability of the apprentice or cause the apprentice to be trained in a trade under the supervision of the craftsman;
(b) be responsible for any harm caused to the apprentice in the course of his training;
(c) provide food for the apprentice unless otherwise agreed;
(d) provide a safe and healthy environment for the apprentice;
(e) be responsible for the moral training of the apprentice; and
(f) Protect the best interest of the apprentice generally.

Section 100. Apprenticeship agreement.

(1) The parent, guardian or relative of an apprentice shall enter into an apprenticeship agreement with the craftsman.

(2) The agreement shall be in accordance with the custom which pertains to the specific trade but shall not include the performance of any induction ceremony which may conflict with the rights of the child contained in Sub-Part 1 of Part I of this Act.

(3) The agreement shall contain such matters as may be agreed between the parties and may include:

(a) provision that the parent, guardian or relative shall bear the cost of protective clothing and the basic tools for the training of the apprentice;
(b) a duty that the craftsman is to provide shelter for the apprentice; and
(c) a provision that the craftsman is to give the apprentice an allowance of not less than half the minimum national daily wage for his daily sustenance.

(4) The agreement shall be in writing and shall contain provisions in the best interest of the parties and the apprentice.

(5) Should either party to the agreement contravene its terms, the agreement shall immediately lapse unless there is a contrary intention in the agreement.

Section 101. Duties of apprentice. An apprentice shall diligently and faithfully obey and serve the craftsman and shall agree:

(a) that he will not absent himself from the apprenticeship without permission;
(b) to prevent any deliberate damage to the property of the craftsman; and
(c) not to conceal any damage to the property of the craftsman.

Section 102. Release of Apprentice.

(1) The conditions for the release of an apprentice upon the completion of his training shall not be exploitative and shall be in accordance with the best interest of the child under Sub-Part 1 of Part I of this Act.

(2) The craftsman shall on completion of a period of apprenticeship issue a certificate of release to the apprentice which shall indicate that the apprentice has completed his training.

(3) If the craftsman refuses to issue the certificate of release without just cause he commits an offence and is liable on summary conviction to a fine not exceeding ¢2 million or six months imprisonment or both.

Section 103. Resolution of disputes. Disputes related to an apprenticeship agreement shall be referred to the district labour officer of the district concerned by the parties to the apprenticeship agreement or the apprentice.

Section 104. Application of Sub-Part I of this Part. The provisions of Sub-Part I of this Part on Child Labour shall apply to this Sub-Part.

APPENDIX 3.
HUMAN TRAFFICKING ACT

THE HUMAN TRAFFICKING ACT, 2005 (ACT 694)

Prohibition and Offences relating to Trafficking

Meaning of Trafficking
1. (a) Human trafficking means the recruitment, transportation, transfer, harboring, trading or receipt of persons within and across national borders by(a) the use of threats, force or other forms of coercion, abduction, fraud, deception, the abuse of power or exploitation of vulnerability, or
(b) Giving or receiving payments and benefits to achieve consent.
2) Exploitation shall include at the minimum, induced prostitution and other forms of sexual exploitation, forced labour or services, salary or practices similar to slavery, servitude or the removal of organs.
3) Placement for sale, bonded placement, temporary placement, placement as service where exploitation by someone else is the motivating factor shall also constitute trafficking.
4) Where children are trafficked, the consent of the child, parents or guardian of the child cannot be used as a defence in prosecution under this Act, regardless of whether or not there is evidence of abuse of power, fraud or deception on the part of the trafficker or whether the vulnerability of the child was taken advantage of.

Prohibition of Trafficking
2. (1) A person shall not traffic another person within the meaning of section 1 or act as an intermediary for the trafficking of a person.
(2) A person who contravenes subsection (1) commits an offence and is liable on summary conviction to imprisonment for a term of not less than five years.
(3) For purposes of this section, an intermediary is someone who participates in or is concerned with any aspect of trafficking under this Act who may or may not be known to the family of the trafficked person.
(4) To be concerned with an aspect of trafficking in this Act means
(a) to send to, take to, consent to the taking to or to receive at any place any person for the purposes of trafficking, or
(b) To enter into an agreement whether written or oral, to subject any party to the agreement or subject any other person to trafficking.

