



SGS QUALIFOR
(Associated Documents)

Number: **AD 33-GH-01**

Version Date: **2016/07/26**

Page: **1 of 64**

Approved by: **Gerrit Marais**

SGS QUALIFOR FOREST MANAGEMENT CHECKLIST FOR GHANA 2016

This checklist presents the SGS Qualifor standard for forest certification against the FSC Principles and Criteria. This standard forms the basis for:

- Scoping assessment
- Certification assessment
- Surveillance assessment
- Information to stakeholders on the assessment criteria used by SGS Qualifor

This checklist is based on the approved FSC National Forest Management for Ghana, ***FSC-STD-GHA-01-2012 Ghana Forest Stewardship Standard EN, Version 5.***

This standard follows the requirements of *FSC-STD-20-002 Structure and content of forest stewardship standards* (November 2004) to improve consistency and transparency in certification decisions between different certification bodies in Ghana and in different parts of the world, and thereby to enhance the credibility of the FSC certification scheme as a whole.

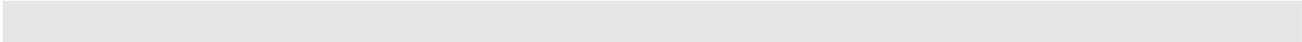
Scope:

This standard is applicable to all forest operations seeking FSC certification within Ghana. This includes Natural Forest and Plantation in Ghana

PHYSICAL ADDRESS	International		Local
		Qualifor Programme SGS South Africa (Pty) Ltd Building 1 Harrowdene Office Park 128 Western Services Road Woodmead South Africa,	SGS South Africa
CONTACT	Person:	Gerrit Marais	Sharon Botha
	Telephone:	+27 13 764-2959	+27 79 523 4873
	Email :	forestry@sgs.com	Sharon.Botha@sgs.com
	Web address:	WWW.SGS.COM/FORESTRY	

CHANGES SINCE THE PREVIOUS VERSION OF THE STANDARD

Section	Change	Date



TERMS AND DEFINITIONS

AAC	Annual Allowable Cut
CBA	Collective Bargaining Agreement
CBD	Convention on Biological Diversity
CITIES	Convention on International Trade in Endangered Species
DFM	District Forest Manager
DFO	District Forest Office
DFA	Defined Forest Area
EIA	Environmental Impact Assessment
FC	Forestry Commission
FMU	Forest Management Unit
FMP	Forest Management Plan
FMS	Forest Management Systems
FSC	Forest Stewardship Council
FSD	Forest Service Division
FR	Forest Reserve
FRNR	Faculty of Renewable Natural Resources
GSBA	Globally Significant Biodiversity Area
HCV	High Conservation Value
HCVF	High Conservation Valued Forest
HFZ	High Forest Zone
H&S	Health and Safety
ILO	International Labour Organisation
ITTA	International Tropical Timber Agreement
LIF	Log Information Form
LMCC	Log Measurement and Conveyance Certificate
LUS	Lesser Used Species
MoP	Manual of Procedures
NHIS	National Health Insurance Scheme
NTFP	Non-Timber Forest Products
PPE	Prevention and Protective Equipments
PSP	Permanent Sample Plots
RFM	Regional Forest Manager
RFO	Regional Forest Office
RIL	Reduced Impact Logging
RMSC	Resource Management Support Centre
RS	Range Supervisor
RTE	Rare Threatened and Endangered
SFM	Sustainable Forest Management
SIA	Social Impact Assessment
SRA	Social Responsibility Agreement
TIF	Tree Information Form
TO	Technical Officer
TOS	Timber Operational Specifications
TUC	Timber Utilisation Contract
WSD	Wildlife Services Division

LAYOUT OF THE STANDARD:

The standard follows the FSC Principles and Criteria of Forest Stewardship (January, 2000). The Standard is divided into 10 sections, each corresponding to one of the FSC principles with the criteria listed underneath each principle. Refer below for further clarification.

Each page of the standard is divided into 3 columns. The standard also serves as the checklist that is used during an assessment and for every criterion the following is provided:

The Qualifor Requirement: Indicator	This outlines the norm or indicators that Qualifor requires for compliance with the specific FSC criterion. A potential source of information or evidence that allows an auditor to evaluate compliance with an indicator. Some indicators make a distinction between the requirements for “normal” forests and SLIMF operations (Small and Low Intensity Managed Forests).
Verifiers	Verifiers are examples of what the SGS assessor will look for to ascertain if the specific norm or indicator has been met. This list is not exhaustive and the assessor may use other means of verifying the relevant indicator.
Guidance	Guidance is written in <i>italics</i> and assists the assessor in understanding the requirement of the specific indicator.

<p>PRINCIPLE 7: COMMUNITY RELATIONS AND WORKER’S RIGHTS:</p> <p>Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities.</p>	
<p>Criterion 4.1: The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services</p>	
<p>Indicator 4.1.6</p> <p>Forest managers shall demonstrate an understanding of and compliance with relevant codes of practice, guidelines and agreements.</p>	<p>Verifiers & Guidance:</p> <p><i>1. TUC holders expend directly a sum of not less than 5% of annual royalty accruing from the TUC in support of development of the community.</i></p> <p>Office visits Timber Resource Management Regulations 1998 – 13 (1) and 14 (1) d</p> <p>Relevant guidelines and codes of practice include: <input type="checkbox"/> Timber Utilisation Contract Procedures Manual <input type="checkbox"/> Manual of Procedures</p>

The FSC Principle

The FSC Criterion

The Indicator

Ghana FMU level verifier (*italic*)

The year of the evaluation

The SGS Qualifor observation i.t.o. the indicator

Other sources of information and Guidance notes

THE STANDARD

PRINCIPLE 1. COMPLIANCE WITH LAWS AND FSC PRINCIPLES:	
Forest management shall respect all applicable laws of the country in which they occur and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria	
Criterion 1.1 Forest management shall respect all national and local laws and administrative requirements	
Indicator 1.1.1	Verifiers & Guidance:
Forest managers shall maintain an up to date register of all statutes relating to forestry and possess copies of all relevant regulations	<p><i>1 Register of relevant documentation</i></p> <p><i>2 Copies of up-to-date statutes and regulations</i></p> <p>Office of DFM/RFM of FSD</p> <p>Office of the Forest manager</p> <p>Relevant acts include:</p> <ul style="list-style-type: none"> ▫ Forest and Wildlife Policy 1994 ▫ Timber Resource Management Act 1997 ▫ Timber Resource Management Amendment Act, 2002 Act 617 ▫ Wildlife Conservation Regulations 1971 LI 685 and its amendments of 1983 L.I 1284; 1988 L. I 1357; 1989 L. I 1452 ▫ Forestry Commission Act 1999 ▫ Trees and Timber Amendment Act 493 1997 ▫ Companies Code 1963 and/or Incorporated Private partnerships Act 1962 ▫ Provincial ordinances ▫ Exchange Control Act ▫ Investment Act ▫ Environmental Health Act ▫ National Health and Safety Regulations ▫ Labour Act 651 of 2003 <p>(List not exhaustive)</p>
Indicator 1.1.2	Verifiers & Guidance:
Forest managers shall demonstrate an understanding of and compliance with relevant codes of practice, guidelines and agreements.	<p><i>1. TUC holders expend directly a sum of not less than 5% of annual royalty accruing from the TUC in support of development of the community.</i></p> <p><i>2. Company policy coincides with laws and regulations</i></p> <p><i>3. Forest management objectives and procedures coincide with laws and regulations</i></p> <p><i>4. Duly authorised Timber Utilisation Contract</i></p> <p>Discussions with:</p>

	<ul style="list-style-type: none"> <input type="checkbox"/> DFM/RFM <input type="checkbox"/> TUC/concession holder <p>Office visits</p> <p>Timber Resource Management Regulations 1998 – 13 (1) a, b and 14 (1) d</p> <p>Timber Resource Management Regulation Amendment</p> <p>Relevant guidelines and codes of practice include:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Timber Utilisation Contract Procedures Manual <input type="checkbox"/> Manual of Procedures <input type="checkbox"/> Terms of Timber Utilisation Contract <input type="checkbox"/> Timber Operational Specifications (TOS) <input type="checkbox"/> Social Responsibility Agreements (SRA) <input type="checkbox"/> Forest protection strategies <input type="checkbox"/> Logging manual
<p>Indicator 1.1.3</p> <p>Forest managers shall document and implement procedures to monitor compliance with laws and regulations and for taking corrective action if/when any non-compliance is detected</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> <i>1. Register of offences</i> <i>2. Complaints register</i> <i>3. Reports of field visits by DFM / RFM / Managers</i> <i>4. Offence files of DFM</i> <p>DFM office – FSD</p> <p>Office of Forest manager</p> <p>Timber Utilisation Contract</p> <p>Procedures Manual</p>
<p>Indicator 1.1.4</p> <p>TUC shall be awarded in accordance with due procedures laid down in the Timber Resource Management Regulations 1998</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> <i>1. TUC signed by appropriate authority exists.</i> <i>2. TUC with all annexes</i> <i>3. Tender documents including advertisements</i> <i>4. Minutes of Evaluation Committee</i> <i>5. Audit trail of progress of TUC application process</i> <p>Discussions and office visits at:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Responsible ministry for Forestry <input type="checkbox"/> Forestry Commission <input type="checkbox"/> DFM/RFM office <input type="checkbox"/> Forest manager <p>Records held by TUC holder will need to be scrutinised independently to ensure that due process was observed</p> <p>Timber Utilisation Contract Procedures Manual</p>
<p>Indicator 1.1.5</p>	<p>Verifiers & Guidance:</p>

<p>There shall be no substantiated outstanding claims of non-compliance with national and local laws, regulations or administrative requirements related to forest management.</p>	<p><i>1. Completed Environmental Impact Assessment</i></p> <p><i>2. Health and Safety Certificates</i></p> <p><i>3. Records of payments and subscriptions from responsible Labour Ministry</i></p> <p><i>4. Records of union meetings</i></p> <p>5. No outstanding court cases</p> <p>Responsible Ministry for Environment and Responsible Ministry for Forestry</p> <p>Responsible Ministry for Labour</p> <p>Forest managers and Union representatives</p> <p>Forestry Commission</p> <p>Consultation with regulatory authorities and other official bodies responsible for monitoring compliance</p> <p>Timber Utilisation Contract Procedures Manual</p>
---	---

--	--

Criterion 1.2	All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid
----------------------	---

<p>Indicator 1.2.1</p> <p>Forest managers shall provide evidence that applicable fees, royalties, taxes and other applicable charges have been paid.</p>	<p>Verifiers & Guidance:</p> <p><i>1. Register of fees paid</i></p> <ul style="list-style-type: none"> • <i>stumpage</i> • <i>royalty</i> • <i>land rent</i> • <i>finer</i> • <i>compensation payments</i> <p><i>2. Official receipts</i></p> <p><i>3. Offence register</i></p> <p><i>4. Records held by local administrator of stool lands</i></p> <p><i>5. Records held by District Assembly</i></p> <p>DFM office</p> <p>Local administrator of stool lands</p> <p>For details of fees see:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Register of Fees held by District Forest Manager <input type="checkbox"/> The terms of the Timber Resource Management Regulations 1998 and Amendment <input type="checkbox"/> Timber Utilisation Contract <input type="checkbox"/> Copies of licence agreement <input type="checkbox"/> TUC Procedures Manual
--	---

--	--

Criterion 1.3	In signatory countries, the provisions of all the binding international agreements such as CITES, ILO conventions, ITTA, and Convention on Biological Diversity, shall be respected.
----------------------	---

<p>Indicator 1.3.1</p> <p>Forest managers shall be aware of the</p>	<p>Verifiers & Guidance:</p> <p><i>1. Species on CITES list Appendix 1 are protected</i></p>
---	---

<p>implications of the Convention on International Trade in Endangered Species (CITES) in the region, and shall implement appropriate measures or controls to ensure that its provisions are respected.</p>	<p><i>2. Species on CITES list Appendix 2 possess appropriate export licenses and documentation</i></p> <p><i>3. Adequate protection measures exist for species that appear on Appendixes 1 and 2</i></p> <p>Discussions with Forest manager</p> <p>Discussions with RFM and DFM</p> <p>Note local species on CITES appendices 1 and 2 (see Annex 2).</p> <p>Contact Ministry or local body responsible for monitoring of CITES agreement in Ghana</p>
<p>Indicator 1.3.2</p> <p>Forest managers shall adhere to Ghana's Labour Laws and ILO conventions applicable in Ghana and shall implement appropriate measures to ensure that their provisions are respected.</p>	<p>Verifiers & Guidance:</p> <p><i>1. Employment policies of Forest manager & Contractors</i></p> <p><i>2. Formal contracts of employment</i></p> <p><i>3. Terms of contracts for staff of Forest manager & Contractors</i></p> <p>Operational manuals and Codes of Conduct</p> <p>Discussions with staff of the forest manager</p> <p>Discussions with Labour Unions and representatives</p> <p>Ghana's Labour Laws</p>
<p>Indicator 1.3.3</p> <p>Forest managers shall be aware of the implications of the ITTA in Ghana and shall implement appropriate measures to ensure that its provisions are respected.</p>	<p>Verifiers & Guidance:</p> <p>Discussions with Forest managers</p> <p>Discussion with responsible Forestry Ministry and FC staff</p>
<p>Indicator 1.3.4</p> <p>Forest managers shall be aware of the implications of the Convention on Biological Diversity applicable in their region, and implement appropriate measures to ensure that its provisions are respected.</p>	<p>Verifiers & Guidance:</p> <p><i>Discussion with forest managers of the policies and procedures of responsible Forestry Ministry and Forestry Commission</i></p> <p><i>Comparison of Forest Management System with requirements of CBD</i></p> <p>Discussion with staff and managers of Forestry Commission and FSD</p> <p>Discussion with staff of Min of Environment</p> <p>Note implications of Convention on Biological Diversity in the region of management and any guidance laid down by local relevant authority. In this case the responsible Environment Ministry</p>
<p>Indicator 1.3.5</p> <p>Forest managers shall be aware of and adhere to all phytosanitary regulations to control pests and diseases of timber and wood products traded internationally or internally.</p>	<p>Verifiers & Guidance:</p> <p><i>1. Discussions with forest managers about the policies and procedures of Forestry Commission</i></p> <p><i>2. Conditions laid down by TIDD</i></p> <p><i>3. Procedures and practices of TUC/Concession holder on prophylactic treatment of logs</i></p> <p>Discussions with FC staff at the district regional and Headquarters</p> <p>Discussions with TIDD staff</p> <p>See Guidance Notes for Auditors on list of FSC prohibited</p>

