# Guidance Material on

Auditing the Government's Management of Natural Resource and the Related Impacts on the Environment for Forest (including deforestation).

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# **Project Objective:**

In many countries, the improper or unsustainable exploitation of natural resources, including forests, minerals, and fisheries, can cause significant environmental degradation, social disruption and economic loss. Adoption of best management practices and effective government oversight of natural resource development is therefore important. This guidance will focus on forestry sector – and will cover a range of management and public policy tools used by governments (from physical planning to management plans to international environmental agreements).

The main goal of this project is to expand the number and breadth of environmental auditing guidance materials available to SAIs specifically in the forestry sector. In this guidance, SAI can find a lot of information with their respective sources, benchmarking and best practicing activities and/or criteria/standard in the forestry sector, and various forestry audit methodologies and procedures.

This guidance material is developed based on general aspects of sustainable forest management processes that can be used as guidance in auditing government management of forest. Furthermore, this guidance also can be used as guidance if SAIs want to audit only some aspects of government management (not entire aspects) in forestry based on the risk assessment.

# **Project Scope:**

Because of the variation of the forest types, characteristics and conditions in every country (SAI), the guidance will cover almost all aspects of government's management on forestry starting from policy and legislation to socio-economic and financial aspects, the risks (threats) in each aspect, and how SAI prioritizing its audit using risk based audit methodology.

The topics and related sub topics are described as follows:

a. Topic : Policy and Legislation

Related Sub Topics:

- 1) Forest Policy
- 2) National Forest Inventory
- 3) Permanent Forest Estate
- 4) Forest Ownership
- 5) National Forest Services
- b. Forest Management

Related Sub Topics:

- 1) Planning
- 2) Harvesting

- 3) Protection
- 4) Legal Arrangements
- 5) Monitoring and Research
- c. Socio-Economic , Financial, and Environmental Aspects

**Related Sub Topics:** 

- 1) Relations with Local Populations
- 2) Economics, Incentives and Taxation

The guidance will cover the above topic and sub topics by explaining and determining their respective risks and or threats. The risks and or threats will be based on associated economy, social and environmental issues, unsustainable development practices and others. For example, the issue about illegal logging will be considered as risks and or threats in the sub topic: planning, harvesting and protection (refers to design audit matrix in the appendix of the outline of the guidance material).

## Planned Methodology and Participants:

- 1. The work will be undertaken with the following arrangement :
  - a. The Role of Team Leader and Sub Committees:
    - a) The role of team leader:
      - To coordinate draft-writing and based on these drafts to write final paper.
      - Provide a clear sense of direction and keep the project focused and on track.
      - Take initiative and make suggestions where necessary.
      - Facilitate consensus decisions between SAI.
      - Maintain communication with and foster communication.
      - Lead the writing of selected project documents, including the Memorandum of Agreement, work plans and progress reports.
    - b) The role of sub committees:
      - To write the draft of agreed chapter(s). Each member can identify topics (step 4 from draft) or other issues where the SAI has more experience. For example, SAI of Estonia could share the knowledge and experience in auditing the activities of state owned forest management company.
      - To provide input and example for specific aspects of the guidance. For example, the sub committee member can give their respective audit experiences and cases.
  - b. The systematic of the guidance material
    - a) Best Practices and Benchmarks

The guidance will explain every aspect of the forest with additional information that can broaden users' knowledge and skill. The guidance will include best practices and benchmarks in auditing the forest. Using this arrangement, the users can easily implement the guidance in their audit.

b) Using Technology

This guidance also will explain the possibility using technology in conducting the audit. The guidance will describe the use of Global Positioning System (GPS) and Geographical Information System (GIS) in planning and executing the forest audit (Appendix 2 and 3).

c) Keeping the guidance simple but comprehensive

Even though the guidance covers many aspects in forestry, it will be kept simple by focusing only on the important and significant aspects.

## 2. The list of sub committees and contact persons :

The sub committees (and the contact persons) of this project are as follows:

No	Country	Contact Person(s)				
1	Indonesia	Mr. Edward Simanjuntak				
	(team leader)	edward.simanjuntak@bpk.go.id				
		Ms. Dewi Sukmawati				
		dewi.sukmawati@bpk.go.id				
		Mrs. Juska M. Sjam				
		juska.sjam@bpk.go.id				
2	Bahamas	Mrs. Cynthia Rolle				
		cynthiarolle@bahamas.gov.bs				
		Telephone No. 242-356-3080				
		Fax No. 242-322-6420.				
3	Bhutan	Mr.Ugen Chewang				
		bhutanaudit@bhutanaudit.gov.bt,				
		auditorgeneral@bhutanaudit.gov.bt,				
		Mr. Choida Jamtsho				
		cjamtsho@bhutanaudit.gov.bt				
4	Brazil	Mr.Walton Alencar Rodrigues				
		arint@tcu.gov.br				
		Mr. Ismar Barbarosa Cruz				
		ismarbc@tcu.gov.br				
5	Cameroon	Mr. BELINGA Jean Protais				
		belinga_protais@yahoo.fr				
		Telephone No. 237 77 69 96 69				
		Fax No. 237 22 23 44 03				
6	Estonia	Ms. Tuuli Rasso				
		tuuli.rasso@riigikontroll.ee				
		Mr. Rainer Kuuba				
		rainer.kuuba@riiqikontroll.ee				
7	Ethiopia	ofag@ethionet.et , ofagit@ethionet.et				
8	Kenya	Mrs. Florence Kiriinya				
		Mrs. Mercy Muasya				

No	Country	Contact Person(s)			
		cag@kenyaweb.com			
9	Lesotho	Mrs. Mamahooana Leisanyane			
		mamahooanal@yahoo.co.uk			
		Telephone No. +266 58863425 OR +266 22317625			
		Fax No. +266 22310366			
10	Malaysia	Mr. Zaaba Zainuddin			
		zaaba@audit.gov.my			
11	Mexico	Dr. Fidel Roberto Rivera Lugo			
		frrivera@asf.gob.mx			
12	South Africa	Mr. Louis Heunis			
		louish@aqsa.co.za			
13	Uganda	Dr. Fixon Okonye Akonya			
		fixonokonye@yahoo.com			
		Mrs. Nyapendi Kayemba Keto			
		kketo_1999@yahoo.com			
14	Zimbabwe	Mrs M.Chiri			
		chiri@auditgen.gov.zw			
		Telephone No. 263-4-708241			
		Fax No. 263-4-728326/7			
		Mr. Gorden Kandoro			
		kandoro@auditgen.gov.zw			
		Mrs M. Chekumanyara			
		chekumanyara@auditgen.gov.zw			
		Telephone No. 263-4-729971-4;263-4-796311-4			
		Fax No. 263-4-728326/7			

## **Communication:**

Communication with sub-committee members of the Project will be conducted by:

- a. Email, Telephone and facsimile
- b. Side-meeting during the INTOSAI-WGEA Meetings

Project leader will carry out communication with WGEA secretariat through any possible means of communication such as e-mail, facsimile, telephone, and others.

# **Possible Final Output:**

## 1. Possible Final Output

The final output of this project will be a document published under the INTOSAI – WGEA in 2010 named Guidance Material on Auditing the Government's Management of Natural Resource and the Related Impacts on the Environment for Forest Sector.

The guidance materials will be published in English. It will be translated into other INTOSAI languages only if there are volunteers among the SAIs.

Stage	Action	Date
1	Respond to Project Plan Status # 1 (including the draft of	31 January 2008
	the outline)	, s
2	Revised draft of the outline and Project Plan Status # 2	Feb – 3 Mar 2008
3	Final Draft of Project Plan to Estonian Secretariat	17 Mar 2008
4	Receive comments from Steering Committees	Apr 2008
5	7 <sup>th</sup> Steering Committee meeting, Tallinn, Estonia	6-9 May 2008
	(review and approve Project Plan)	-
	Workshop session to discuss and divide writing parts for	
	the sub committee members who attend the meeting.	
6	Final version of the Project Plan	30 May 2008
7	Send the Final version of the Project Plan (and Project	9 June 2008
	Plan Status #3) to Sub Committee members and discuss	
	the role of the members in writing the project plan.	
8	Deadline of Draft-writing for sub-committees	31 October 2008
9	Draft of the Guidance Material to be sent to sub-	28 November 2008
	committees for comments	
10	12 <sup>th</sup> WGEA, Doha, Qatar	January 2009
	Workshop session to analyze draft-writings from	
	members and to decide further actions	
11	Draft of the Project to the Secretariat – preparation for	October 2009
	the translation process.	
12	8 <sup>th</sup> Steering Committee meeting, review and approve	December 2009
	the draft of the Project	
13	Final draft of the Project to the secretariat	Apr 2010
14	13 <sup>th</sup> WGEA meeting	June 2010
15	Final version of the Project – translation, editing, printing	September 2010
	etc.	
16	INCOSAI XX	15-20 November 2010

## 2. The time table (timelines) and key milestones

## 3. Possible Workshop

There are two workshops planned during the preparation of the guidance:

• 7<sup>th</sup> Steering Committee meeting, Tallinn, Estonia (review and approve Project Plan) on May 6-9, 2008.