Provision of Trafficked Person Prohibited
3. (1) A person who provides another person for purposes of trafficking commits an offence even where the person is a parent.
(2) A person who contravenes subsection (1) commits an offence and is liable on summary conviction to a term of imprisonment of not less than five years.

Use of Trafficked Persons Prohibited
4. A person who uses a trafficked person commits an offence and is liable on summary conviction to a term of imprisonment of not less than five years.

Conveyance in Trafficking
5. Means of conveyance in trafficking includes use of public transport and other forms of transport such as conveyance by land, water or air.

Duty to Inform
6. (1) A person with information about trafficking
(a) Shall inform the police, or
(b) May inform
(i) the Commission of Human Rights and Administrative Justice,
(ii) the Department of Social Welfare,
(iii) the Legal Aid Board, or
(iv) a reputable Civil Society Organisation.
(2) A person who fails to inform the police commits an offence and is liable on summary conviction to a fine of not less than two hundred and fifty penalty units or a term of imprisonment not less than twelve months or to both.

Special Mitigating Factors
7. Where a court in sentencing a person convicted under section 3 or 4 finds that there are special circumstances related to the offence or the offender, and that the imposition of the minimum sentence in respect of the offence is harsh, it may sentence the accused to a lesser term of imprisonment in addition to a fine of not less than five hundred penalty units.

Application
8. A person is liable to be tried and punished in Ghana for trafficking if the person does an act which if done within the jurisdiction of the courts in this country would have constituted the offence of trafficking.

APPENDIX 4.
ICE-BREAKERS (EXAMPLES)

Introductory ice breakers are used to introduce participants to each other and to facilitate conversation among the participants[27].

The Little Known Fact: Ask participants to share their name, role in the community/ farm/ their organization, length of service and one little known fact about themselves.

This "little known fact" becomes a humanizing element that can help break down differences in future interaction.

True or False: Ask your participants to introduce themselves and make three or four statements about themselves, one of which is false. Now get the rest of the group to vote on which fact is false.

As well as getting to know each other as individuals, this ice breaker helps to start interaction within the group.

Interviews: Ask participants to get into twos. Each person then interviews his or her partner for a set time while paired up. When the group reconvenes, each person introduces their interviewee to the rest of the group. Questions to be asked can be: name, profession, where do people come from, etc.

Problem Solvers: Ask participants to work in small groups. Create a simple problem scenario for them to work on in a short time. Once the group have analyzed the problem and prepared their feedback, ask each group in turn to present their analysis and solutions to the wider group.

27. http://www.mindtools.com/pages/article/newLDR_76.htm

APPENDIX 5.
FARM ACTIVITIES AND POSSIBLE HAZARDS TO CHILDREN

ACTIVITIES	ROLE OF CHILDREN	DANGERS/HAZARDS	PROTECTIVE · MEASURES IN PLACE	SUGGESTED PROTECTIVE MEASURES
(i) Clearing of land/ felling of trees	Cutting of trees, burning	Cutlass (machete) cuts, lack of boots, snake bites, burns, trapping by falling trees, cuts may result in tetanus, and thorn pricks		Introduction of new methods of land clearing, protective clothing, Wellington boots
(ii) Preparation of seedlings	Transporting seedlings to farm through head porterage	Carrying heavy loads over long distance, fungal infection		Use of power tillers to cart load
(iii) Planting of cocoa seedlings	Use of earth chisel for planting	Cuts from chisel, worm infestation, thorn pricks		Wear Wellington boots
(iv) Weeding of farm	Weeding	Cutlass cuts on legs & hands, insect & snake bites, cuts may result in tetanus		Wear Wellington boots
(v) Fertilizer application	Carrying, spreading of fertilizer	Corrosion of hands, chemical burns, allergic reactions		Wear hand gloves, training on fertilizer application, sensitization
(vi) Spraying with pesticides	Fetching water & assisting in mixing pesticides	Poisoning, long term health effects		Use trained spraying gangs. With proper personal protective equipment
(vii) Harvesting of pods	Plucking pods, gathering pods	Eye & head injuries from falling insect & snake bites, exhaustion, cuts may result in tetanus		Should be avoided by children, wear gloves, use less sharp tools