	Pesticides FAO: International Standard for phytosanitary measures (Guidelines for Regulating Wood Packaging Material in International Trade)
Indicator 1.3.6	Verifiers & Guidance:
Forest managers shall be aware of the implications of International Conventions on Climate Change and Desertification.	<p><i>Discussion with forest managers about the policies and procedures of the responsible forestry ministry</i></p> <ul style="list-style-type: none"> <i>Policies and procedures of Forestry Commission</i> <i>Policies and procedures of the responsible Environment ministry</i> <p>Identify and note any other relevant international agreements and their requirements</p>
Criterion 1.4	Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case-by-case basis, by the certifiers and the involved or affected parties
Indicator 1.4.1	Verifiers & Guidance:
Forest managers shall identify conflicts between laws, regulations and the FSC P&C.	<i>Documented conflicts by the Forest managers</i>
Indicator 1.4.2	Verifiers & Guidance:
Forest managers shall resolve all identified conflict between laws, regulations and the FSC P&C with appropriate regulatory bodies and other parties.	<p><i>Forest managers' mechanism for resolving conflicts with relevant regulatory bodies</i></p> <p>Discussions with relevant regulatory bodies</p> <p>Discussion with the National Working Group on Forest Certification</p>
Criterion 1.5	Forest management areas should be protected from illegal harvesting, settlement and other unauthorised activities
Indicator 1.5.1	Verifiers & Guidance:
Any admitted farms and alienated land shall specify terms and conditions of admittance or ownership.	<ol style="list-style-type: none"> <i>TUC/Forest document and annexes</i> <i>There are maps identifying location of admitted farms and alienated land</i> <i>Appropriate documentation specifies terms and conditions, rights and obligations of occupation</i> <p>Discussions with owners of admitted farms</p> <p>For TUCs principally the responsibility of the FC but TUC holder may identify where breaches have occurred.</p> <p>The FC is the enforcing body</p>
Indicator 1.5.2	Verifiers & Guidance:
Terms and conditions of occupation shall be adhered to.	<ol style="list-style-type: none"> <i>Details of rights, responsibilities and restrictions detailed in TUC/Concession and SRAs</i> <i>For TUC's, the FC aware of all such areas and the manager enforces rules and regulations</i> <i>No evidence of disputes</i>

	Discussions with RFM and DFM
Indicator 1.5.3	Verifiers & Guidance:
The DFA/FMU shall be clearly identified, demarcated, described and protected against unauthorised human activities.	<ol style="list-style-type: none"> 1. <i>Fixed markers on the ground</i> 2. <i>Gazette notices of revisions and changes to boundaries</i> 3. <i>Evidence of Forest Managers' mechanism for protection against unauthorised activities</i> <p>Field visits</p> <p>Discussions with the fringe communities</p> <p>Discussions with the RFM/DFM</p>
Indicator 1.5.4	Verifiers & Guidance:
The area and structure of the DFA/FMU shall be maintained.	<ol style="list-style-type: none"> 1. <i>Area of DFA/FMU is not reduced.</i> 2. <i>Proportion of area covered by forest remains constant</i> <p>Remote sensing imagery or aerial photographs</p> <p>Maps of forest reserves will be readily available. Details of off-reserve forest areas will be more difficult to find</p>
Indicator 1.5.5	Verifiers & Guidance:
<p>Managers shall take measures to prevent illegal harvesting, settlement and other unauthorized activities within the management area. Depending on the size of the forest area and on the risk of illegal activity occurring, such measures may include:</p> <ul style="list-style-type: none"> • Forest roads have gates and/or have controlled access to areas of high risk; • Forest roads are physically closed off after harvesting; • Forest roads are patrolled to detect and prevent illegal access to the forest; • Personnel and resources have been assigned to detect and control illegal activities promptly. 	<ol style="list-style-type: none"> 1. <i>Fixed markers on the ground</i> 2. <i>Gazette notices of revisions and changes to boundaries</i> 3. <i>Evidence of Forest Managers' mechanism for protection against unauthorised activities</i> <p>Field visits</p> <p>Discussions with the fringe communities</p> <p>Discussions with the RFM/DFM</p>
Indicator 1.5.6	Verifiers & Guidance:
The forest area shall be monitored for evidence of illegal or unauthorized activities.	<ol style="list-style-type: none"> 1. <i>Fixed markers on the ground</i> 2. <i>Gazette notices of revisions and changes to boundaries</i> 3. <i>Evidence of Forest Managers' mechanism for protection against unauthorised activities</i> <p>Field visits</p> <p>Discussions with the fringe communities</p> <p>Discussions with the RFM/DFM</p>

Indicator 1.5.7	Verifiers & Guidance:
<p>Appropriate measures shall be taken when illegal activities are detected. Depending on the nature of the activity such measures may include:</p> <ul style="list-style-type: none"> • Reporting the activity to an appropriate authority; • Disciplinary action or fines in the case that staff were involved; • Working with the appropriate authorities, and always within the law, to control the unauthorized activity; • Working with local communities and/or authorities to resolve underlying grievances leading to illegal or unauthorized activity; • Pursuing legal action (e.g. prosecution) if necessary. 	<p><i>Evidence of Forest Managers' mechanism for protection against unauthorised activities</i></p> <p>Field visits</p> <p>Discussions with the fringe communities</p> <p>Discussions with the RFM/DFM</p>
Indicator 1.5.8	Verifiers & Guidance:
<p>For Large Enterprises only:</p> <p>Managers shall have documented policies and procedures to protect the forest from illegal harvesting, settlement and other unauthorized activity.</p>	<p><i>1. Fixed markers on the ground</i></p> <p><i>2. Gazette notices of revisions and changes to boundaries</i></p> <p><i>3 Evidence of Forest Managers' mechanism for protection against unauthorised activities</i></p> <p>Field visits</p> <p>Discussions with the fringe communities</p> <p>Discussions with the RFM/DFM</p>
Indicator 1.5.9	Verifiers & Guidance:
<p>The enterprise shall maintain a record of all detected instances of illegal harvesting and other unauthorized activities within its management area, and of any subsequent actions taken to control the illegal activity.</p>	<p><i>1. Fixed markers on the ground</i></p> <p><i>2. Gazette notices of revisions and changes to boundaries</i></p> <p><i>3 Evidence of Forest Managers' mechanism for protection against unauthorised activities</i></p> <p>Records of illegal harvesting from DFM.</p>
Indicator 1.5.10	Verifiers & Guidance:
<p>Forest managers shall have developed agreements in discussion with local communities for their help in identifying and/or preventing illegal or unauthorized activities.</p>	<p>Documented agreement with communities.</p> <p>Discussions with the fringe communities</p>
Indicator 1.5.11	Verifiers & Guidance:
<p>Managers shall take measures to prevent illegal harvesting, settlement and other unauthorized activities within the management area. Depending on the size of the forest area and on the risk of illegal activity occurring, such measures may include:</p> <ul style="list-style-type: none"> • Forest roads have gates and/or have controlled access to areas of high risk; 	<p><i>Evidence of Forest Managers' mechanism for protection against unauthorised activities</i></p> <p>Field visits</p> <p>Discussions with the fringe communities</p> <p>Discussions with the RFM/DFM</p>

<ul style="list-style-type: none"> • Forest roads are physically closed off after harvesting; • Forest roads are patrolled to detect and prevent illegal access to the forest; • Personnel and resources have been assigned to detect and control illegal activities promptly. 	
Indicator 1.5.12	Verifiers & Guidance:
The forest area shall be monitored for evidence of illegal or unauthorized activities.	<ul style="list-style-type: none"> 1. <i>Fixed markers on the ground</i> 2. <i>Gazette notices of revisions and changes to boundaries</i> Records of illegal harvesting from DFM.
Indicator 1.5.13	Verifiers & Guidance:
Appropriate measures shall be taken when illegal activities are detected. Depending on the nature of the activity such measures may include: <ul style="list-style-type: none"> • Reporting the activity to an appropriate authority; • Disciplinary action or fines in the case that staff were involved; • Working with the appropriate authorities, and always within the law, to control the unauthorized activity; • Working with local communities and/or authorities to resolve underlying grievances leading to illegal or unauthorized activity; • Pursuing legal action (e.g. prosecution) if necessary. 	<ul style="list-style-type: none"> <i>Report of offense to DFM.</i> Discussion with DFM and FFC
Indicator 1.5.14	Verifiers & Guidance:
For Large Enterprises only: Managers shall have documented policies and procedures to protect the forest from illegal harvesting, settlement and other unauthorized activity.	<ul style="list-style-type: none"> <i>Report of illegalities detected in the forest</i> Discussion with DFM and FFC
Indicator 1.5.15	Verifiers & Guidance:
The enterprise shall maintain a record of all detected instances of illegal harvesting and other unauthorized activities within its management area, and of any subsequent actions taken to control the illegal activity.	<ul style="list-style-type: none"> <i>Report of illegalities detected in the forest</i> Discussion with DFM and FFC
Indicator 1.5.16	Verifiers & Guidance:
Forest managers shall have developed agreements in discussion with local communities for their help in identifying and/or	<ul style="list-style-type: none"> <i>Documentation of agreements with communities.</i> Discussion with DFM and FFC

preventing illegal or unauthorized activities.		
Criterion 1.6 Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria		
Indicator 1.6.1	Forest managers shall demonstrate long-term commitment to the principles of responsible forest management. <i>(TUC area management plan)</i>	Verifiers & Guidance: <i>TUC area management plan</i> Discussions with FC Discussions with TUC holder/Forest manager Field visit Discussion with local communities and the District Assembly
Indicator 1.6.2	Forest managers policy objectives shall coincide with international definitions of sound forest management and good practice	Verifiers & Guidance: <i>TUC area management plan</i> Discussions with FC Discussions with TUC holder/Forest manager Field visit Discussion with local communities and the District Assembly
Indicator 1.6.3	Forest Managers shall display understanding of and commitment to the concept and practices of sustainability and the precautionary principle	Verifiers & Guidance: <i>TUC area management plan</i> Discussions with FC Discussions with TUC holder/Forest manager Field visit Discussion with local communities and the District Assembly
Indicator 1.6.4	Forest Managers shall strive to comply with management requirements in other areas under their responsibility	Verifiers & Guidance: <i>TUC area management plan</i> Discussions with FC Discussions with TUC holder/Forest manager Field visit Discussion with local communities and the District Assembly
Indicator 1.6.5	Forest Manager shall demonstrate commitment at complying with the requirements of this certification standard.	Verifiers & Guidance: <i>TUC area management plan</i> Discussions with FC Discussions with TUC holder/Forest manager Field visit Discussion with local communities and the District Assembly

PRINCIPLE 2. TENURE AND USE RIGHTS RESPONSIBILITIES:	
Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.	
Criterion 2.1 Clear evidence of long-term forest use rights to the land (e.g. land title, customary rights or lease agreements) shall be demonstrated	
Indicator 2.1.1	Verifiers & Guidance:
Records detailing the ownership of the land comprising the DFA shall be maintained by the Forest Manager. E.g. Tenorial agreement showing <ul style="list-style-type: none"> • Period of validity • Name of users 	<ol style="list-style-type: none"> 1. <i>List of stools, skins and other owners comprising the reserves and DFA</i> 2. <i>Names of District and Traditional Authorities</i> 3. <i>Names of communities making up the land owning stool are listed</i> 4. <i>Maps at 1:10,000 scale showing land ownership and/or tenancies</i> <p>Discussions with paramount chiefs</p> <p>Lands Commission</p> <p>Administrator of Stool Lands</p> <p>For TUCs legal records maintained by the Forest Service and by Paramount chiefs. TUC holders may also retain copies but this is primarily the responsibility of the FC staff/ Forest manager.</p>
Criterion 2.2 Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.	
Indicator 2.2.1	Verifiers & Guidance:
The needs of local communities and the traditional uses, rights and customs of the local communities in the area shall be adequately documented	<ol style="list-style-type: none"> 1. <i>Socio-economic annex of the TUC or Forest manager's social policy</i> 2. <i>FRMP</i> 3. <i>SRA</i> 4. <i>Maps of areas of local importance, requiring specific interventions or conditions or areas to be protected</i> 5. <i>Forest managers and contractors have access to this information and make use of it in the planning of their activities</i> <p>Discussions with TUC holder/Forest manger</p> <p>Documentation held by TUC holder/Forest manager</p> <p>Refer to Forest Reserve Management Plans and District Forest Development Plans</p>
Indicator 2.2.2	Verifiers & Guidance:
Responsibilities and rights of the owners, managers and other stakeholders shall be clearly established and made clear to all stakeholders	<ol style="list-style-type: none"> 1. <i>Forest /Timber Utilisation Contracts and TUC operational plans contain details of rights and responsibilities</i> 2. <i>Social Responsibility Agreements contain details of rights and responsibilities.</i> 3. <i>Local communities possess copies of SRA</i> <p>SRA, Discussions with local communities & DFM</p> <p>See TUC, SRAs and Manual of Procedures for details</p>

Indicator 2.2.3	Verifiers & Guidance:
Domestic use rights of members of local communities to enter the DFA and harvest NTFPs for subsistence shall be assured.	<ol style="list-style-type: none"> 1. <i>Access to the forest is not impaired</i> 2. <i>Manual of Procedures is adhered to</i> <p>Discussions with local communities See MoP Section C and F</p>
Indicator 2.2.4	Verifiers & Guidance:
Local communities' traditional activities within the DFA shall be respected provided that such activities do not diminish the long term capacity of the DFA to provide products and services	<ol style="list-style-type: none"> 1. <i>SRA</i> 2. <i>TOS</i> 3. <i>Socio-economic annex to TUC</i> <p><i>Maps at an appropriate scale</i></p> <p>Discussions with local communities Discussions with local land owners This indicator covers non-extractive activities or uses. For extraction of NTFP see 2.2. Other activities may require the establishment of baseline data</p>
Indicator 2.2.5	Verifiers & Guidance:
Control mechanisms for domestic use rights to the DFA/FMU shall be supported by landowners and Local communities.	<ol style="list-style-type: none"> 1. <i>SRAs specify the control measures</i> 2. <i>Local communities and landowners are aware of control measures and what they are supposed to accomplish</i> 3. <i>No evidence of consistent breaches of SRAs or other agreements</i> 4. <i>No outstanding long-running disputes or court cases</i> <p>Discussions with forest manager Discussions with local landowners Local communities should be aware of Forest Manager's/contractors responsibilities and practices through SRAs</p>
Criterion 2.3	Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified
Indicator 2.3.1	Verifiers & Guidance:
Processes shall exist within the management system to identify and address suggestions and complaints from stakeholders	<ol style="list-style-type: none"> 1. <i>A formal and documented process for receiving and dealing with complaints and suggestions exists</i> 2. <i>All stakeholders are aware of the process and have access to it.</i> 3. <i>Forest manager maintains a community liaison officer</i> 4. <i>Where local processes exist these are documented</i> <p>Discussions with forest managers</p>