The first Workshop session to discuss and divide writing parts.

• 12<sup>th</sup> WGEA, Doha, Qatar on January 2009.

Workshop session to analyze draft-writings from sub-committees and to decide further actions.

# **FINAL OUTPUT**

Guidance Material on Auditing the Government's Management of Natural Resource and the Related Impacts on the Environment for Forest (including deforestation).

## **Executive Summary**

The executive summary will shortly describe the content of the guidance and explicitly explain how the readers use the guidance. In the executive summary, the readers will find the following aspects:

- a. The background of the guidance including the sub committee members, the goal of the guidance and the target of the guidance.
- b. The short version of chapter 1 to 4.

## Chapter I

## Introduction

The contents of this part are:

- a. a brief explanation about forest, the importance of forest (foreign exchange, jobs and environment), the reason for people to sustain the forest and the impact of unsustainable management of the forest. This part will also explain the link with forest as an ecosystem that provides multiples services: biodiversity, medicine, regulator of climate, etc.
- b. The role of government in ensuring the sustainability of the forest
- c. The role of SAI in assessing the government's forest management
- d. International awareness of forest :
  - Forests for local, national, and regional economy
  - Deforestation, forest fire, degradation, illegal logging and global warming
  - Forest and poverty
- e. A brief explanation about the structure of the document

## Chapter 2

## Forestry

This chapter will contain the following aspects:

a. Definitions, characteristics and types of forest.

This part will describe the definition and characteristic of forests in the world. There is a possibility that

the definition and the types of the forest might be varied for some countries, therefore, the guidance will not only include the best practice definition and types of forest but also country's definitions and types (sub committee members will be asked to share their country respective condition/information). For characteristic of the forest, the guidance will describe the best practice characteristic of the forest or use the characteristic developed by FAO or other well-known international forestry organizations. Similarly, the guidance will also include the specific characteristics in each sub committee member country (if any).

b. The function and usage of forest (based on the characteristic and country)

This sub topic will discuss the function and usage of the forest according to FAO or similar international forestry organizations (as best practices). To broaden user" perspectives, it will also include the sub committee members national function and usage (as benchmarking).

c. International Forest Initiatives

This part will list and describe the main substance of the international forest initiatives for example Forest Law Enforcement and Governance (FLEG), forest certification, voluntary Partnership Agreement (VPA), etc.

d. International environmental agreement

This part will list and describe the international environment agreements (including the regional and/or bilateral environmental agreements) related to forest based on the characteristic of the forest (the website included).

## Chapter 3

## Sustainable Forest Management (SFM)

This chapter will describe SFM and their respective foreseen risk (threat), internal control (ways to mitigate and avoid the destruction of the forest)

a. Sustainable Forest Management

This part will explain the best practices definition about SFM and its process (using ITTO Process of SFM and other sources), including:.

- 1) Description of sustainable development in forestry (including definition)
- 2) The characteristic of sustainable development in forestry/SFM.
- 3) The relationship between sustainable development in forestry /SFM and the economic, social and environment aspects of forest management.
- 4) The key players.
- 5) Unsustainable development in forestry /SFM issue(s)
- 6) Importance of sustainability in forestry and the interaction between economics, social and environmental benefits.

This part will describe the importance of the forest at least in three aspects: economic, social and environment.

b.	The Sc	ope of SF	-M and Related Risks(Threats)				
	This part will describe the scope (topics and sub topics) of SFM and related risks (threats) for each sub						
	topic.						
	1)	Policy a	Policy and Legislation				
		This part will explain about the government policy and legislation which consist of the following sub topics:					
		<ul> <li>Forest Policy</li> </ul>					
		0	National Forest Inventory				
		0	Permanent Forest Estate				
		0	Forest Ownership				
		0	National Forest Services				
	2)	Forest	Management				
	This part v topics:		Il explain about the government forest management which consists of the following su				
		0	Planning				
		0	Harvesting				
		0	Protection				
		0	Legal arrangements				
		0	Monitoring and Research				
	3)	Socio-E	Economic, Financial and Environmental Aspects of Forest				
		is part wi owing su	II explain about the socio-economic and financial aspects of forest which consist of th b topics:				
		0	Relations with local Populations				
		0	Economics, incentives and Taxation				
	No	ote :					
	SO	cial aspe	ation for the above sub topics will include their respective economy, environment, an act (that should be considered by any forest management from the national level i nt unit level) and the risks/threats associated to each sub topics.				
Ch	apter 4						
Au	dit of Fo	rest					

a. Audits of Forest (and/or deforestation) Issue(s)

