



CAMEROON BIOSECURITY PROJECT

Development and Institution of a National Monitoring and Control System (Framework) for Living Modified Organisms (LMOs) and Invasive Alien Species (IAS)

COURSE NOTES ON COMMODITY AUDIT SYSTEMS FOR COMPLIANCE WITH RISK ASSESSMENT PROFILES IN CAMEROON

These course notes have been produced with the support of UNEP/GEF and the Government of Cameroon via the Ministry of Environment, Protection of Nature and Sustainable Development.

Under the Supervision of:

Project Component 3 Taskforce (MINESUP)

&

The Biosecurity Project Coordination Unit (MINEPDED)



June 2017

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Acronyms and Abbreviations

ANAFOR	Agence Nationale d'Appui au Développement forestier
BSL	Biological Safety Levels
BRM	Biological risk management
CAMPOST	Cameroon Postal Services
CBD	Convention on Biological Diversity
CBP	Cameroon Biosecurity Project
CDC	Centers for Disease Control
CIFOR	Center for International Forestry Research
Codex	Codex Alimentarius
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
GIZ	Gesellschaft für Internationale Zusammenarbeit
GMO	Genetically Modified Organisms
IAS	Invasive Alien Species
ICRAF	World Agroforestry Centre
IITA	International Institute of Tropical Agriculture
IPPC	International Plant Protection Convention
IRAD	Institut de Recherche Agricole pour le Développement
ISPM	International Standards for Phytosanitary Measures
LANAVET	Laboratoire National Vétérinaire
LMOs	Living Modified Organisms
LNSP	Laboratoire National de Santé Publique
MINADER	Ministry of Agriculture and Rural Development
MINEPAT	Ministry of Economy, Planning and Regional Development
MINEPDED	Ministry of Environment, Protection of Nature and Sustainable Development
MINEPIA	Ministry of Livestock, Fisheries and Animal Industries
MINESUP	Ministry of Higher Education
MINFI	Ministry of Finance
MINRESI	Ministry of Scientific Research and Innovation
MINTRANSPORT	Ministry of Transport

OIE	World Organization for Animal Health
PIP	Procedure for Importation of Plant
PRA	Pest Risk Analysis
RA	Risk Analysis
RM	Risk Management
SGS	Société Générale de Surveillance
SNV	Netherlands Development Organization
ToR	Terms of Reference
ToT	Training of Trainers
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UPU	Universal Postal Union
WCO	World Customs Organization
WHO	World Health Organization
WTO	World Trade Organization
WWF	World Wildlife Fund

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Preferred way to cite this publication

The preferred way to cite publication should be as follows:

MINEPDED, (2017), Course notes on Commodity Audit Systems for Compliance with Risk Assessment Profiles. Course notes submitted to MINEPDED under the UNEP/GEF Cameroon Biosecurity Project: Development and Institution of a National Monitoring and Control System (Framework) for Living Modified Organisms (LMOs) and Invasive Alien Species (IAS). Yaoundé, Cameroon.

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Acknowledgements

This national training was conducted as part of UNEP/GEF Project number: GFL/3651 titled “Development and Institution of a National Monitoring and Control System (Framework) For Living Modified Organisms (LMOs) and Invasive Alien Species (IAS)”, known as The Cameroon Biosecurity Project. The Ministry of Environment, Protection of Nature and Sustainable Development (MINEPDED) is the Project National Executing Agency. This training course notes have been prepared for MINEPDED.

The authors also acknowledge the funding support of the Global Environment Facility (GEF), the technical and supervisory support of the Ministry of Environment, Protection of Nature and Sustainable Development (MINEPDED), the Ministry of Higher Education (MINESUP) and the United Nations Environment Programme (UNEP).

The authors are grateful for the considerable assistance given in the undertaking of this assignment. This includes those whose names have not been mentioned but who played a fundamental role in the development of these course notes.