	Discussions with land owners Discussions with tenants Discussions with local communities
Indicator 2.3.2	Verifiers & Guidance:
Systems and procedures shall be formulated to resolve grievances and ensure compensation in the case of loss or damage arising from management activities within the DFA that affect customary or traditional rights, property, resources or livelihoods of local people	<p><i>2.3.2.1. Documented procedures exist, both informal and formal and responsible personnel are identified</i></p> <p><i>2.3.2.2. Documented procedures exist that involve communities and the forest manager</i></p> <p>Discussions with Forest managers</p> <p>Discussions with local communities</p>
PRINCIPLE 3. INDIGENOUS PEOPLES' RIGHTS:	
The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognised and respected.	
NOTE: Ghana has no "indigenous peoples" within its territory within the working definition adopted by the UN Working Group on Indigenous Peoples. Rights of (members of) local communities are provided for under Principle 2. Therefore, no indicators are proposed in relation to Principle 3. It must be mentioned however, that there exist small minority groups especially in Northern Ghana such as the Konkomba, Grusi, Chokosi, Nchumburu, Gurma etc whose rights as local communities are covered under Principle 2	
PRINCIPLE 4. COMMUNITY RELATIONS AND WORKER'S RIGHTS:	
Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities.	
Criterion 4.1	The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services
Indicator 4.1.1	Verifiers & Guidance:
All efforts shall be made to employ workers from local communities before workers are sought from further afield.	<p><i>1. Human Resources/Recruitment policy/strategy</i></p> <p><i>2. Evidence of employment of local personnel</i></p> <p><i>3. Advertisements in appropriate local media</i></p> <p>Discussions with forest managers</p> <p>Discussions with local communities</p> <p>Discussion with unions</p> <p>This principally applies to the license holder who operates only within a specified DFAs</p>
Indicator 4.1.2	Verifiers & Guidance:
Training shall be provided for workers from local communities.	<p><i>1. Human Resources/Recruitment policy/strategy</i></p> <p><i>2. Evidence of employment of local personnel</i></p> <p><i>3. Advertisements in appropriate local media</i></p> <p>Discussions with forest managers</p> <p>Discussions with local communities</p> <p>Discussion with unions</p> <p>This principally applies to the license holder who operates only within a specified DFAs</p>

Criterion 4.2 Forest management <u>should</u> meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families	
Indicator 4.2.1	Verifiers & Guidance:
Health and safety measures shall comply with national minimum requirements.	<ol style="list-style-type: none"> 1. <i>Records of inspections by national or regional H & S inspectors</i> 2. <i>Records of non-compliance/No evidence of non compliance as appropriate</i> 3. <i>Health and safety policy of forest manager</i> 4. <i>Health and safety policy of contractors</i> 5. <i>Managers are familiar with relevant health and safety guidelines and regulations</i> <p>Discussions with regional H & S inspectors</p> <p>Discussions with forest managers</p> <p>Discussions with contractors</p> <p>Auditors should identify and be familiar with all relevant health and safety guidelines and regulations</p>
Indicator 4.2.2	Verifiers & Guidance:
Managers shall assess risks to workers of particular tasks and equipment and take all measures to reduce or eliminate such risks.	<ol style="list-style-type: none"> 1. <i>Written risk assessments for key tasks</i> 2. <i>Records kept by forest managers and actions taken in response to accidents and/or health and safety issues raised by national or regional H & S inspections</i> <p>Discussions with managers</p> <p>Discussions with regional H & S inspectors</p>
Indicator 4.2.3	Verifiers & Guidance:
Workers and contractors shall know the health and safety guidelines that are relevant to them.	<ol style="list-style-type: none"> 1. <i>Accessible copies of guidelines and regulations</i> 2. <i>Posted notices and/or circulars</i> 3. <i>Job instructions</i> 4. <i>Minutes of health and safety meetings</i> <p>Discussions with workers</p> <p>Identify all relevant health and safety guidelines and regulations</p>
Indicator 4.2.4	Verifiers & Guidance:
All workers including Contractors shall receive training in safe working practices and should be provided with safety equipment and clothing appropriate to their workplace situation.	<ol style="list-style-type: none"> 1. <i>Up to date list of staff trained in first aid, health or safety</i> 2. <i>Register of safety equipment by job description</i> 3. <i>Safety equipment available and in good condition</i> 4. <i>Training procedure documented</i> 5. <i>Training records kept</i> 6. <i>Employees aware of safety procedure</i> <p>Discussions with forest managers</p> <p>Discussions with employees of forest management entity</p>

<p>Indicator 4.2.5</p> <p>Managers/Contractors shall ensure that workers use safety gears and equipment that are provided.</p>	<p>Verifiers & Guidance:</p> <ul style="list-style-type: none"> <i>1. Manager's job descriptions</i> <i>2. Managers enforcement measures / procedure.</i> <i>3. Workers use protective gears during normal working day</i> <i>3. Terms of employment</i> <p>Discussions with forest manager Discussions with employees Discussions with local Trade Union</p>
<p>Indicator 4.2.6</p> <p>Managers shall record all work related accidents and deaths of employees and their causes, record actions taken to prevent similar accidents in future, and implement such preventative actions.</p>	<p>Verifiers & Guidance:</p> <ul style="list-style-type: none"> <i>1. Accident records</i> <i>2. Evidence that preventative actions have been implemented</i> <p>Discussions with forest managers Discussion with staff of forest management entity.</p>
<p>Indicator 4.2.7</p> <p>Workers shall have access to appropriate health facilities.</p>	<p>Verifiers & Guidance:</p> <ul style="list-style-type: none"> <i>1. First aid kits and trained first aid administrators available at all operational sites</i> <i>2. All first aid kits inspected for completeness on a regular basis and re-inspection dates logged</i> <i>3. Clinic maintained by forest management entity</i> <i>4. Clinic properly equipped and staffed by adequately trained staff and/or</i> <i>5. Local health facilities are adequate and appropriate for the type of work being conducted</i> <i>6. Freedom of staff (and where appropriate families) to use local facilities</i> <i>7. National Health Insurance registration status of workers/contractors</i> <p>Discussions with forest manager Discussions with employees Discussions with Local Trade Unions Discussions with the District National Health Insurance Scheme (NHIS) office Medical conditions as agreed in the Collative Bargaining Agreements (CBA)</p>
<p>Indicator 4.2.8</p> <p>There shall be assured compensation benefits in case of accidents.</p>	<p>Verifiers & Guidance:</p> <ul style="list-style-type: none"> <i>1. Appropriate process and compensation protocol documented</i> <i>2. Records of payments kept</i> <i>3. Forest management entity is adequately insured for compensation claims</i> <i>4. No complaints of non-payment outstanding</i> <p>Discussions with forest managers Discussions with employees</p>

	Discussions with Local Trade Union Labour Act 651 of 2003
Criterion 4.3	The rights of the workers to organise and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labour Organisation (ILO).
Indicator 4.3.1	Verifiers & Guidance:
Employees of the forest management entity and contractors shall be permitted to organise and voluntarily negotiate with their employers as guaranteed in the Constitution and labour laws of Ghana	<ol style="list-style-type: none"> 1. <i>Copies of Constitution and Labour Laws are available</i> 2. <i>Written conditions of employment</i> 3. <i>Contracts</i> 4. <i>No evidence of non-compliance</i> <p>Discussions with managers Discussions with employees Ghana Labour Act 651 of 2003</p>
Indicator 4.3.2	Verifiers & Guidance:
The employees of the forest management organisation, and contractors shall receive benefits commensurate with their responsibilities.	<ol style="list-style-type: none"> 1. <i>Wages not below the National Minimum Wage</i> 2. <i>Contracts and terms of employment</i> 3. <i>Forest managers pay their required contribution to workers' Social Security and National Insurance Trust (SSNIT) contribution</i> 4. <i>Minutes of union meetings</i> 5. <i>Staff receive a wage not markedly below wages for equivalent work elsewhere within the industry in Ghana</i> 6. <i>Casual workers are employed on a pro-rata basis equivalent to full benefits for full time staff.</i> 7. <i>Working conditions and contractual terms not markedly below wages for equivalent work elsewhere within the industry in Ghana</i> <p>Discussions with staff and/or Local Trade Union representatives Discussions with forest managers Discussions with FC staff Collective Bargaining Agreement</p>
Criterion 4.4	Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations.
Indicator 4.4.1	Verifiers & Guidance:
Forest management shall include systems to monitor the social impacts of harvesting and other operations.	<ol style="list-style-type: none"> 1. <i>Social Responsibility Agreements</i> 2. <i>Discussions with communities and District Assemblies</i> 3. <i>Formal complaints procedures</i> 4. <i>Formal records of meetings between stakeholders.</i> 5. <i>Minutes of meetings of stakeholder focus groups.</i> 6. <i>Health records from hospitals and clinics</i> <p>Discussions with District Assemblies Discussions with forest managers</p>

<p>Indicator 4.4.2</p> <p>For TUCs, Social Responsibility Agreements with appropriate and relevant conditions for the DFA/FMU shall be established and adhered to, in spirit and in deed by all parties</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>One or more SRAs exist</i> 2. <i>SRAs drawn up through an appropriate process</i> 3. <i>Terms and conditions of the SRAs do not favour one stakeholder group over another</i> 4. <i>Control mechanisms for domestic use rights are broadly supported by stakeholders</i> <p>Discussions with local stakeholders, owners, farmers etc</p> <p>Relevant background documents outline some of the problems inherent with SRAs for instance 'Status Report on Collaborative Management Practices in the High Forest Zone' and 'Developments and Setbacks in Forest Conservation', by Kofi Smith</p>
<p>Indicator 4.4.3</p> <p>For TUCs, Timber Operational Specifications (TOS) shall lay down clear and unambiguous conditions and technical specifications.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. TOS exists 2. TOS contain appropriate operating specifications and limits relating to access and use of forest resources <p>Discussions with TUC holder</p> <p>Discussion with the DFM</p> <p>See MoP Annex Section B for details of what TOS should contain</p>
<p>Indicator 4.4.4</p> <p>TOS and SRAs shall adequately cover operations in the DFA/FMU</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. TOS 2. SRA 3. Additional requirements esp. concerning resource development <p>Detailed examination of terms and conditions of SRA and TOS</p> <p>Field visits to ensure terms and conditions are being adhered to</p> <p>Auditors should study the specific recommendations closely:</p> <ul style="list-style-type: none"> <input type="checkbox"/> to identify if there are any areas of management or control which are inadequately addressed <input type="checkbox"/> to ensure that the conditions laid down as part of the TOS and SRA are being adhered to <input type="checkbox"/> to ensure that both parties (contractors and local communities/farmers etc) are equally well-informed
<p>Indicator 4.4.5</p> <p>Within a DFA/FMU local communities, both men and women shall be consulted during the development of the Forest Reserve Management Plans, the Timber Utilisation Contract, and in the identification of and planning for the maintenance of High Conservation Value Forest areas (see Criterion 9.1 and 9.2).</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Minutes and notes of meetings with stakeholder and planning meetings to prepare plans</i> 2. <i>Local community involvement detailed in the respective FMU/FRMP, TUCMP DFDP and SRA</i> 3. <i>Form CAI/1 and attachments</i> <p>Discussions with local communities</p> <p>See MoP Section C for details of appropriate processes</p> <p>Forest Service personnel are responsible for ensuring that</p>

	<p>communities are involved and consulted</p> <p>TUC comes complete with 5 schedules</p> <p>CAI/1 details all consultations undertaken as part of developing SRAs</p>
Indicator 4.4.6	Verifiers & Guidance:
<p>Forest managers shall establish awareness programmes to ensure that stakeholders are aware of the key elements of policy and management of the forest resource, including the management of High Conservation Value Forest areas.</p>	<p><i>1. Detailed list of stakeholders is established and maintained</i></p> <p><i>2. Stakeholder awareness programme exists and is widely available</i></p> <p><i>3. All stakeholders are aware of:</i></p> <ul style="list-style-type: none"> <i>• the forest management policy</i> <i>• laws, regulations and other legal instruments</i> <i>• their roles in relation to the management plan</i> <i>• contingency plans to be undertaken in the event of emergencies, accidents or unforeseen conditions</i> <p><i>procedures for improving response to stakeholders and performance</i></p> <p>Discussions with DFO and other members of FC</p> <p>Discussions with local communities</p>
Indicator 4.4.7	Verifiers & Guidance:
<p>The forest management system shall include processes for ensuring ongoing consultation with stakeholders (both men and women) during the implementation of the management plan.</p>	<p><i>1. Minutes or findings / conclusions / recommendations of meetings held as part of preparation of Forest Reserve Management Plans</i></p> <p><i>2. Recommendations on Social Responsibility Agreements provided by the FC and deriving from the consultation process</i></p> <p><i>3. Existing SRA agreements (between managers and stakeholders)</i></p> <p>Discussions with local communities</p> <p>Discussions with DFM</p> <p>Discussions with forest managers</p>
Indicator 4.4.8	Verifiers & Guidance:
<p>Forest management activities shall minimise Health and safety risks to local communities as a result of their forest activities.</p>	<p><i>1. Potential hazards or threats to the resources and health of local communities are documented for principal forest operations:</i></p> <ul style="list-style-type: none"> <i>• roads - construction and use</i> <i>• vehicle use</i> <i>• field operations</i> <i>• waste and pollution</i> <p><i>2 Forest managers responsible for field operations have established documented mitigative measures and contingency plans for spillage, leakage and pollution of the local environment</i></p> <p><i>3. Forest managers implement appropriate mitigative and preventative measures</i></p> <p><i>4. Where necessary forest managers employ appropriate remedial measures to offset or counter negative impacts on local communities</i></p>

	<p>Discussions with forest managers</p> <p>Discussions with local Health and Safety officers</p> <p>Discussions with local communities</p> <p>Discussions with FC staff</p>
Indicator 4.4.9	Verifiers & Guidance:
The enterprise shall demonstrate how it has incorporated the results of its evaluation of social impacts into its management planning and operations.	
Criterion 4.5	Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage
Indicator 4.5.1	Verifiers & Guidance:
<p>Forest Managers shall make all efforts to avoid losses or damages affecting local peoples, and in resolving grievances related to legal rights, damage compensation.</p> <p>See 4.1.1. above.</p>	
	<p><i>Existence of mechanism for avoiding loss or damage and resolving grievances.</i></p> <p>Discussions with forest managers</p> <p>Discussions with local communities</p>
Indicator 4.5.2	Verifiers & Guidance:
Where damage to the forest or local facilities occurs as a result of forest management activities, local communities shall be compensated in a fair and prompt manner	
	<p><i>Clear rules exist and are documented for compensation of the aggrieved party(ies)</i></p> <p><i>Clear rules exist for compensating landowners</i></p> <p><i>Organisation responsible for meeting compensation claims is clearly identified</i></p> <p>Discussions with FC</p> <p>Discussions with forest managers</p> <p>Discussions with local communities</p> <p>Be aware of the potential for problems to occur 'downstream' from where the activities took place</p>
Indicator 4.5.3	Verifiers & Guidance:
There shall be a documented procedure for the resolution of disputes or grievances raised in relation to the activities of the forest enterprise.	
	<p><i>Clear rules exist and are documented for compensation of the aggrieved party(ies)</i></p> <p><i>Clear rules exist for compensating landowners</i></p> <p><i>Organisation responsible for meeting compensation claims is clearly identified</i></p> <p>Discussions with FC</p> <p>Discussions with forest managers</p> <p>Discussions with local communities</p> <p>Be aware of the potential for problems to occur 'downstream' from where the activities took place</p>