This part will discuss many aspects related to auditing the forest (including deforestation) such as the

types of audit, the audit tools (e.g. Global Positioning System (GPS) and Geographical Information System (GIS)), common methodology and others. The GPS and GIS detailed information will be described in appendix 2.

b. Design Matrix

This part will extensively explain how to develop design matrix for each topics and sub topics in chapter 3 with the following arrangement :

- o Topic
- o Sub Topic
- o Related risk/threat
- Potential audit objective and researchable questions which may help auditors define audit objectives and lines of enquiry (per sub topic); and
- Audit criteria from international convention, agreements, legislation, policies, programs and standards (ITTO standards and others).
- o International standards on Auditing (if any).

Note :

- The result of the arrangement above will be used to fill in the AUDIT DESIGN MATRIX as can be seen in Appendix 3.
- c. Choosing and designing Audits of Forest (Risk Based Audit Approach)

It should be noted that not all topics and sub topics in this chapter will be included in the design matrix. The audit should focus on the most prioritized topics and sub topics. In deciding the most prioritized topics and sub topics, the auditors have to consider related risks (threats) and the way management mitigate the risks(threats).

The following steps could be used to prioritize the audit topics:

- Step 1 Identify the risks(threats) for each sub topic by considering the following aspects:
  - forest characteristic and threats (risks) to it (description and changes in forest cover, characteristics, management),
  - legal background and remedies in forestry.
  - key players in forestry.
- Step 2Obtain adequate understanding on how government mitigate the<br/>risks(threats) in Step 1 by considering the following aspects:
  - the government's (or other key players') internal control system/measure(s) put in place and response to mitigate

	those threats or risks.				
	Other administrative regulations.				
	The differences between State and commercial/industrial forest management				
	Government's role and steps/tools used to regulate both the private and public sectors				
Step 3	Evaluate and test the government's (or other key players') internal control/measures and responses (government's efforts to mitigate the risks (threats)) identified in step 2. For example by finding gaps in the legal regulation of forest management and protection.				
Step 4	Choose audit topics and priorities by considering the following aspects:				
	<ul> <li>Gaps between sub topic's risks(threats) and government's efforts to mitigate</li> </ul>				
	<ul> <li>Materiality which includes the value of money and impacts</li> </ul>				
Step 5	Decide on audit approaches: audit objectives and lines of enquiry.				
Note:					
Case studies from topic was chosen	m SAIs should include results of steps 1 to 3, which allows readers to understand why the n.				
Chapter 5					
Conclusion					
	conclude the use of this guidance and recommend future actions to be taken by SAIs in nt and/or improve the quality of this guidance.				
Appendix List					
Glossary					
Reference					

**APPENDIX 2** 

## THE USE OF GPS AND GIS IN AUDITING FOREST MANAGEMENT

## AUDIT DESIGN MATRIX

Торіс	Sub Topic	Related Risk/Threat	Audit Objective	Researchable Question	Audit Criteria
Policy and Legislation	Forest Policy	<ul> <li>Example :</li> <li>Unbalanced use of forests.</li> <li>Overlapping use of land</li> </ul>	Does the government have forest policy that can ensure sustainability of the forest development?	To what extent (if any) does the forest policy ensure sustainable use of all forest natural resources and integration with the national policy?	Example criteria for tropical timber country : International Tropical Timber Organization (ITTO) Guidelines for the sustainable management of natural tropical forests (ITTO Guidelines). Consideration in deciding a forest policy include the present proportion of land under forest, needs of protection and conservation of biological diversity, needs and aspirations of present and future generation of population, and the place of forestry in the national economic planning. Other Criteria: • National regulation. • Other International Guidelines
	National Forest Inventory	<ul> <li>Example :</li> <li>Loss of species</li> <li>Loss of habitats</li> <li>Fragmentation</li> <li>Incorrect forest data</li> </ul>			

Торіс	Sub Topic	Related Risk/Threat	Audit Objective	Researchable Question	Audit Criteria
	Permanent Forest Estate	Example : • Lost of species.			
	Forest Ownership				
	National Forest Services				
Forest Management	Planning	Example : Illegal Logging Etc			
	Harvesting	Example : Illegal logging Over-cutting Etc			
	Protection	Example : • Forest Fire • Illegal Logging • etc			
	Legal arrangements				
	Monitoring and Research				
Socio-Economic, Financial and Environmental Aspects.	Relations with local Populations				

Торіс	Sub Topic	Related Risk/Threat	Audit Objective	Researchable Question	Audit Criteria
	Economics, incentives and Taxation				