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Executive Summary

This activity is being executed under the Cameroon Biosecurity Project (Development and Institution of a National Monitoring and Control System (Framework) for Living Modified Organisms (LMOs) and Invasive Alien Species (IAS)), which aims to increase the capacity of stakeholders to prevent and control the introduction, establishment and spread of IAS and management of LMOs in Cameroon through the implementation of a risk-based decision making process.

The main objective of this course is to train government departments and stakeholders involved in border controls on Commodity Audit Systems for Compliance with Risk Assessment Profiles in Cameroon. This is absolutely important because there is insufficient capacity for risk-based approach to biodiversity management resulting in low levels of awareness amongst key stakeholders given that no training has ever been given to them as such. In addition, this has resulted in acute lack of information flow to management.

These course notes are designed from a purely Cameroonian context and contain nine modules elaborated to provide illustrative examples from our environment, Africa and the world. Group exercises and self-assessment activities will spice the training. Prior to the training, several samples of invasive plants species from around should be put in display to be there throughout the training period for the participants to appropriate. This will surely constitute an eye opener for those who are not versed with them to easily identify them during the fieldtrip and appreciate their invasiveness. Maps and photos of entry/transit points or laboratories and other related centres may also be displayed.

Since the participants are a cocktail of indiscriminate mix of men and women, from the MINEPDEP, MINFOF, MINPAT, MINFI, CUSTOMS SERVICES, MINAGRI etc. who have never been trained on commodity audit system and the majority of them may not speak English/French presentation should be made either in English or French and discussions in either of the languages. The training course cycles around 9 modules distributed unequally throughout the three days.

The course will be made of nine (09) modules structured as follow:

Module 1: Basic principles of risk analysis/management and commodity audit systems.

Here a general background to risk analysis will be laid including basic concepts. It is expected that at the end of this session, participants will be able to: a) define and understand the concept of Biosecurity, Biosafety and Commodity Audit systems, b) relate the national and international agreements and legislation for Biosecurity and c) developed an understanding of the Risk Analysis process.

Module 2: An overview of the commodity audit process-audit requirements from production area to post-entry.

It aims at letting stakeholders have an overview of the commodity audit process-audit requirements from production area to post-entry i.e. an overview of the commodity audit process-audit requirements from production area to post-entry. By the end of this module, trainees should be able to understand the broad principles and practice of commodity system audits; specifically to outline the goals and basic principles, steps and points of IAS and LMO management.

Module 3: Biological risk management (BRM) measures and audit requirements: In production areas.

It exposes the participants to the potential sources for BRM, transmission routes and mechanisms to prevent introduction at production and minimizes the mechanisms of the spread if there is already. By the end of the module, trainees should be able to know the a) potential sources for BRM, b) transmission routes, c) mechanisms to prevent introduction (External BRM) and d) mechanisms to minimize the spread of what is already present within an operation (Internal BRM).

Module 4: Biological Risk Management (BRM) measures and audit requirements: In post-harvest situations.

This module gears towards understanding of the measures and audit requirements in post-harvest situations regarding Biological Risk Management (BRM). At the end of this session trainees should understand the principles of BRM at ports of entry and exit as prevention, early detection and rapid response, control, management, education and Public awareness for compliance measures of CAS that already exist and identify new gaps for biosecurity risk.

Module 5: Biological risk management (BRM) measures and audit requirements: In Transit.

This module aims at exposing the participants to the potential sources for BRM, transmission routes and mechanisms to prevent introduction at production sites and the mechanisms to minimize spread if there is already introduction. At the end of the module, participants are expected to a) understand the principles of BRM in postharvest situations/ sites including processing, storage and certification and b) identify measures for consideration at each step of a post-harvest CAS.

Modules 6 & 7 Biological risk management measures and audit requirements in production areas – transport: Point of entry and Post Entry.