PRINCIPLE 5. BENEFITS FROM THE FOREST:	
Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.	
Criterion 5.1 Forest management should strive towards economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest	
Indicator 5.1.1	Verifiers & Guidance:
Forest managers budgets shall include provision for environmental and social as well as operational costs necessary to maintain certifiable status	<ol style="list-style-type: none"> 1. <i>EIA for the forest/TUC which includes an assessment of the social as well as environmental costs of critical activities</i> 2. <i>Annual Budget records (present, past and projected)</i> <p>Discussions with forest managers</p> <p>For new TUC an EIA is mandatory under LI 1652 1999. Concessions issued prior to the TUC should be covered by an Environmental Management Plan - EPA 490/94</p>
Indicator 5.1.2	Verifiers & Guidance:
Benefits and costs shall be consistent with predictions used to justify the initial investment	<ol style="list-style-type: none"> 1. <i>Forest Managers Budgets</i> 2. <i>Forestry, timber trade and export statistics</i> 3. <i>Annual reports, published accounts of forest management entity</i> 4. <i>Harvesting schedule and other plans</i> <p>Auditors should be aware of techniques to undervalue the forest crop or reduce costs by such mechanisms as modifying timber dimensions and published volumes, transfer pricing etc.</p>
Indicator 5.1.3	Verifiers & Guidance:
Mechanisms shall exist for sustained and adequate funding of the management of the forests	<ol style="list-style-type: none"> 1. <i>Accounting system designed to ensure costs and benefits for the DFA/FMU</i> 2. <i>Short, medium and long term Investment strategies exist. E.g. Equipment investment plan</i> <p>Discussion with forest management entity</p>
Criterion 5.2 Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.	
Indicator 5.2.1	Verifiers & Guidance:
Forest managers shall ensure the best possible and optimum use of individual timber species	<ol style="list-style-type: none"> 1. <i>Log grading on LMCC</i> 2. <i>Differences in TIF and LIF</i> 3. <i>Forest managers timber felling practices</i> <p>TIDD offices</p> <p>FSD district and regional offices</p> <p>Forest managers logging documents and records</p>
Indicator 5.2.2	Verifiers & Guidance:
Forest managers shall ensure the commercial	<ol style="list-style-type: none"> 1. <i>Comparison of enumeration data, with the yield .</i>

<p>utilisation of Lesser Used Species (LUS)</p>	<p><i>2. Comparison of yield with actual felling</i></p> <p>RMSC FSD offices Forest managers yield and felling records</p>
<p>Indicator 5.2.3</p> <p>Forest Managers shall ensure local processing of Lesser Used Species (LUS)</p>	<p>Verifiers & Guidance:</p> <p><i>Existence of local processing of LUS</i></p> <p>Discussions with forest managers</p>
<p>Indicator 5.2.4</p> <p>Collection of non-timber forest products shall be assured provided that harvesting does not exceed levels that are sustainable in the long term.</p>	<p>Verifiers & Guidance:</p> <p><i>1. Collection and harvesting of NTFPs specified in FRMP, TUC, TUC operational plans and Social Responsibility Agreements.</i></p> <p><i>2. Baseline data on NTFPs, status and harvesting levels exist</i></p> <p><i>3. Levels of harvesting that area is sustainable are clearly specified</i></p> <p><i>4. In the absence of hard data on NTFPs the management system adopts a conservative and precautionary approach to harvesting</i></p> <p>Discussions with local communities Discussions with forest managers Discussions with DFM and FC staff See Principle 7.7 for further details of sustainability</p> <p>Auditors shall differentiate between collection for domestic purposes and 'commercial' harvesting which will require greater rigour and attention to detail and shall appear under Principle 7 - commercial use of NTFPs</p>
<p>Indicator 5.2.5</p> <p>Non-timber forest products (NTFPs) shall be considered during forest use and processing. Within forest reserves appropriate areas are set aside specifically for collection of NTFPs by local communities. See also Indicators associated with Criterion 5.4</p>	<p>Verifiers & Guidance:</p> <p><i>1. Established NTFP production areas demarcated on maps and on the ground</i></p> <p><i>2. No logging or conflicting land use employed in such area.</i></p> <p><i>3. Local communities are aware of these areas and their respective rights and responsibilities</i></p> <p>See MoP Section A</p>
<p>Criterion 5.3 Forest management <u>should</u> minimise waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.</p>	
<p>Indicator 5.3.1</p> <p>Harvesting shall take into account the need to minimise timber waste</p>	<p>Verifiers & Guidance:</p> <p><i>1. Specific waste reducing methodologies and techniques. (RIL)</i></p> <p><i>2. Tree stumps demonstrate that stumps have been cut at the lowest level practicable.</i></p> <p><i>3. Absence of cut logs not extracted</i></p> <p>Discussions with forest managers Field visits</p>

Indicator 5.3.2	Verifiers & Guidance:
Waste and collateral damage resulting from harvesting shall be minimised	<ol style="list-style-type: none"> 1. <i>Collateral damage in field is monitored, recorded and made part of the yield calculation</i> 2. <i>Use of objective system (eg microborer) to identify rot in trees prior to felling</i> <p>Field visits</p>
Indicator 5.3.3	Verifiers & Guidance:
Timber shall be extracted and processed promptly after felling	<ol style="list-style-type: none"> 1. <i>Evidence of wastage in forest</i> 2. <i>Internal tracking system to monitor levels of log wastage in the forest and mill</i> <p>Field visits</p>
Criterion 5.4	Forest management <u>should</u> strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.
Indicator 5.4.1	Verifiers & Guidance:
Land owners and other stakeholders shall benefit directly from the forest operations	<ol style="list-style-type: none"> 1. <i>Rights of beneficiaries to receive revenue clearly stated as a management objective within FRMP and relevant planning documents</i> 2. <i>Terms and conditions for revenue sharing or disbursement clearly established and followed</i> 3. <i>Land owners and other stakeholders paid promptly (quarterly)</i> 4. <i>Annual Report</i> <p>Discussions with land owners Discussions with District Assemblies Discussions with DFM</p>
Indicator 5.4.2	Verifiers & Guidance:
Forest managers shall support local value added processing.	<ol style="list-style-type: none"> 1. <i>Existence of local processing of forest products eg wood carving , NTFP processing etc</i> <p>Community visits Discussions with the people Discussions with forest managers</p>
Indicator 5.4.3	Verifiers & Guidance:
For TUCs, forest managers shall meet their obligation to provide amenities to the communities within the fringes of the DFA, to a value of not less than 5% of the annual stumpage accruing from the operations under the TUC	<ol style="list-style-type: none"> 1. <i>Appropriately worded SRAs</i> 2. <i>List of amenities provided and value</i> 3. <i>Other amenities/services provided by forest management entity</i> <p>Discussions with local communities Discussions with the DFM and the District Assemblies Discussions with forest managers</p>

Criterion 5.5 Forest management operations shall recognise, maintain and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.	
Indicator 5.5.1	Verifiers & Guidance:
The full range of forest services and resources (including, for example, municipal watersheds, upstream and downstream commercial and recreational fisheries, landscape quality, and the forest's contribution to regional biodiversity, recreation and tourism) shall be identified in the forest management plan (or equivalent documentation) for the enterprise	<ol style="list-style-type: none"> 1. <i>Zonation of the FMU</i> 2. <i>FMU management plan</i> <p>Discussions with the RFM and DFM, Discussions with forest managers MoP section A</p>
Indicator 5.5.2	Verifiers & Guidance:
The management plan (or equivalent documentation) shall specify appropriate measures to maintain and/or enhance the value of each identified forest service or resource.	<ol style="list-style-type: none"> 1. <i>Zonation of the FMU</i> 2. <i>FMU management plan</i> <p>Discussions with the RFM and DFM, Discussions with forest managers MoP section A</p>
Indicator 5.5.3	Verifiers & Guidance:
Forest managers shall protect the full range of forest services associated with the DFA where appropriate to include watersheds, biodiversity, recreation and tourism	<ol style="list-style-type: none"> 1. <i>Zonation of the FMU</i> 2. <i>FMU management plan</i> <p>Discussions with the RFM and DFM, Discussions with forest managers MoP section A</p>
Indicator 5.5.4	Verifiers & Guidance:
<p>Forest managers shall protect riparian zones along all watercourses, streams, pools, springs and lakes/ponds, in accordance with Ghana's Logging Manual</p> <p>5.5.4.1. 50m on each side of water courses as identified on a 1:50,000 topographic map and 25m for any other water course</p>	<ol style="list-style-type: none"> 1. <i>Compartment map</i> 2. <i>Compartment logging plan</i> 3. <i>Forest/TUC management plan</i> 4. <i>Logging Manual</i> <p>Field visits See Ghana's logging Manual MoP section D</p>
Criterion 5.6 The rate of harvest of forest products shall not exceed levels, which can be permanently sustained.	
Indicator 5.6.1	Verifiers & Guidance:
Rates of forest product harvesting shall be established prior to permitting harvesting for each resource type within each compartment	<ol style="list-style-type: none"> 1. <i>Data are available in sufficient detail to permit accurate estimates of current quantities of timber and of their replenishment rates</i> 2. <i>PSP, inventory and stock survey methodology</i> <p>Other information:</p> <ul style="list-style-type: none"> • Inventory data

	<ul style="list-style-type: none"> • Stock survey records • Stock maps • Compartment harvesting records
Indicator 5.6.2	<p>Verifiers & Guidance:</p> <p><i>1. Data are available in sufficient detail to permit accurate estimates of current quantities of timber and of their replenishment rates</i></p> <p><i>2 PSP, inventory and stock survey methodology</i></p> <p>Other information:</p> <ul style="list-style-type: none"> • Inventory data • Stock survey records • Stock maps • Compartment harvesting records
Rates of forest product harvesting shall be based on current inventory, growth and yield data.	
Indicator 5.6.3	<p>Verifiers & Guidance:</p> <p><i>1. Data are available in sufficient detail to permit accurate estimates of current quantities of timber and of their replenishment rates</i></p> <p><i>2 PSP, inventory and stock survey methodology</i></p> <p>Other information:</p> <ul style="list-style-type: none"> • Inventory data • Stock survey records • Stock maps • Compartment harvesting records
Rates of forest product harvesting shall be demonstrated to be within the capacity of the DFA to sustain in the long term.	
Indicator 5.6.4	<p>Verifiers & Guidance:</p> <p><i>1. Detailed manuals for yield calculation exist and are readily available</i></p> <p><i>2. Yield calculation method is regularly updated based on growth and dynamics of the FMU/DFA</i></p> <p><i>3. Reliable data and information from research and monitoring is available and forms the basis of the periodic re-calculation of sustainable output</i></p> <p>Discussions with DFM, RMSC & Forest managers. See MoP section D</p>
Calculation of yield or yield regulation method shall be rational and scientifically based.	
Indicator 5.6.5	<p>Verifiers & Guidance:</p> <p><i>1. Minimum number and size of trees to be retained as seed bearers</i></p> <p><i>2. Maximum number (or density) of trees to be harvested per hectare</i></p> <p><i>3. Felling Permit from DFM</i></p> <p><i>4. Statements of yield or allowable cut held by FSD and forest management entity coincide</i></p> <p>Discussions with:</p>
The yield selection methods and limits on harvesting shall be clearly stated in one or more of the management documents available to forest manager	

	DFM, RMSC and forest managers Inspection of Stock maps against yield and actual harvesting records. Field visits See MoP section D
Indicator 5.6.6	Verifiers & Guidance:
Harvesting shall be conducted according to stipulated regulations and guidelines which ensure that the levels of harvesting do not exceed stipulated levels	<ol style="list-style-type: none"> 1. <i>The minimum exploitable diameter for each species to be harvested in the yield</i> 2. <i>Stock survey field books, stock maps, yield summary and yield map</i> 3. <i>Compartment closure reports</i> <p>Discussions with Forest management entity, DFM, RFM & RMSC See MoP section D</p>
Indicator 5.6.7	Verifiers & Guidance:
Forest managers shall respect controls on logging and harvesting practice to prevent over-exploitation	<ol style="list-style-type: none"> 1. <i>Restriction of logging to approved production areas only</i> 2. <i>Prevention of logging in protected or environmentally sensitive areas</i> 3. <i>The numbers and species of trees in the yield</i> 4. <i>Forest management entity exits a compartment after 2 years and do not re-enter until the next felling cycle</i> 5. <i>Re-entering of a compartment before 40 years is consistent with provisions in Section D of MoP</i> 7. <i>Formal permission from DFM to enter compartment for felling</i> <p>Discussions with Forest management entity, DFM, RFM & RMSC Ghana Logging Manual 'Section D of MoP</p>
PRINCIPLE 6. ENVIRONMENTAL IMPACT:	
Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.	
Criterion 6.1	Assessment of environmental impacts shall be completed - appropriate to the scale, intensity of forest management operations and the uniqueness of the affected resources - and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site disturbing operations.
Indicator 6.1.1	Verifiers & Guidance:
The variety and distribution of biological communities and forest ecosystems that comprise the regional landscape and make up the DFA/FMU shall be identified and described.	<ol style="list-style-type: none"> 1. <i>Forest surveys</i> 2. <i>Maps of forest types, important habitats and critical areas (incl. GSBA and coarse grained protection areas)</i> 3. <i>Environmental impact assessment</i> <p>DFM office and the forest management entity Forest management entity and responsible Environmental ministry and the FC.</p>

	<p>National Forest Inventory of 1984-9 may provide baseline data about the FMU as well as the national status of the forest resource.</p> <p>The Multi-Resource Inventory (MRI) of 2002</p> <p>RMSC should possess GIS for each forest reserve within a TUC</p> <p>For new TUC an EIA is mandatory under LI 1652 (1999). Concessions issued prior to the TUC should be covered by an Environmental Management Plan - EPA 490/94</p>
Indicator 6.1.2	Verifiers & Guidance:
<p>Applicable to SLIMF (1) DFAs only.(Note. Above indicators do not apply except when required by law or FC administrative directive)</p> <p>Forest managers shall be aware of and demonstrate knowledge of the possible negative impacts of their activities and take practical steps to avoid or reduce such them.</p>	<p><i>1 On the ground evidence relating to road building, logging, in-situ processing, boundary activities, riparian management among others.</i></p> <p><i>2 Managers' knowledge of presence of any species and habitats of conservation importance and practical conservation efforts</i></p> <p><i>3 Evidence of any negative impacts from management activities on adjoining lands</i></p> <ul style="list-style-type: none"> • <i>Completing assessment of environmental impact</i> • <i>Integrating results of assessment into management system</i> • <i>Assessment of impact of on-site processing facilities before commencing site-disturbing operations.</i> <p>Discussions with forest managers.</p> <p>Discussions with adjoining land owners/users</p> <p>Discussion with DFM</p>
Indicator 6.1.3	Verifiers & Guidance:
<p>For Large Enterprises only:</p> <p>The enterprise shall complete and document an assessment of the environmental impacts of its management activities at the level of the landscape in which it is situated.</p>	<p><i>As above (6.1.2)</i></p>
Indicator 6.1.4	Verifiers & Guidance:
<p>The enterprise shall complete and document an assessment of the environmental impacts of its forest management activities within the FMU under assessment.</p>	<p><i>As above (6.1.2)</i></p>
Indicator 6.1.5	Verifiers & Guidance:
<p>The enterprise shall complete and document an assessment of the environmental impacts of its forest management activities within the FMU under assessment.</p>	<p><i>As above (6.1.2)</i></p>
Indicator 6.1.6	Verifiers & Guidance:
<p>The enterprise shall complete and document an assessment of the environmental impacts of any processing facilities within the FMU under assessment.</p>	<p><i>As above (6.1.2)</i></p>