(viii) Breaking of pods /fermentation	Breaking pods, fermentation	Lacerations, cuts on hands		Children should be excluded, use leather gloves
(ix) Carting of beans for drying	Carrying on head	Neck & backbone ailments, exhaustion, deformities impairment of normal physical development		Reduce weight of load
(x) Drying of beans	Spreading beans, stirring	Pricks from palm fronds		Wear hand gloves, use rake for spreading
(xi) Bagging of beans	Collecting beans in to bags, sealing bags	Inhale dust, eye injuries, allergies from dust.		Use sunshade, respirators
(xii) Carting of beans for sale	Carrying load on head, walking long distances	Neck & backbone ailments, deformities, exhaustion, tiredness		Reduce weight of loads

APPENDIX 6.
CLIMATE CHANGE AND COCOA ARTICLES

Cocoa Industry must Adapt to Climate Change - Study

Source: Thomson Reuters Foundation - Fri, 30 Sep 2011 10:09 AM Author: George Fominyen
DAKAR (AlertNet) - Enjoying a bar of chocolate could become an expensive pleasure in years to come, say researchers who have been studying the impact of climate change on West Africa's cocoa-growing regions.

Half of the world's cocoa comes from the West African nations of Ivory Coast and Ghana. An expected temperature rise of more than two degrees Celsius by 2050 will render many of the region's cocoa-producing areas too hot for the plants that bear the fruit from which chocolate is made, says a new study from the Colombia-based International Centre for Tropical Agriculture (CIAT).

“What we are saying is that if we don't take any action, there won't be sufficient chocolate around in the future,” said Peter Läderach, the report's lead author.

The warmer conditions predicted by the researchers, based on 19 climate models, mean cocoa trees will struggle to get enough water during the growing season, curtailing the development of cocoa pods containing the prized cocoa bean - the key ingredient in chocolate production.

“The dry seasons will become more intense; it will get hotter and the plants will be affected,” Läderach told AlertNet on the phone from Nicaragua.

By 2050, a rise in temperature of 2.3 degrees Celsius will drastically affect production in lowland regions, including the major cocoa-producing areas of Moyen-Comoe, Sud-Comoe and Agneby in Ivory Coast, and Western and Brong Ahafo in Ghana, the report predicts.

Ideal cocoa-growing areas will shift to higher altitudes to compensate for the rise in temperatures. The search for new cocoa-producing sites could fuel the clearing of forests, protected areas and important habitats for flora and fauna, the report warns.

NEW VARIETIES, TECHNIQUES NEEDED
Cocoa farmers and exporters, the cocoa industry and consumers of products derived from cocoa will all feel the impact of these changes if action to adapt is not taken now, Läderach said.
Farmers are particularly vulnerable since cocoa production is often their primary source of

income. They sell the pods to raise cash for basic services like school fees or medical expenses.

Läderach said plant scientists must breed new crop varieties adapted to the warmer conditions associated with climate change, and farmers should develop new crop management techniques to survive the coming climate shifts.

They could grow their cocoa plants under the shade of bigger forest trees, which would help keep them cool, for example.

“They would also need to have irrigation systems if places get too dry, and should consider alternative cash crops that could match the climatic conditions,” Läderach added.
The researchers hope the study, commissioned by the Bill and Melinda Gates Foundation, will help decision makers, governments, farmers, exporters and cocoa businesses take steps to tackle the situation.