These two modules treated together for easy comprehension expose the participants to the compliance measures of CAS for pre-entry and follow up post entry. The traceability of LMOs describes a system that ensures the forwarding of the identity from production to the final user which is an essential prerequisite for the co-existence of LMOs and non-LMOs foods and for the freedom of choice for consumers. At the end of the modules trainees will be able to: a) understand the need to trace origin and follow up on destination of LMOs and IAS to ensure biosecurity and b) outline the processes for pre and post-entry and identify areas for improvement.

Module 8: Introduction Pathways Management.

This module exposes the participants to the introduction pathways management in Cameroon – institutions and capacities. Furthermore to provide indications of International institutions, organisations and networks that can assist Cameroon in the CAS as in Module 9. At the end of the session, participants should be having enough knowledge of the CBD toolkit for IAS and to demonstrate with examples international pathway categories and management options.

Module 9: International institutions, organizations and networks that can assist Cameroon in the commodity audit process.

This is a purely and strictly participatory and interactive brainstorming module that make the participants cough out names of international institutions, organizations and networks that can assist Cameroon in the commodity audit process. It is to test the participants on their knowledge of the national and international organizations that can assist Cameroon in the commodity audit process. At the end of the module trainees are expected to be able to name International

institutions, organizations and networks that can assist Cameroon in the commodity audit process.

The course is also developed in view of the fact that the level of education, specialization of the participants, language and their working backgrounds might not be the same. These assisted in designing the methodology to be used, including the consideration of both the objectives to be attained, resolving on a highly participatory and practical approach, built on the simple principle of learning by doing punctuated by an enriching field trip wherever it will be replicated in future. Accordingly, throughout the workshop, trainees are engaged in group discussions, question-answer sessions, practical drills (songs, dance, and physical exercises), use of illustrative figures on some species, field work for better understanding, etc. and this will surely generate a very high degree of excitement, commitment and satisfaction resulting in consensus on lessons learnt and recommendations.

Before the workshop proper, the participants undertake a Pre-workshop evaluation on the importance of competence raising and their expectations from the training. At the end of the training; they are expected to take a post workshop evaluation test.

Due to the short time allocated for the training, PowerPoint projection has been proposed as the main media to facilitate the task. At the end of each module, participants should be able to understand the background, basic concepts, objectives, learning outcomes, importance of the module for Biosecurity Risk assessments to Cameroon. To spice the training, it is important that a mid-session field trip be organized either to the entry points, transit and the participants see for themselves control measures at each level or where they don't exist they should be organized in the field where they are given the opportunity to see and compare organisms that have been genetically modified with the local breed and also IAS and determine their invasiveness.

Résumé Exécutif

Cette activité est en cours d'exécution dans le cadre du Projet de Biosécurité du Cameroun (Développement et établissement d'un système national de surveillance et de contrôle (Cadre) pour les Organismes Vivants Modifiés (OVM) et les Espèces Exotiques Envahissantes (EEE)), qui vise à renforcer la capacité des autorités compétentes à prévenir et à contrôler l'introduction, l'établissement et la propagation des EEE et à la gestion des OVM au Cameroun; par la mise en œuvre d'un processus de prise de décision axée sur les risques.

L'objectif principal de ce cours est de former les Départements ministériels et ceux/celles (corps de métier/personnes) impliquées dans le contrôle au niveau des points d'introduction (frontières) des Systèmes d'audit des denrées pour la conformité des profils d'évaluation des risques (Activité -3.1.9) au Cameroun. Ceci est très important parce qu'il existe une insuffisante connaissance sur une approche axée sur le risque de la gestion de la biodiversité, ce qui entraîne une faible sensibilisation des acteurs clés, étant donné qu'aucune telle formation ne leur avait jamais été donnée. En plus, ceci a abouti à une kyrielle d'information sur la gestion.