Indicator 6.1.7	Verifiers & Guidance:
The assessments of environmental impact referred to in the three Indicators above shall include potential impacts of management infrastructure, logging camps, and workers' activities.	<i>As above (6.1.2)</i>
Indicator 6.1.8	Verifiers & Guidance:
The assessments of environmental impact referred to in the first three Indicators above shall include potential impacts relating to the extraction of forest products (e.g. the choice of equipment, impact of the transport network, impact on rivers in the case of fluvial extraction, etc.), both within and outside the FMU.	<i>As above (6.1.2)</i>
Indicator 6.1.9	Verifiers & Guidance:
The management plans and other relevant policies and procedures of the enterprise shall clearly identify the actions to be taken to mitigate or reduce the environmental impacts identified as a result of the assessments.	<i>As above (6.1.2)</i>
Indicator 6.1.10	Verifiers & Guidance:
There shall be a procedure to review and evaluate potential environmental impacts and to record the specific actions taken to mitigate the impacts identified, on a site-by-site basis, prior to the commencement of site-disturbing operations.	<i>As above (6.1.2)</i>
Criterion 6.2	Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g. nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collecting shall be controlled.
Indicator 6.2.1	Verifiers & Guidance:
Management plans shall contain clear and unambiguous objectives or goals for protection and conservation of flora and fauna within forest reserves.	<ol style="list-style-type: none"> 1. <i>Forest Reserve Management Plan</i> 2. <i>TUC Management plan</i> 3. <i>TOS</i> 4. <i>District Forest Development Plan (DFDP)</i> <p>Discussions with forest management entity</p> <p>Discussions with FC</p> <p>Discussions with responsible Environmental ministry.</p> <p>Discussions with District Assembly</p> <p>Ghana source material submitted as part of Convention on Biological Diversity</p>
Indicator 6.2.2	Verifiers & Guidance:

<p>The DFA/FMU shall be covered by clearly defined and formulated strategies to ensure the conservation of existing flora and fauna, including the identification of conservation zones to protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas)</p>	<p><i>1. Forest/TUC possesses comprehensive forest protection strategy</i></p> <p><i>2. Plans incorporate coarse and fined-grained protection measures</i></p> <p><i>3. Pre-stock survey report</i></p> <p>Discussions with forest managers, staff and workforce</p> <p>Discussions with FSD, staff and workforce</p> <p>Discussions with District Assemblies</p> <p>Discussions with the RMSC</p> <p>Procedures laid down in MoP Section A</p> <p>Appropriate planning documents in which objectives and strategies should be formulated are the FRMP and the DFDP.</p>
<p>Indicator 6.2.3</p> <p>Management shall identify areas of semi-protection within the DFA/FMU</p>	<p>Verifiers & Guidance:</p> <p><i>1. For forest reserves - maps showing:</i></p> <ul style="list-style-type: none"> • <i>fire buffer zones</i> • <i>shelterbelts</i> • <i>areas of convalescing forest</i> <p><i>2. Fire risk assessment of DFA conducted</i></p> <p>Discussions with DFM</p> <p>Discussions with forest management entity</p> <p>Discussions with District Assemblies</p> <p>Fine grained strategy measures detailed in Forest Protection in Ghana by Hawthorne and Abu-Juam</p> <p>Summary of procedures is found in Manual of Procedures Section A - Instruction Sheet A2.3 page 8</p>
<p>Indicator 6.2.4</p> <p>Management shall adopt genetic heat index and star colour coding of individual species in the calculation of yield and the selection of trees to be felled</p>	<p>Verifiers & Guidance:</p> <p><i>1. Tree maps derived from stock surveys</i></p> <p><i>2. Trees located and colour coded</i></p> <p><i>3. Selection procedure adopted as prescribed in MoP Section D</i></p> <p><i>4. Special permits for species on CITES appendixes (See annex 2)</i></p> <p>Discussions with DFM</p> <p>Discussions with forest management entity</p> <p>TUC Operational plan</p> <p>Genetic heat index and the star system are detailed in Forest Protection in Ghana by Hawthorne and Abu-Juam</p> <p>Summary of procedures is found in Manual of Procedures Section A</p> <p>See also Manual of Procedures Section D Yield Allocation</p>
<p>Indicator 6.2.5</p> <p>Management shall adopt and put in place appropriate limits or precautionary measures.</p>	<p>Verifiers & Guidance:</p> <p><i>1. Limit on maximum number of stems per hectare to be harvested is adhered to.</i></p> <p><i>2. Limits on minimum spacing of felled trees (density of felling)</i></p> <p><i>3. Other precautionary limits to prevent over-cutting</i></p>

	<p>Discussions with DFM</p> <p>Discussions with forest management entity</p> <p>Existing systems are map-based and rely on accurate maps. Simple ground based rules and limits should be in place in the event that maps are inaccurate or not produced in time.</p>
Indicator 6.2.6	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Forest/TUC management plan, FMU management plan, compartment plans</i> 2. <i>Policy documents</i> 3. <i>Operational procedures/manuals and works instructions sheets</i> 4. <i>Appropriate control of contractors and workforce exist</i> <p>Discussions with forest management entity</p> <p>To include:</p> <ul style="list-style-type: none"> o instruction sheets o posted notices o verbal instructions to staff <p>Ghanaian source material submitted as part of Convention on Biological Diversity</p> <p>Requirements developed for Forest Protection Strategy for forests (coarse and fine grained) provide the minimum acceptable standards</p>
<p>Forest management shall demonstrate a commitment to adopt and adhere to protection measures and the spirit of the protection strategy</p>	
Indicator 6.2.7	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Existence of measures to control such activities.</i> 2. <i>No evidence of uncontrolled activity taking place</i> <p>Consolidated Wildlife laws of Ghana</p>
<p>Inappropriate hunting, fishing, trapping and collecting shall be controlled.</p>	
Criterion 6.3	<p>Ecological functions and values shall be maintained intact, enhanced, or restored, including:</p> <ul style="list-style-type: none"> ▪ Forest regeneration and succession. ▪ Genetic, species and ecosystem diversity. ▪ Natural cycles that affect the productivity of the forest ecosystem.
Indicator 6.3.1	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Species composition, stand densities, quantities of forest products available post-harvesting are documented</i> 2. <i>Status of forest at compartment closure is consistent with requirements for regeneration of the existing forest structure</i> 3. <i>Enrichment planting is appropriate (native species etc.) and is carried out in such a way as to genuinely contribute to the regeneration of the forest crop</i> 4. <i>A system exists for the long term monitoring of the regeneration and growth of the forest (e.g. permanent sample plots, periodic re-assessments) within the DFA</i> 5. <i>A system exists for executing remedial action in the event of the failure of the compartment/area to regenerate adequately</i> 6. <i>Latest research information and environmental codes on what</i>
<p>Silvicultural systems shall be adopted to ensure that a full complement of tree species regenerate successfully in the DFA over the duration of the rotation/felling cycle</p>	

	<p><i>constitutes good practice inform changes in operational practice</i></p> <p>Post harvest inventory or objective assessment</p> <p>Discussions with forest management entity</p> <p>Field visit</p> <p>Discussions with FC (RMSC) and FORIG</p>
<p>Indicator 6.3.2</p> <p>Forest management shall adopt coarse grained protection measures where appropriate in the planning and management of the resource</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Initial zonation maps - identify, delineate and map protected areas</i> 2. <i>Maps are accurate and truly represent the situation on the ground</i> 3. <i>Protected or conserved areas are adequate and appropriate in size and scale</i> 4. <i>Areas protected for environmental stability including:</i> <ul style="list-style-type: none"> • <i>hills, summits and steep slopes</i> • <i>swamp sanctuaries</i> • <i>shelterbelts</i> • <i>fire protection blocks</i> 5. <i>Areas for biodiversity protection</i> 6. <i>Culturally sensitive areas of:</i> <ul style="list-style-type: none"> • <i>local significance</i> • <i>national significance</i> 7. <i>Sites are excluded from production</i> <p>Field visits</p> <p>Coarse grained strategy measures detailed in Forest Protection in Ghana by Hawthorne and Abu-Juam</p> <p>Summary of procedures is found in Manual of Procedures Section A</p> <p>Inspectors should seek to ensure that adequate and appropriate areas of forest types occurring within the FMU/DFA are set aside for protection, both nationally and regionally. Small isolated areas of forest that have been set aside for protection may not be adequate or capable of providing effective protection of species, plant or animal communities or ecosystems</p>
<p>Indicator 6.3.3</p> <p>Forest management shall adopt fine grained protection measures in the planning and management of the forest</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Stock surveys</i> 2. <i>Individual tree location maps</i> 3. <i>Compartments or zonation maps</i> 4. <i>Maps are accurate and truly represent the situation on the ground</i> 5. <i>Following areas are identified, mapped and physically excluded:</i> <ul style="list-style-type: none"> • <i>Areas where slopes > 30%</i> • <i>Watercourse buffer zones (25-50m) depending on stream size</i> • <i>Permanently wet areas (but not designated as swamps)</i>

	<ul style="list-style-type: none"> • <i>Any sanctuaries identified under coarse grained zonation</i> • <i>Open patches of forest (classes 5 and 6)</i> <p>Field visits MoP Section C and D</p> <p>Fine grained strategy measures detailed in Forest Protection in Ghana by Hawthorne and Abu-Juam</p> <p>Summary of procedures is found in Manual of Procedures Section A</p> <p>Class 5 = very poor. Canopy mostly broken (>75% open)</p> <p>Class 6 = no significant forest left. Scattered trees only remaining (Forest classes from Forest Protection in Ghana: Hawthorne and Abu-Juam)</p> <p>See also MoP section D</p>
<p>Indicator 6.3.4</p> <p>Areas/corridors of unlogged forest shall be retained as local refugia, to provide a seed source and to act as movement corridors for local fauna</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Survey data</i> 2. <i>Forest maps and compartment records</i> 3. <i>Selection criteria and documented procedures for selecting corridors and refugia</i> <p>Field visits DFM office Forest managers office</p>
<p>Indicator 6.3.5</p> <p>Management shall comprise systems capable of identifying degraded areas (pre or post logging)</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Criteria established for degraded or unproductive areas</i> 2. <i>Areas shown on maps and classified accordingly as non-productive, protected or convalescent</i> 3. <i>Areas are appropriately designated and excluded from logging</i> <p>Discussions with FC Discussions with forest management entity MoP section D</p>
<p>Indicator 6.3.6</p> <p>Management shall comprise appropriate mechanisms of on-site amelioration</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Prescriptions laid down for different types of degrade or pollution including soil and water</i> 2. <i>Prescriptions for enhancing or stimulating the regeneration of the tree crop</i> 3. <i>Reduced Impact Logging practices</i> <p>Discussions with FC Discussions with forest management entity</p>
<p>Indicator 6.3.7</p> <p>Degraded areas shall be identified and</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Selection criteria and documented procedures for identifying and selecting representative areas</i>

restorative treatments effected.	<p style="color: #A52A2A;"><i>2. Forest and zonation maps and compartment records</i></p> <p>Field visits</p> <p>Ghana's forest protection strategy</p>
Criterion 6.4 Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources.	
Indicator 6.4.1	Verifiers & Guidance:
Representative areas of existing forest communities and ecosystems, especially sites of ecological importance, shall be protected in their natural state and documented. (10% shall be the minimum in FSC certified forests).	<p style="color: #A52A2A;"><i>1. Selection criteria and documented procedures for identifying and selecting representative areas</i></p> <p style="color: #A52A2A;"><i>2. Forest and zonation maps and compartment records</i></p> <p>Field visits</p> <p>Ghana's forest protection strategy</p>
Criterion 6.5 Written guidelines shall be prepared and implemented to: control erosion; minimise forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources.	
Indicator 6.5.1	Verifiers & Guidance:
Forest managers shall produce written guidelines to cover all aspects of management that impact on the forest to include road design and construction, preparation of log siding, tree felling, skidding among others aimed at minimising onsite impact.	<p style="color: #A52A2A;"><i>1. Forest managers written operations procedures</i></p> <p style="color: #A52A2A;"><i>2 Roads, bridges and loading sites located as per map</i></p> <p style="color: #A52A2A;"><i>3. Appropriateness and quality of road, bridges , culverts, skid trail</i></p> <p style="color: #A52A2A;"><i>4. Felling direction</i></p> <p style="color: #A52A2A;"><i>5. Riparian protection</i></p> <p>Field visit</p> <p>Ghana Logging Manual</p>
Indicator 6.5.2	Verifiers & Guidance:
The guidelines shall include, at a minimum, specific provisions to prevent erosion by identifying areas which are susceptible to erosion, in which harvesting and other disturbance is prohibited	<p style="color: #A52A2A;"><i>1. Forest managers written operations procedures</i></p> <p style="color: #A52A2A;"><i>2 Roads, bridges and loading sites located as per map</i></p> <p style="color: #A52A2A;"><i>3. Appropriateness and quality of road, bridges , culverts, skid trail</i></p> <p style="color: #A52A2A;"><i>4. Felling direction</i></p> <p style="color: #A52A2A;"><i>5. Riparian protection</i></p>
Indicator 6.5.3	Verifiers & Guidance:
Applicable to SLIMF (1) DFAs only. (Note. Indicator 6.5.1 does not apply.)	<p style="color: #A52A2A;"><i>1. Managers road design and construction on the ground</i></p> <p style="color: #A52A2A;"><i>2. Felling and skidding techniques</i></p> <p>Discussions with forest managers and field workers</p> <p>Field visits</p>
Indicator 6.5.4	Verifiers & Guidance:
The road network and related constructions	<p style="color: #A52A2A;"><i>1. Main road width does not exceed 5m and haulage roads < 3m</i></p>

<p>shall be properly constructed and maintained.</p>	<p><i>2. Roads with clear and unobstructed side drains and run offs</i></p> <p><i>3. No erosion on road surface</i></p> <p><i>4. Bridges and culverts permit unobstructed flow of water</i></p> <p><i>5. Road spill material removed or utilised in road and landings construction</i></p> <p><i>6. Embankments are stable</i></p> <p><i>7. Passing places adequate in number, appropriately constructed and sited</i></p> <p><i>8. Log loading sites properly constructed, stabilised and drained</i></p> <p><i>9. Road junctions do not exceed 11m in width and < 30 m in length</i></p> <p><i>10. Roads do not exceed permitted gradients (10% for main roads and 14% for haulage roads)</i></p> <p><i>11. Roads and tracks are sited at regulation distances from rivers and streams</i></p> <p><i>12. Roads and extraction tracks do not cross rivers or buffer zones without culverts or bridges properly constructed</i></p> <p><i>13. Trees felled in road construction are utilised and/or crowns cross cut and reduced</i></p> <p><i>14. Records of road maintenance</i></p> <p><i>15. Roads not built during wet weather or other restricted times</i></p> <p>Field visit</p> <p>For details of permitted limits Auditors should refer to the Logging Manual and relevant sections of MoP Sections C. The key elements of these guidelines appear as verifiers in Column 2</p>
<p>Indicator 6.5.5</p>	<p>Verifiers & Guidance:</p>
<p>Felling and extraction shall be executed according to the logging plan</p>	<p><i>1. Logging adheres to logging plan</i></p> <p><i>2. Only trees selected for harvesting are felled - trees marked for retention are retained</i></p> <p><i>3. Extraction routes for selected trees and/or felling direction coincides with the map in logging plan</i></p> <p><i>4. Restricted or protected areas marked in field and not logged (river buffer zones, slopes >30%, swamps)</i></p> <p><i>5. Stock maps and yield maps at 1:2,500 scale</i></p> <p><i>6. Compartment inspection forms and stock maps provide details of:</i></p> <ul style="list-style-type: none"> <i>• roads and skid trails</i> <i>• bridges and culverts</i> <i>• areas where soil erosion control measures may be required</i> <i>• proposed location of log loading sites</i> <i>• streams and areas part of the coarse grained protection strategy</i> <p>Field visit</p> <p>Format laid down in MoP Section C.</p> <p>Harvesting details also laid down in Logging Manual</p>