“Cocoa prices have been on the rise in the past year,” said Läderach. “If there is less cocoa available, they are going to continue to rise - which means the industry will have to make decisions that could cause chocolate prices to increase.”
http://www.trust.org/item/20110930100900-k08ny/

Ghana's Cocoa Production to Decline in 20 years
By: Masahudu Ankiilu Kunateh

Ghana, which is on track to achieve its one million metric tonnes of cocoa target in the last quarter of the year, will face some gloomy days ahead.
According to climate scientists at the Colombia-based International Centre for Tropical Agriculture (CIAT), expected increasing temperatures will lead to massive declines in cocoa production by 2030 in Ghana and Cote d'Ivoire, both in West Africa.

The CIAT's new report being contracted with the Bill and Melinda Gates Foundation (BMGF) to “Predict the impact of climate change on the cocoa-, cashew- and cotton-growing regions in Ghana and Cote d'Ivoire”, observed that “More than half of the world's chocolate comes from the cocoa plantations of Ghana and Côte d'Ivoire, where hundreds of thousands of smallholder farmers supply lucrative fair-trade markets in developed countries”.
The report –the first of its kind into the likely effects of climate change on cocoa production in the region -anticipated that areas of cocoa suitability will begin to decline by 2030, as average temperatures increase by one degree Celsius.

It also disclosed that an expected annual temperature rise of more than two degrees Celsius by 2050 will leave Ghana and many of West Africa's cocoa-producing areas too hot for chocolate.
Warmer conditions mean the heat-sensitive cocoa trees will struggle to get enough water during the growing season, curtailing the development of cocoa pods, containing the prized cocoa bean –the key ingredient in chocolate production, the report added.
While cocoa trees are also expected to struggle as the region's dry season becomes increasingly intense, saying “by 2050, a rise of 2.3 degrees celsius will drastically affect production in lowland regions, including Western and Brong Ahafo”.
The analyses of the report were conducted by the Decision and Policy Analyses (DAPA) program at the CIAT under the leadership of Dr. Peter Läderach, with the collaboration of Anton Eitzinger, Armando Martínez and Narioski Castro.

The compilation of the ground data has been facilitated through Agro Eco – Louis Bolk Institute in Ghana.

The objectives of this study were: to determine which environmental variables drive the climate suitability of an area to grow cocoa; to predict the change in climate for the cocoa-growing areas in Ghana and Côte d'Ivoire; and to predict the impact of progressive climate change on the suitability of the current growing area in Ghana and Côte d'Ivoire to continue producing cocoa.

Statistics from the International Cocoa Organisation (ICCO), in 2008/2009 world cocoa production was aboutUS$9 billion. Ivory Coast, the world's leading producer of cocoa with 2.4 Mha under cocoa, and Ghana, the second after Ivory Coast (1.5 Mha) between them produce 53% of the world's cocoa.

Ghana produces high-quality cocoa that earns a premium price on the world market. Cocoa is an important cash crop in countries, contributing 7.5% of GDP in Côte d'Ivoire and 3.4% in Ghana in 2008. It accounts for 70-100% of household incomes of cocoa farmers in Ghana.
Any impact of climate change on the suitability to grow cocoa in West Africa wills not only affect farmers' livelihoods and incomes, but the national economies as well. Half of the cocoa in Ghana and Côte d'Ivoire is grown under low shade, which is a sustainable land use practice with ecological, biological and economics benefits.

However, the Ghana Cocoa Board (COCOBOD) downplayed the report, saying climate change has serious consequences on all sectors of the Ghanaian economy and not only the cocoa sector. COCOBOD has put in place measures to mitigate the impact of climate change on cocoa production in the country.