Ce cours de formation est conçu à partir des exemples illustratifs du Cameroun, de l'Afrique et du monde. Les exercices de groupe et les activités d'auto-évaluation agrémenteront la formation. Avant la formation, plusieurs échantillons d'espèces de plantes envahissantes récoltés des alentours seront exposés dans la salle de formation tout au long de la période de formation pour que les apprenants se l'approprient. Ces échantillons constitueront sûrement un outil pratique pour ceux qui n'en étaient pas familiers ainsi, pourrons aisément les identifier pendant la sortie de terrain et donc apprécieront leur invasivité. Les cartes et photos des points d'entrée/transite ou des laboratoires et autres centres appropriés pourraient aussi être exposées.

Étant donné que les participants sont un ensemble d'hommes et de femmes venus du MINEPDEP, du MINFOF, du MINPAT, du MINFI, des Services Douaniers, du MINAGRI, etc. qui n'ont jamais été formés sur le système d'audit des produits et que la majorité d'entre eux pourraient ne pas parler l'Anglais/Français; la formation sera faite en Anglais ou en Français et les discussions dans l'une des deux langues. La formation se fera autour de 9 modules repartis inégalement pendant les trois jours.

Le cours est structuré en neuf (09) modules de base, à savoir:

Module 1: Principes de base de l'analyse/gestion des risques et des systèmes d'audit de denrées.

Dans ce module, un aperçu général de l'analyse des risques sera fait, y compris les concepts de base. On s'attend à ce que, à la fin de cette session, les participants puissent: a) définir et avoir une bonne compréhension du concept de biosécurité et du système d'audit des denrées, b) connaître les accords et la législation nationaux et internationaux en matière de biosécurité et c) avoir une bonne compréhension du processus d'analyse des risques.

Module 2: Vue d'ensemble du processus d'audit des produits - nécessités d'audit de la zone de production à avant le point d'entrée.

Il vise à permettre aux autorités compétentes d'avoir une vue d'ensemble du processus d'audit des produits - les exigences d'audit de la zone de production à avant le point d'entrée. À la fin de ce module, les participants devraient pouvoir comprendre les principes généraux et la pratique du système d'audits des produits. Plus spécifiquement, ressortir les objectifs et les principes de base, les étapes et les points de gestion des EEE et des OVM.

Module 3: Mesures de gestion du risque biologique (GRB) et nécessités d'audit: dans les zones de production.

Il expose les participants aux potentielles sources de GRB, de voies de transmission et de mécanismes pour empêcher l'introduction dans la zone de production et minimiser les mécanismes de propagation s'il existe déjà. À la fin du module, les participants devraient pouvoir connaître: a) les potentielles sources de la GRB, b) les voies de transmission, c) les mécanismes pour empêcher l'introduction (GRB externe) et d) les mécanismes pour minimiser la propagation de ce qui est déjà présent dans une zone (GRB interne).

Module 4: Mesures de gestion du risque biologique (GRB) et nécessités d'audit: dans les situations post-récolte.

Ce module vise à faire comprendre les mesures et les exigences de d'audit dans les situations post-récolte concernant la gestion des risques biologiques (GRB). À la fin de cette session, les participants devraient maîtriser les principes de prévention de GRB aux ports d'entrée et de sortie, de détection précoce et de réaction rapide, du contrôle et de la gestion, de l'éducation et

de la sensibilisation du public. Accentuer la sensibilisation aux mesures de conformité pour la CAS qui existe déjà et identifier de nouvelles lacunes en matière de risque de biosécurité.

Module 5: Mesures de gestion du risque biologique (GRB) et nécessités d'audit: En transit.

Ce module vise à exposer les participants aux sources potentielles de GRB, aux voies de transmission et aux mécanismes permettant de prévenir l'introduction dans les sites de production et les mécanismes permettant de minimiser la propagation s'il existe déjà une introduction. À la fin du module, les participants devraient: a) maîtriser les principes de GRB dans les situations post-récolte, y compris le traitement, le stockage et la certification; b) identifier les mesures à prendre en considération à chaque étape d'une CAS post-récolte.