Indicator 6.5.6	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Directional felling has been practised</i> 2. <i>Collateral damage identified, recorded and compensated.</i> 3. <i>Yield recalculated to take into account collateral damage</i> 4. <i>No skid paths on slopes > 30%</i> 5. <i>No trees felled on slopes >30%</i> 5. <i>Waterways cleared of debris</i> 6. <i>Buffer zones exist</i> 7. <i>No evidence of erosion or water contamination in the field</i> 8. <i>Two or more trees adjacent to each other have not been felled</i> 9. <i>Trees not felled into streams, buffer zones or other restricted/protected areas.</i> 10. <i>No more than 3 trees per hectare felled</i> <p>Field visit.</p>
Reduced impact logging and harvesting shall be practised	
Indicator 6.5.7	<p>Verifiers & Guidance:</p> <p><i>Instructions provided on:</i></p> <ol style="list-style-type: none"> 1. <i>Location of bridges and culverts</i> 2. <i>Map requirements for alignment of roads, tracks, loading sites, bridges and culverts</i> 3. <i>Road and track network subjected for approval prior to permission to enter compartment</i> 4. <i>Specifications for road construction (width, surface cover, drainage etc)</i> 5. <i>Specifications for landing sites (permanent locations)</i> 6. <i>Specifications for road junctions (permissible angles, area covered by junction, approach slopes etc)</i> 7. <i>Acceptable slopes on which roads and tracks may be situated</i> 8. <i>Acceptable gradients for roads and extraction tracks</i> 9. <i>Operational conditions clearly laid down when road and bridge construction are:</i> <ul style="list-style-type: none"> • <i>permitted</i> • <i>not permitted (wet weather conditions etc)</i> 10. <i>Stabilization of roads, embankments and cuttings</i> 11. <i>Acceptable road density (per ha)</i> 12. <i>Re-use of roads, loading and skid trails</i> 13. <i>Operational rules established for roads, streams, buffer zones etc.</i> <p>Discussions with FC</p> <p>Discussions with forest managers</p> <p>Logging Manual.</p> <p>Detailed instructions and standards for Reserve Forests are covered by MoP Section C</p>
Management shall provide detailed instructions and minimum standards for the design, construction and maintenance of roads and extraction tracks	

Indicator 6.5.8	Verifiers & Guidance:
Trees to be harvested shall be indicated on maps of an appropriate scale prior to felling	<ol style="list-style-type: none"> 1. Stock map exists at appropriate showing all trees prior to felling. 2. Trees selected according to appropriate criteria. 3. Stock map identifies trees to remain (seed trees, buffer zones etc) <p>Discussions with forest managers and DFM office</p> <p>See MoP Section D</p>
Indicator 6.5.9	Verifiers & Guidance:
Felling direction of trees and/or extraction route shall be marked on map prior to felling.	<ol style="list-style-type: none"> 1. Stock map with felling direction marked 2. Stock map with extraction route and provisional loading bays marked <p>Discussions with forest managers and DFM office</p>
Indicator 6.5.10	Verifiers & Guidance:
Felling and extraction equipment shall be specifically selected to minimise environmental impact	<ol style="list-style-type: none"> 1. Appropriate decision making criteria and process for selection and purchase of harvesting and extraction machinery 2. Machines of dimensions and specifications higher than D6 and D7 not allowed <p>Discussions with forest managers</p> <p>Ghana Logging Manual</p>
Indicator 6.5.11	Verifiers & Guidance:
Relevant staff shall be trained and should be aware of the provisions of the written guidelines aimed at minimising impact of their operations	<ol style="list-style-type: none"> 1. Training records 2. Discussion with field workers <p>Field visit</p>
Criterion 6.6	Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organisation Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimise health and environmental risks.
Indicator 6.6.1	Verifiers & Guidance:
Documented pest, disease and weed control strategies shall be available.	<p><i>Manuals and operational guidelines exist</i></p> <p>Discussions with forest management entity</p> <p>FC</p>
Indicator 6.6.2	Verifiers & Guidance:

<p>The use of all pesticides shall be discouraged, actively monitored and plans for their progressive phasing out made part of the management process.</p>	<ol style="list-style-type: none"> 1. <i>A suitable and foolproof means of monitoring and recording the storage and use of chemicals exists and is documented</i> 2. <i>Guidelines and manuals for chemical use exist and good practice is adopted</i> 3. <i>Chemicals register (pesticides and herbicides). Including records of chemical use:</i> <ol style="list-style-type: none"> a) <i>Name of the product</i> b) <i>Location of the site treated;</i> c) <i>Area of the site treated;</i> d) <i>Method of application;</i> e) <i>Date chemical use started;</i> f) <i>Date chemical use finished;</i> g) <i>Total quantity of the chemical used</i> 4. <i>Contingency plans are documented and in place in the event of pollution or poisoning of the environment or individuals</i> 5. <i>Adequate preventive and health and safety measures in place and implemented</i> 6. <i>A clear plan for the phasing out of chemicals is detailed in the management plan together with a justification for the continued use of the chemical</i> <p>Field and office inspection of forest management</p> <p>Discussions with forest managers</p> <p>Auditors should consult advice notes on FSC list of prohibited pesticides</p>
<p>Indicator 6.6.3</p> <p>Environmentally friendly means of pest and weed control shall be adopted wherever possible. Chemicals shall be used only where there is no existence of known non-chemical alternative or entails excessive cost or an unrealistic expenditure of resources.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Documented justification for use</i> 2. <i>Documentary evidence that alternatives are being considered.</i> <p>Field inspections.</p> <p>EPA guidelines on non-chemical pest management.</p>
<p>Indicator 6.6.4</p> <p>Chemical prohibited by FSC (FSC-POL-30-601), World Health Organisation Type 1A and 1B and chlorinated hydrocarbon pesticides; as well as any highly hazardous pesticides banned by international agreement shall be prohibited, unless a FSC derogation has been obtained for their use in certified forests in Ghana.</p>	<p>Verifiers & Guidance:</p> <ul style="list-style-type: none"> • <i>Records of chemicals purchased and used.</i> • <i>Field observation.</i> • <i>Discussions with managers, staff and contractors.</i> <p>Auditors shall consult advice notes on FSC list of prohibited pesticides</p>
<p>Indicator 6.6.5</p> <p>Where chemicals are used, proper equipment and training shall be provided to minimise health and environmental risks.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Procedures are in place to record all use of synthetic chemicals by the forest management enterprise</i> 2. <i>Training and appropriate equipment provided to all operators.</i> 3. <i>Chemical tanks and stores located so that spillages and waste will not enter watercourses</i> 4. <i>All equipment for the transport, storage and application of chemicals is maintained in safe condition and leak-proof containers</i>

	<p>5. No application of chemicals within 10m of watercourses and 30m around reservoirs and lakes</p> <p>6. No application in heavy rain or on ground baked dry during a drought</p> <p>7. No soaking of seedlings treated with chemicals in drains or watercourses</p> <p>Field and office visits of forest management.</p>
Criterion 6.7 Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed in an environmentally appropriate manner at off-site locations.	
Indicator 6.7.1	Verifiers & Guidance:
Mechanical equipment shall be maintained to function efficiently so that pollution and spillage are minimised	<p>1. Service records</p> <p>2. Records of maintenance programmes</p> <p>3. Absence of spillage on operational sites</p> <p>4. Where servicing and repairs in the forest are unavoidable all polluting material is collected returned to camp or is disposed of properly</p> <p>Visual inspection - working and stationary</p> <p>Field visits</p>
Indicator 6.7.2	Verifiers & Guidance:
Appropriate forms of chemical waste disposal shall be adopted in the field and in camps	<p>1. Waste material properly disposed</p> <p>2. Clear procedures and directives for proper waste disposal</p> <p>3. Offsite locations identified for the disposal of chemicals, oil lubricants and non-organic waste</p> <p>4. No evidence of waste and waste disposal in forests, along sides of streams etc</p> <p>5. Forest camps and operators/contractors based in the field abide by the same rules as HQ based staff</p> <p>Visits to field sites and camps.</p>
Indicator 6.7.3	Verifiers & Guidance:
The enterprise shall keep an up to date list identifying the off-site location(s) for the disposal of all its chemicals, containers, liquid and solid non-organic wastes (including fuel and oil).	<p>1. Waste material properly disposed</p> <p>2. Clear procedures and directives for proper waste disposal</p> <p>3. Offsite locations identified for the disposal of chemicals, oil lubricants and non-organic waste</p> <p>4. No evidence of waste and waste disposal in forests, along sides of streams etc</p> <p>5. Forest camps and operators/contractors based in the field abide by the same rules as HQ based staff</p> <p>Visits to field sites and camps.</p>
Criterion 6.8 Use of biological control agents shall be documented, minimised, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.	
Indicator 6.8.1	Verifiers & Guidance:

Genetically modified organisms shall not be used	<ul style="list-style-type: none"> • <i>Plant supply records</i> • <i>Discussions with forest managers.</i> <p>The creation of GMOs involves gene transfer under laboratory conditions and not the product of tree breeding, vegetative propagation, cloning or tissue culture programmes.</p>
Indicator 6.8.2	Verifiers & Guidance:
Use of biological control agents shall be documented, minimized, monitored and strictly controlled.	<ol style="list-style-type: none"> 1. <i>Introduction protocols</i> 2. <i>Permission from MoFA, EPA, FC</i> 3. <i>Supporting trial results</i> 4. <i>Documented procedures for monitoring impacts</i> <p>EPA Guidelines on non-chemical pest management</p>
Criterion 6.9 The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts	
Indicator 6.9.1	Verifiers & Guidance:
The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.	<ol style="list-style-type: none"> 1. <i>Documented procedures for monitoring ecological impacts of exotic species or existence of a long history of use without known, significant negative ecological impacts</i>
Indicator 6.9.2	Verifiers & Guidance:
The likely ecological impacts of any exotic species shall be evaluated prior to its use.	<ol style="list-style-type: none"> 1. <i>Documented evidence of evaluation prior to the use of an exotic species.</i>
Criterion 6.10 Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion:	
<ol style="list-style-type: none"> a) entails a very limited portion of the forest management unit; and b) does not occur on high conservation value forest areas; and c) will enable clear, substantial, additional, secure, long-term conservation benefits across the forest management unit. 	
Indicator 6.10.1	Verifiers & Guidance:
Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion: a) entails a very limited portion of the forest management unit; and b) does not occur on high conservation value forest areas; and c) will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit.	<ol style="list-style-type: none"> 1. <i>Maps of areas planted</i> 2. <i>Maps of land use prior to planting</i> 3. <i>Conversion objectives</i>
Indicator 6.10.2	Verifiers & Guidance:
The area affected shall not exceed 0.5% of the area of the FMU in any one year, nor affect a total of more than 5% of the area of the FMU.	<ol style="list-style-type: none"> 1. <i>Maps of areas planted</i> 2. <i>Maps of land use prior to planting</i> 3. <i>Conversion objectives</i>

PRINCIPLE 7. MANAGEMENT PLAN:

A management plan - appropriate to the scale and intensity of the operations - shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.

Criterion 7.1	<p>The management plan and supporting documents shall provide:</p> <ul style="list-style-type: none"> a) management objectives; b) description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands; c) description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resources inventories d) rationale for rate of annual harvest and species selection; e) provisions for monitoring of forest growth and dynamics; f) environmental safeguards based on environmental assessments; g) plans for the identification and protection of rare, threatened and endangered species; h) maps describing the forest resource base including protected areas, planned management activities and land ownership; i) description and justification of harvesting techniques and equipment to be used.
----------------------	--

Indicator 7.1.1	Verifiers & Guidance:
<p>Management plan for FMU/DFA/TUC Area, the attached and referenced documents shall provide</p> <ul style="list-style-type: none"> a. Clear management objectives b. Description of the resource, exploitation, land use ownership, socio-economic conditions and adjoining lands c. Description of silviculture and or other management system based on knowledge of the ecosystem of the forest in question and information gathered through resource inventory d. Rationale for annual harvest and species selection. e. Description and justification of the techniques and equipment to be used f. Environmental safeguard based on environmental assessment g. Measures for identifying and protecting of rare, threatened and endangered species h. Map(s) describing the forest resource including protected areas, unique biological or cultural resources, watercourses and drains, compartments/blocks, roads, log landings, , and other planned management activities; i. Strategies for monitoring forest growth and dynamics 	<ul style="list-style-type: none"> 1. Copies of relevant and up to date FRMPs available 2. Clear and unequivocal management goals 3. Management goals for the FMU are congruent with the forest policy and do not conflict with each other 4. For TUCs, management goals are congruent with FMU management goals. 5. One or more maps at an appropriate scale showing the boundaries of the DFA and with reference to survey points or clear and recognisable geographical or topographical features 6. Maps require all appropriate features to be included: <ul style="list-style-type: none"> • rivers and water features with buffer zones • black star species • scarlet star species • Slopes • Cultural sites • Research sites • Proposed roads, extraction tracks, junctions and loading sites 7. All relevant personnel have access to plans, maps and technical data as required 8. Adequate information exists on which to base an FRMP <p>Forest Management Plan</p> <p>Visits to DFM office and discussions with DFM</p> <p>Discussions with forest managers</p> <p>Refer to:</p> <ul style="list-style-type: none"> • National Forestry Plan • Forest Reserve Management Plans