Short URL: http://thechronicle.com.gh/?p=35080

APPENDIX 7.
COCOBOD LIST OF APPROVED CHEMICALS

PESTICIDES	QTY	CURRENCY	FOREIGN CURRENCY			LOCAL CURRENCY		
Fungicides for Blackpod Areas	(kg)		UNIT PRICE		AMOUNT	UNIT PRICE		GH¢
CHAMPION	66,000	USD	12.50	-	825,000.00	20.00	-	1,320,000.00
METALM	52,860	EURO	21.95	-	1,156,326.00	49.36	-	2,600,577.17
NORDOX	185,230	NOK	118.50	-	2,149,755.00	33.14	-	6,139,346.47
FUNGURAN	281,520	EURO	9.97	-	2,149,754.40	22.42	-	6,312,390.64
RIDOMIL GOLD	648,220	EURO	31.50	-	20,418,930.00	70.85	-	45,922,173.57
KOCIDW	152,910	USD	10.95	-	1,674,364.50	17.52	-	2,678,983.20
FUNGIKILL	61,080	EURO	22.40	-	1,368,192.00	50.38	-	3,077,063.80
AGROCOMET	40,560	USD	28.25	-	1,145,8200.00	45.20	-	1,833,312.00
Sub-Total	**1,488,200**							**69,888,846.85**
Fungicides for Capsid Areas								
RIDOMIL GOLD	226,000	USD	31.50	-	7,119,000.00	50.40	-	11,390,400.00
NORDOX	211,000	NOK	118.50	-	25,003,500.00	33.14	-	6,993,478.95
Sub-Total	437,000							18,383,678.95
TOTAL FUNGICIDES	**1,925,200**							**88,267,525.80**
Insecticides for Capsid Areas	(LITRES)							
AKATE MASTER	1,046,520	USD	23.94	-	25,053,688.30	38.30	-	40,085,902.08
CONFIDOR	335,088	EURO	56.75	-	19,016,244.00	127.63	-	42,767,532.75
ACTARA	99,601	USD	137.95	-	13,739,957.95	220.72	-	21,767,532.75
Sub-Total	**1,481,209**							**104,837,367.55**
Insecticides for Blackpod Areas	(LITRES)							
CONFIDOR	478,080	EURO	56.75	-	27,131,040.00	127.63	-	61,017,708.96
Sub-Total	478,080							61,017,708.96
TOTAL INSECTICIDES	**1,959,289**							**165,855,076.51**

USD 1 = GH¢1.60 £ **1 = GHC2.249** **NOK 1 = GH¢0.2797**

Provisional List of Banned Chemicals in Ghana

Name	Active Ingredient	Reason for Ban
Aldrex T	Aldrin and Parathion	persistent, highly toxic
Aldrex T	Aldrin and Parathion	persistent, highly toxic
Aldrin	Aldrin	persistent
Dieldrin	Dieldrin	persistent
E-605 Combi	Parathion	highly toxic
Parathion Methyl	Parathion Methyl	highly toxic
Heptachlor C10	Heptachlor	not in use
DDT	Dichloro-Diphenyl-Trichloro-Ethane	safer alternatives
EDIB	EthylenDibromide	highly toxic
D-D	Dichloropropane	banned internationally

Source: Pesticides Use and Policies in Ghana (MoFA)

Provisional List of Severely-Banned Chemicals

Product Name	Active Ingredient
Azodrin	Monocrotophos
Unden	Propoxur
Lindane	Gamma BHC
Elocron	Dioxacarb
Gramaxone	Paraquat
Furadan	Carbofuran
Thiodan	Endosulfan
Atrazine	Atrazine

Source: Pesticides Use and Policies in Ghana (MoFA)

APPENDIX 8.
ENERGIZERS (EXAMPLES)

“Energizers” are fun and short exercises you may want to do at any time during your training session to re-energize or “wake up” your group. These are very useful after long theoretical sessions when people seem to be dozing off or after meals. Try to make them as “physical” as possible, that is, make people actually move and stretch up their bodies.

Here are some examples:

The Wave
Form a straight line with people standing behind each other. The leader starts off making an arm motion and the group members follow one at a time immediately following each other to make a wave. See how fast you can go. The leader can change the motion and the pattern of the wave.

The Ball Competition
Get some paper and wrap it up in the form of a ball (1 per group). Split your group into two and tell each group to pass the ball in the quickest time possible among each group (all members of each group need to 'touch” the ball). Time the exercise. Put pressure on the groups by saying that in other trainings, groups managed to pass on the ball in half the time and that they have to do much better, etc. Repeat the rounds as many times as convenient.

Local song or game
See if anyone in the group can help you energize everyone using a local song or game. This can work very well especially if the song or game involves standing up, moving arms and legs, etc

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