Modules 6 et 7: Mesures de gestion du risque biologique et nécessités d'audit dans les zones de production - transport: point d'entrée et post-entrée.

Ces deux modules sont traités ensemble pour une meilleure compréhension, exposant les participants aux mesures de conformité de CAS pour la pré-entrée et le suivi à l'entrée. La traçabilité des OVM est un système qui assure la transmission de l'identité de la production à l'utilisateur final, ce qui est une condition préalable essentielle à la coexistence des aliments VM et non VM et à la liberté de choix pour les consommateurs. À la fin des modules, les participants pourront: a) connaître la nécessité de tracer et suivre les OVM et les EEE de l'origine à leur destination finale pour assurer la biosécurité et b) décrire les processus de pré et post-entrée et identifier les domaines à améliorer.

Module 8: Introduction de la Gestion des voies.

Ce module expose les participants à la gestion des voies d'introduction au Cameroun, les institutions et les compétences. En outre, ce module permet de fournir des indications sur les institutions internationales, les organisations et les réseaux qui peuvent aider le Cameroun dans la CAS comme indiqué dans le module 9. À la fin de la session, les participants devraient avoir suffisamment de connaissance des différents outils de la CDB pour les EEE et démontrer avec des exemples à l'appui les différentes voies internationales et les options de gestion.

Module 9: Institutions, organisations et réseaux internationaux qui peuvent aider le Cameroun dans le processus d'audit des produits.

Ce module est un remue-méninge purement et strictement participatif et interactif, qui permet aux participants de citer les institutions internationales, les organisations et les réseaux qui peuvent aider le Cameroun dans le processus d'audit des produits. C'est pour tester les participants sur leur connaissance des organisations nationales et internationales qui peuvent aider le Cameroun dans le processus d'audit des produits qui doivent ou ne doivent pas entrer dans le Pays. À la fin du module, on s'attend à ce que les participants puissent citer ces institutions, ces organisations et ces réseaux internationaux qui peuvent ainsi aider le Cameroun dans ce processus.

Le cours est également préparé en tenant compte du fait que le niveau d'éducation des participants, leurs spécialisations, leur langue d'éducation et leurs background de travail pourraient ne pas être les mêmes. Ces différents points ont aidé à concevoir une méthodologie de la formation, prenant en compte les deux objectifs à atteindre. Ce qui a permis d'opter pour une approche hautement participative et pratique, fondée sur le principe simple de l'apprentissage par la pratique ponctuée par une excursion enrichissante qui pourrait être refaite à l'avenir. Tout au long de l'atelier, les participants sont repartis dans des travaux de groupe, des séances de questions-réponses, des exercices pratiques (chansons, danse et exercices physiques). L'utilisation des illustrations pour certaines espèces et le travail sur le terrain a permis une meilleure compréhension. Ceci a permis de générer un très haut degré de participation, d'engagement et de satisfaction qui aboutit à un consensus sur les leçons apprises et les recommandations.

Avant la formation proprement dite, les participants subissent une pré-évaluation sur l'importance de la vérification de compétences et leurs attentes de la formation. A la fin de la formation, ils devraient passer un test de post-évaluation.

En raison du peu de temps imparti à la formation, la projection en PowerPoint a été proposée pour dispenser les enseignements. À la fin de chaque module, les participants devraient pouvoir maîtriser le background, les concepts de base, les objectifs et l'importance du module d'évaluation des risques de biosécurité au Cameroun. Pour agrémenter la formation, il serait important qu'en mi-formation, une sortie de terrain soit organisée aux points d'entrée et point de transit pour que les participants voient les mesures de contrôles à chaque niveau et où il n'existe pas, qu'ils soient organisée une descente sur le terrain (laboratoires/Zoo/Champs) pour

qu'ils aient l'opportunité de toucher du doigt les organismes génétiquement modifiés et les espèces exotiques envahissantes pour pouvoir mesurer leur invasivité.