	<ul style="list-style-type: none"> • Forest Protection Strategy (Fine and coarse grained) • Manuals of Procedures • <input type="checkbox"/> MoP Section D
Indicator 7.1.2	Verifiers & Guidance: <ol style="list-style-type: none"> 1. <i>Socio-economic survey</i> 2. <i>Field reconnaissance</i> 3. <i>Conservation and protection areas</i> 4. <i>Maps</i> 5. <i>Forest Reserve Annual Reports</i> 6. <i>Team composition for FMU plans</i> 7. <i>Stakeholder workshops for FMU plans</i> DFM and RFM
TUCs shall be observed in formulating the FMU plans and they should follow the agreed format.	
Indicator 7.1.3	Verifiers & Guidance: <ol style="list-style-type: none"> 1. <i>Forest Reserve Management Plan</i> 2. <i>Forest inventory</i> 3. <i>Forest stock maps</i> DFM, DFO, DFM National Forest Inventory of 1984-9 may provide baseline data about the FMU as well as the national status of the forest resource and the Multi-resource inventory of MRI (2003) Annexes and zonation maps should accompany the Forest Reserve Management Plan
Information on the flora of the DFA/FMU shall be clearly documented.	
Indicator 7.1.4	Verifiers & Guidance: <ol style="list-style-type: none"> 1. <i>Forest Reserve Management Plan</i> 2. <i>Ecological survey which details the status of fauna within the DFA</i> DFM, Wildlife Division and Min of Environment DFM and/or Forest management entity are expected to conduct some form of survey to assess the current status of fauna within the DFA/FMU
Information on the fauna of the DFA/FMU shall be clearly documented	
Indicator 7.1.5	Verifiers & Guidance: <ol style="list-style-type: none"> 1. <i>Harvesting schedule available</i> 2. <i>Accompanying maps</i> 3. <i>DFA/FMU appropriately subdivided into compartments</i> 4. <i>Harvesting Schedule for DFA/FMU is appropriate based on the 40 felling cycle and compartment history</i> Forestry Commission RFM or DFM of FC Format laid down in MoP Section E and Logging Manual
DFA/FMU shall be covered by a valid harvesting schedule of a pre-determined format	

<p>Indicator 7.1.6</p> <p>Compartment inspection shall be completed for the DFA/FMU</p>	<p>Verifiers & Guidance:</p> <p><i>1. Detailed compartment map at 1:10,000 scale</i></p> <p><i>2. Detailed compartment information available according to format</i></p> <p>Discussion with DFM</p> <p>Format and key elements to be included are laid down in MoP Sections C and E</p>
<p>Indicator 7.1.7</p> <p>Stock Survey and Compartment inspection shall be completed for the DFA/FMU</p>	<p>Verifiers & Guidance:</p> <p><i>Completed inspection form and stock survey signed off by District Forest manager.</i></p> <p>Discussion with DFM, forest manager</p> <p>Format laid down in MoP Section D and Logging Manual</p> <p>See MoP Sections C</p>
<p>Indicator 7.1.8</p> <p>DFA/FMU compartment logging plan shall be prepared.</p>	<p>Verifiers & Guidance:</p> <p><i>1. Logging plan which adheres to a detailed pre-determined format:</i></p> <p><i>2. Stock maps and yield maps at 1:2,500 scale or better</i></p> <p><i>3. Yield summary in tabular form</i></p> <p><i>4. Compartment logging plan with details of:</i></p> <ul style="list-style-type: none"> <i>• roads and skid trails</i> <i>• bridges and culverts</i> <i>• areas where soil erosion control measures may be required</i> <i>• proposed location of log loading sites</i> <i>• streams and areas part of the coarse grained protection strategy</i> <p><i>5. Forestry Commission approval of logging plan</i></p> <p>Discussion with the DFM and DFA managers</p> <p>Format laid down in MoP Sections B and C and the Logging Manual</p>
<p>Indicator 7.1.9</p> <p>Applicable to SLIMF (1) DFAs only: (note: above indicators do not apply except when required by law or FC administrative directive)</p> <p>DFA shall have written management plan that at minimum includes the following:</p> <p>a. Objectives of management;</p> <p>b. A description of the forest;</p> <p>c. How the objectives will be met.</p> <p>d. Sustainable harvest limits that is consistent with FSC criteria 5.6);</p> <p>e. Conservation of rare species habitats and any high conservation values;</p>	<p>Verifiers & Guidance:</p> <p><i>1 Written management plan of DFA</i></p> <p><i>2 Managers knowledge of the management plan's contents</i></p> <p>Discussion with DFA managers</p> <p>Discussion with DFM</p>

<p>f. Maps of the forest, showing protected areas, planned management.</p> <p>g. Duration of the plan.</p>	
<p>Criterion 7.2 The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances</p>	
<p>Indicator 7.2.1</p> <p>Planning and overall management of the forest resource shall be based on the best and most up-to-date information possible and shall be regularly reviewed and revised to incorporate new information.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Forest inventories and surveys</i> 2. <i>Compartment records and closing reports</i> 3. <i>Research, bulletins, briefing papers</i> 4. <i>Forest Reserve Management Plans</i> 5. <i>Document tracking system for research reports to ensure proper circulation.</i> 6. <i>Schedule for revision of management plans at regular intervals.</i> 7. <i>EIA guidelines for forest and wood industries</i> <p>Discussions with FC FORIG and DFA managers</p>
<p>Indicator 7.2.2</p> <p>The forest management system (FMS) shall be constantly upgraded and improved in the light of new information and of the results of monitoring to ensure its continuing suitability and effectiveness</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Organisations and individuals responsible for systems modification are clearly identified and are aware of their responsibilities</i> 2. <i>Provisions are made for the periodic review, evaluation and revision of the FMS and its component parts</i> 3. <i>Evaluation of policy objectives and targets in light of information from internal monitoring procedures, audits and feedback from stakeholders</i> 4. <i>Failures to meet intended goals or manifest failures of FMS are identified</i> 5. <i>Appropriate modifications in the FMS developed and installed</i> 6. <i>Document tracking system for research reports to ensure proper circulation.</i> 7. <i>Schedule for revision of management plans at regular intervals.</i> 8. <i>EIA guidelines for forest and wood industries.</i> <p>Discussions with FC and DFA managers</p>
<p>Indicator 7.2.3</p> <p>Applicable for SLIMF (1) DFA's only (Note: above indicators do not apply except where it is required by law or FC administrative directive)</p> <p>Management plan shall be reviewed at least every 10 years and updated, if necessary, incorporating the results of monitoring to plan and implement future management.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Age of the management plan</i> 2. <i>Monitoring results</i> 3. <i>Available research results on the DFA</i> <p>Discussions with managers</p>

Criterion 7.3 Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plan	
Indicator 7.3.1	Verifiers & Guidance:
The Forest Management Organisation shall assign responsibilities to employees and delegate authority to them to enable them to fulfil their responsibilities.	<ol style="list-style-type: none"> 1. <i>Clear documentation exists identifying roles and responsibilities</i> 2. <i>Organisational chart identifying individuals, and respective responsibilities</i> 3. <i>Respective individuals are aware of their responsibilities</i> 4. <i>Instruction sheets to staff and workers</i> 5. <i>Contracts and terms of employment</i> <p>Discussions with staff of forest management entity</p> <p>It is important for management staff to be as fully informed as possible and that the authority and responsibilities of those responsible for the management of the resource are clear and transparent.</p>
Indicator 7.3.2	Verifiers & Guidance:
Regular assessments of training and education needs of employees and contractors shall be conducted by the managers.	<ol style="list-style-type: none"> 1. <i>Records of training assessments</i> <p>Discussions with managers</p> <p>Both for forest managers own employees and contractors</p>
Indicator 7.3.3	Verifiers & Guidance:
Regular assessments of employees and contractors' performance and actions shall be conducted regularly by managers to identify and correct poor performance, failure to meet standards or other shortcomings	<ol style="list-style-type: none"> 1. <i>Records of training assessments</i> 2. <i>Records of induction courses</i> 3. <i>Appropriateness of content of induction courses</i> 4. <i>Records of courses on health and safety</i> 5. <i>Individual training records (personnel records)</i> <p>Discussions with managers</p>
Indicator 7.3.4	Verifiers & Guidance:
Sufficient workers with appropriate levels of skills shall be employed by the managers to execute the work required by the forest management system.	<ol style="list-style-type: none"> 1. <i>Adequate workforce</i> 2. <i>Regular and appropriate training and re-training programmes</i> <p>Discussions with DFM, Forest manager</p> <p>Workforce of the forest management entity will need to be evaluated to see if they can fulfil their respective functions</p>
Indicator 7.3.5	Verifiers & Guidance:
Any changes in operational procedures from that laid down by the FMS or arising from corrective or preventive actions shall be recorded.	<ol style="list-style-type: none"> 1. <i>Forest managers operations manuals</i> <p>Discussions with FC staff</p> <p>Discussions with forest managers</p>
Indicator 7.3.6	Verifiers & Guidance:
Provisions shall be made for the periodic review	<ol style="list-style-type: none"> 1. <i>Licence holder continues to meet its legal, technical and</i>

<p>and evaluation of forest managers procedures to detect, prevent or remedy non-conformities and to determine the extent to which actual outcomes of the operations coincide with forecasts.</p>	<p><i>organisational obligations (eg under TUC)</i></p> <ol style="list-style-type: none"> 2. <i>Relevant and appropriate targets and performance indicators have been established by management</i> 3. <i>Maps of DFA/FMU and its constituent components readily and widely available and regularly updated</i> 4. <i>Management comprises suitable monitoring systems which provides information to improve and modify the management of the DFA / FMU</i> <p>Discussions with managers</p>
<p>Indicator 7.3.7</p> <p>Management systems shall ensure good internal communications and transparency.</p>	<p>Verifiers & Guidance:</p> <p><i>System exists for communication between the contract/licence holders and the government agencies responsible for management as well as landowners, farmers and other stakeholders</i></p> <ol style="list-style-type: none"> 1. <i>Formal system of recording and documenting correspondence and communications exists</i> 3. <i>Public reporting mechanisms exist</i> 4. <i>Stakeholder awareness programme exists (see also 2.5)</i> <p>Discussions with: DFM, Communities, Staff of Forest management entity among other stakeholders</p>
<p>Indicator 7.3.8</p> <p>Manuals of management and or Standard operations procedures (SoP) shall be established and maintained.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Appropriate manuals of procedures and operational guidelines exist and are regularly in use</i> 2. <i>Regular revisions/updates</i> <p>Discussions and office visit with forest management entity</p> <p>Discussions visit with FC</p> <p>It is the FC who is principally responsible for maintaining the Manuals of Procedures, Logging Manual and associated technical manuals.</p> <p>However, it is reasonable to expect TUC holders to produce their own operations and field manuals even if they are distillations of the manuals prepared by the FC.</p>
<p>Criterion 7.4 While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed in Criterion 7.1 above.</p>	
<p>Indicator 7.4.1</p> <p>A summary of the primary elements as in 7.1 (i to j) of the management plan shall be made publicly available, including the elements listed in FSC Criterion 7.1 and 9.3</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Publicly available management plan summary.</i> 2. <i>Stakeholders have received the public summary when they have requested it.</i> <p>The summary should be available to members of the public on request.</p>

Criterion 7.5 Measures shall be taken to prevent and minimise outbreaks of fire (Additional Criterion for Ghana – bush fire is a problem in the country).	
Indicator 7.5.1	Verifiers & Guidance:
The need for fire management and control shall be properly evaluated and documented.	<ol style="list-style-type: none"> 1. <i>FRMP and District Area Plans</i> 2. <i>District Forest Development Plan</i> <p>Discussions with DFM</p> <p>Discussions with District Assemblies</p> <p>MoP G</p> <p>National Wildlife Management Policy 2006</p>
Indicator 7.5.2	Verifiers & Guidance:
In fire-prone areas, or those in which fire is an integral feature of the ecology of the forest, there shall be a fire management plan.	<ol style="list-style-type: none"> 1. <i>Fire plan based on appropriate maps and consideration of:</i> <ol style="list-style-type: none"> a) <i>Known ignition sources;</i> b) <i>Direction of main threat;</i> c) <i>Fuel, distribution and flammability;</i> d) <i>Ecological features and processes in the forest;</i> e) <i>Special features e.g. archaeological sites, rare fire susceptible flora;</i> f) <i>Local communities;</i> g) <i>Local assets requiring protection;</i> h) <i>Access, firebreaks and fuel reduction measures;</i> i) <i>Fire detection and suppression procedures;</i> j) <i>Resources for control and suppression</i> <p>Discussions with DFM</p> <p>Discussions with District Assemblies</p> <p>MoP G</p> <p>National Wildfire Management Policy 2006</p> <p>The Ghana National Fire Service Act, 1997</p>
Indicator 7.5.3	Verifiers & Guidance:
Forest managers shall implement fire management plan and monitor its effectiveness	<ol style="list-style-type: none"> 1. <i>Implementation procedures</i> 2. <i>Monitoring records</i> 3. <i>Action on monitoring results</i> 4. <i>Field visits</i>

PRINCIPLE 8. MONITORING AND ASSESSMENT:
 Monitoring shall be conducted - appropriate to the scale and intensity of forest management - to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.

Criterion 8.1 The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessments of change.

Indicator 8.1.1	Verifiers & Guidance:
Forest management shall include systems for periodic monitoring and reporting of key elements of forest management and their impacts.	<ol style="list-style-type: none"> 1. Existence of monitoring system 2. Coverage of monitoring system eg environmental, social, and economic and operation. 3. Actions on monitoring results
Note: see also Indicators for implementation of Criterion 8.2, below.	Compartment Records

Indicator 8.1.2	Verifiers & Guidance:
The frequency and intensity of monitoring shall be based on the size and complexity of the operation and the fragility of the resources under management	<ol style="list-style-type: none"> 1 Assessment of complexity of operations and the ecosystem. 2. Periodicity of monitoring 3. Monitoring reports <p>Auditors must refer to the classification contained in schedule 1 of the Timber Resources Management Regulation L.I 1649 of 1998: 20km², 125km² and 125+ km² for small, medium and large operators respectively</p>

Indicator 8.1.3	Verifiers & Guidance:
Applicable to SLIMF (1) DFA's only (Note: above indicators do not apply except where it is required by law or FC administrative directive):	<ol style="list-style-type: none"> 1. Evidence of monitoring of harvesting operations 2. Consistency of monitoring
DFA managers shall conduct regular and consistent monitoring in connection with harvesting operations.	Discussions with managers

Criterion 8.2 Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators:

- a) yield of all forest products harvested;
- b) growth rates, regeneration and condition of the forest;
- c) composition and observed changes in the flora and fauna;
- d) environmental and social impacts of harvesting and other operations;
- e) costs, productivity, and efficiency of forest management.

Indicator 8.2.1	Verifiers & Guidance:
Forest management shall include systems to monitor the growth rates, regeneration and condition of the commercially exploitable tree crops	<ol style="list-style-type: none"> 1. Post harvesting inventory 2. Compartment registers 3. Compartment closure report (for baseline data and purposes of comparison) 4. Research records and reports 5. Analysis of data from permanent sample plots (PSP)

	<p>Post harvesting inventory data</p> <p>Aerial photographs</p> <p>Satellite and remote sensing imagery</p>
<p>Indicator 8.2.2</p> <p>Forest management shall include systems to monitor changes in the structure of the forest ecosystem - its flora and fauna.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Compartment records</i> 2. <i>Forest maps</i> 3. <i>Permanent sample plots and continuous inventory</i> 4. <i>Data and forms for recording fauna</i> 5. <i>Remote sensing, aerial photography</i> 6. <i>Ongoing monitoring of fauna and flora component</i> 7. <i>Routine reporting systems by forest guards</i> <p>Discussions with managers/FC</p> <p>Discussions with forest guards</p>
<p>Indicator 8.2.3</p> <p>Forest management shall include systems to monitor the effectiveness of the measures employed to maintain or enhance the high conservation value attributes identified as a result of the analysis specified in indicator 9.1.1.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Monitoring records on HCV</i> 2. <i>Analysis and use of results</i>
<p>Indicator 8.2.4</p> <p>Forest management shall include systems to monitor costs, productivity, and efficiency of forest management operations.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Annual reports for on reserve forests</i> 2. <i>Comparison of performance with 5 year plan</i> 3. <i>Monthly reports.</i> 4. <i>Quarterly expenditure and revenue reports.</i> 5. <i>Published accounts</i> <p>Discussions with forest managers.</p>
<p>Indicator 8.2.5</p> <p>Adequate compartment registers shall be established and maintained by the managers</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Compartment registers of an appropriate format exist detailing:</i> <ol style="list-style-type: none"> a) <i>location, area and boundaries</i> b) <i>history of operations and interventions</i> c) <i>schedule for harvesting including date of next cut</i> d) <i>location and descriptions of environmentally sensitive areas and requirements for their conservation</i> 2. <i>Compartment maps</i> <p>Visit to offices of forest management entity and the DFM</p>
<p>Indicator 8.2.6</p> <p>Applicable to SLIMF (1) DFAs only (Note: above indicators do not apply except where it is required by law or FC administrative directive):</p> <p>DFA shall at a minimum monitor and record</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. <i>Monitoring records</i> <p>Discussions with managers.</p>

<p>information on the following:</p> <ul style="list-style-type: none"> • Amount of products harvested; • Regular monitoring of any identified high conservation values; • Fire threats • Forest growth and regeneration. • Post harvest inspection for erosion and stream flow; and, • Periodic inventory (every 10 to 15 years). 	
<p>Criterion 8.3 Documentation shall be provided by the forest manager to enable monitoring and certifying organisations to trace each forest product from its origin, a process known as the “chain of custody.”</p>	
<p>Indicator 8.3.1</p> <p>Forest management shall include a system for identifying and marking, in a unique and unambiguous manner, the identity of timber or other commercial forest products and its point of origin.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. FC's log tracking procedure 2. Physical marking of timber/other products 3. System of timber tagging 4. Marking or tagging corresponds to field surveys and tree maps <p>Discussions with forest management entity</p> <p>Field visits to harvesting sites in field</p> <p>Visits to roadside check stations</p> <p>Timber Resource Management Regulation L.I 1649</p> <p>Ghana Logging Manual</p>
<p>Indicator 8.3.2</p> <p>Forest management shall include systems for tracking timber or other commercial forest products from the point of origin to the point of sale or point of conversion.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. Control systems in place and functioning effectively 2. FC tracking system 3. Yield summaries, TIF, LIF, LMCC, production <p>Discussions with forest management entity and FC</p> <p>Field visits</p> <p>Note: The Free Zone Board holds quarterly production, export , local sales and other data for registered free zone forest entities</p>
<p>Indicator 8.3.3</p> <p>The forest management entity shall maintain control of the chain of custody of commercial forest products up to the point of sale.</p>	<p>Verifiers & Guidance:</p> <ol style="list-style-type: none"> 1. Procedure documented 2. Invoices or appropriate documentation issued for timber sales that clearly identifies the: <ol style="list-style-type: none"> a) commercial product (permitting its source to be traced) b) date of sale c) quantity and specifications (species, dimensions, quality) d) point at which the buyer takes control of the chain of custody of the product <p>Discussions with forest management entity</p> <p>Discussions with FC</p>

	Field visits at various points along the custody of chain
Criterion 8.4	The results of monitoring shall be incorporated into the implementation and revision of the management plan.
Indicator 8.4.1	Verifiers & Guidance:
The management plan shall include protection and conservation strategies are modified in response to new data and information	<ol style="list-style-type: none"> 1. <i>System exists for regular review of management plans</i> 2. <i>Results of environmental studies</i> 3. <i>Results of forest inventories and permanent sample plots</i> 4. <i>Wildlife studies and information from Wildlife Division on forest ecosystems</i> 5. <i>Remote sensing data and aerial photography</i> 6. <i>Forest maps and compartment records</i> 7. <i>Fire protection plans</i> <p>Discussions with forest management entity, FC staff (RMSC) and FORIG</p> <p>Discussions with Wildlife Division</p> <p>Discussions with forest management entity</p>
Criterion 8.5	While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2.
Indicator 8.5.1	Verifiers & Guidance:
A summary of the results of monitoring shall be made publicly available, including the elements listed in FSC Criterion 8.2.	<ol style="list-style-type: none"> 1. <i>Publicly available summary of results of monitoring.</i> 2. <i>Stakeholders have received the public summary when they have requested it.</i> <p>The summary should be available to members of the public on request.</p>
PRINCIPLE 9. MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS:	
Management activities in high conservation value forests shall maintain or enhance the attributes, which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.	
Criterion 9.1	Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management
Indicator 9.1.1	Verifiers & Guidance:
The results of assessments specified in Indicator 6. 1.1. shall be analysed to determine the presence of High Conservation Value attributes, as defined in the FSC Glossary.	<ol style="list-style-type: none"> 1. <i>Forest surveys</i> 2. <i>Maps of forest types, important habitats and critical areas (incl. GSBA and coarse grained protection areas)</i> 3. <i>Environmental impact assessment</i> <p>Ghanaian assessments of Globally Significant Biodiversity Areas (GSBA).</p> <p>An Interpretation of Global HCVF toolkit for use in Ghana</p> <p>Areas (GSBA): Areas within Ghana that are assessed as being outstanding (globally and nationally) as repositories of biodiversity. Key elements of Ghana's protected area network.</p>

	Broadly synonymous with High Conservation Value Forests..."
Indicator 9.1.2	Verifiers & Guidance:
Sites within the DFA that are of special cultural, ecological or religious significance to local communities shall be identified in collaboration with such people, documented and provided with such protection that they continue to fulfil their functions	<ol style="list-style-type: none"> 1. <i>TOS and SRA</i> 2. <i>Clear policy exists for identifying and dealing with such sites when they are encountered</i> 3. <i>Operational or field guidelines of forest managers</i> 4. <i>Surveys and maps accompanying forest management</i> 5. <i>Clear guidelines exist for the subsequent protection of such sites when identified</i> <p>Discussions with forest management entity</p> <p>Discussions with local communities</p> <p>Field visits</p> <p>Guidelines for the appropriate processes can be found in MoP Section C</p> <p>Details of sites should also appear in the TUC and appropriate annexes and the SRA</p>
Criterion 9.2	The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.
Indicator 9.2.1	Verifiers & Guidance:
Forest managers shall consult and document in consultation with stakeholders on the identification of High Conservation Values, and the management options thereof. (see Indicators 4.4.5 and 4.4.6)	<p><i>see indicators 4.4.5 and 4.4.6</i></p> <p><i>Existence of consultation documentation.</i></p> <p><i>Discussion with stakeholders.</i></p> <p>During evaluation for certification the certification body should consult to confirm whether the Managers' consultation with stakeholders was adequate in relation to consideration of High Conservation Values.</p>
Indicator 9.2.2	Verifiers & Guidance:
Applicable to SLIMF (1) DFAs only (Note: above indicators do not apply except where it is required by law or FC administrative directive): Managers shall have consulted with relevant stakeholders to identify HCVs and/or HCVF. This may occur during the actual certification assessment. If HCVs or HCVF are present, managers are required to take all reasonable steps to protect these values and/or reduce threats	<ol style="list-style-type: none"> 1. <i>Evidence of any earlier consultations</i> <p>Discussions with managers.</p>
Criterion 9.3	The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.
Indicator 9.3.1	Verifiers & Guidance:
The management plan shall include specific measures for the maintenance and/or enhancement of those attributes identified in Criterion 9.1 as being High Conservation Values	<p><i>Management planning documents</i></p> <p>An Interpretation of Global HCVF toolkit for use in Ghana</p>

Criterion 9.4		Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.
Indicator 9.4.1	Verifiers & Guidance:	
See Indicator 8.2.3		
PRINCIPLE 10. PLANTATIONS:		
Plantations shall be planned and managed in accordance with Principles and Criteria 1 - 9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.		
Criterion 10.1		The management objectives of the plantation, including natural forest conversion and restoration objectives, shall be explicitly stated in the management plan, and clearly demonstrated in the implementation of the plan.
Indicator 10.1.1	Verifiers & Guidance:	
Objectives of plantation shall be clearly stated in the management plan to include: Conservation and restoration of the nature forest, social acceptability and environmental appropriateness.	<i>1. Management plan</i> <i>2. Supporting documents</i> Forest manager's office Discussions with other stakeholders Plantation Manual of Procedures (MoP) Section A, B and C	
Indicator 10.1.2	Verifiers & Guidance:	
The means of achieving plantation management objectives shall be documented in the management plan	<i>1. Management plan</i> <i>2. Supporting documents</i> Forest Manager's office For areas less than 20 ha a management plan may not be necessary documented	
Indicator 10.1.3	Verifiers & Guidance:	
Plantation management objectives shall be demonstrated in forest management activities	<i>1 Management plan</i> <i>2. Forest manager's field operational procedures/instructions</i> Forest managers office Discussions with other stakeholder Field visit	
Criterion 10.2		The design and layout of plantations should promote the protection, restoration and conservation of natural forests, and not increase pressures on natural forests. Wildlife corridors, streamside zones and a mosaic of stands of different ages and rotation periods, shall be used in the layout of the plantation, consistent with the scale of the operation. The scale and layout of plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape.
Indicator 10.2.1	Verifiers & Guidance:	
Plantation design and layout shall demonstrate the commitment to protect, restore and conserve	<i>1 Management plan</i> <i>2. supporting documents</i>	

natural forest	<p><i>3. Planning procedures</i></p> <p><i>4. Plantation and blocks map</i></p> <p>Plantation MoP (A)</p> <p>DFO, Field visits.</p>
Indicator 10.2.2	Verifiers & Guidance:
Plantation design and layout shall establish riparian zones in accordance with Ghana's best practices, wildlife habitats and corridors suitably located across plantation areas.	<p><i>1. Plantation and block maps</i></p> <p><i>2. Field inspection</i></p> <p>Field visits</p> <p>Discussions with other stakeholders</p>
Indicator 10.2.3	Verifiers & Guidance:
The layout of plantation blocks shall be consistent with the patterns of the landscape and natural feature of the area	<p><i>1. Management plan</i></p> <p><i>2. Planning procedures</i></p> <p><i>3. Field inspection</i></p> <p>Field visits, Topographical map of the area</p>
Criterion 10.3	Diversity in the composition of plantations is preferred, so as to enhance economic, ecological and social stability. Such diversity <u>may</u> include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes and structures.
Indicator 10.3.1	Verifiers & Guidance:
Plantation establishment shall place emphasis on combining / varying, varying block sizes, age class and structure	<p><i>1. Management plan (number of species)</i></p> <p><i>2. Field visits (block sizes, age classes)</i></p>
Indicator 10.3.2	Verifiers & Guidance:
Plantation design and management shall ensure species and genetic diversity.	<p><i>The number of species and management practices</i></p> <p><i>Diversity of flora and fauna within plantation</i></p> <p><i>Reports indicating changes in species diversity since plantation establishment</i></p> <p>Field visit</p> <p>Botanical and other wildlife reports</p>
Criterion 10.4	The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives. In order to enhance the conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts.
Indicator 10.4.1	Verifiers & Guidance:
Species selection shall be based on suitability to the site conditions (soils, topography and climate) and management objectives	<p><i>1. Management plan</i></p> <p><i>2. Justification for species selection</i></p> <p>Discussion with other stakeholder (FORIG, RMSC, FRNR)</p> <p>Plantation MoP (A)</p>

Indicator 10.4.2	Verifiers & Guidance:
Indigenous species shall be given first consideration during species selection.	<ol style="list-style-type: none"> 1. <i>Justification for specie selection</i> 2. <i>Discussion with manager on potentials and limitations of indigenous species</i> <p>Discussion with other stakeholder (FORIG, FRNR)</p>
Indicator 10.4.3	Verifiers & Guidance:
The choice of exotic species shall be justified to include that it out-performs against native species for selected management objectives.	<ol style="list-style-type: none"> 1. <i>Justification for selection of exotic species</i> 2. <i>Discussions with management</i> <p>Discussions with research institutions eg FORIG, FRNR</p>
Indicator 10.4.4	Verifiers & Guidance:
Exotic species shall not be planted on a large scale until local trials and /or experience have shown that they are well adapted to the site and do not have serious adverse ecological impact.	<ol style="list-style-type: none"> 1. <i>Species local trial results</i> 2. <i>Species trial results from other published sources</i> <p>Discussion with research, eg FORIG, FRNR</p> <p>Field visits</p>
Criterion 10.5	A proportion of the overall forest management area, appropriate to the scale of the plantation and to be determined in regional standards, shall be managed so as to restore the site to a natural forest cover.
Indicator 10.5.1	Verifiers & Guidance:
A proportion of the existing natural ecosystem shall be managed to enhance its natural characteristics. (Note. Reference is also being made to indicators 10.2.1, 10.2.2 and 10.2.3)	<ol style="list-style-type: none"> 1. <i>Maps</i> 2. <i>Justification for total area managed for natural forest restoration</i> 3. <i>Field visits</i>
Indicator 10.5.2	Verifiers & Guidance:
Applicable to SLIMF (2) only: (Note, Indicator above do not apply except where it is required by law or FC administrative directive)	<ol style="list-style-type: none"> 1. <i>Maps</i> 2. <i>Field visits</i>
Plantation design and management shall enhance ecological values especially conservation features	
Criterion 10.6	Measures shall be taken to maintain or improve soil structure, fertility and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns
Indicator 10.6.1	Verifiers & Guidance:
Plantation establishment and management shall incorporate specific measure to maintain or enhance the soil in terms of structure, fertility and biological activity.	<ol style="list-style-type: none"> 1. <i>Management plan</i> 2. <i>Species selection</i> 3. <i>Soil suitability records</i> 4. <i>Field visit</i> <p>Discussions with research institutions</p>

	Plantation MoPs A and C
Indicator 10.6.2	Verifiers & Guidance:
Plantation design and management activities shall not lead to soil degradation	<ol style="list-style-type: none"> 1. <i>Management plan</i> 2. <i>Field visit</i> Discussions with other stakeholders Plantation MoPs
Indicator 10.6.3	Verifiers & Guidance:
Plantation activities shall not degrade water quality, and impact negatively on local hydrology.	<ol style="list-style-type: none"> 1. <i>Management plan</i> 2. <i>Other plans (maps, annual plan of work)</i> 3. <i>Field visits</i> Discussions with other stakeholder (eg fringe communities)
Indicator 10.6.4	Verifiers & Guidance:
Where soil rehabilitation or improvement is required, organic fertilisers, cover cropping or other non-chemical means shall be adopted in preference to inorganic fertilisers wherever possible	<ol style="list-style-type: none"> 1. <i>Discussions with managers</i> 2. <i>Documentation on methods used.</i> Site visits of rehabilitation areas
Criterion 10.7	Measures shall be taken to prevent and minimise outbreaks of pests, diseases, fire and invasive plant introductions. Integrated pest management shall form an essential part of the management plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilisers. Plantation management should make every effort to move away from chemical pesticides and fertilisers, including their use in nurseries. The use of chemicals is also covered in Criteria 6.6 and 6.7.
Indicator 10.7.1	Verifiers & Guidance:
Plantation management shall take measures to prevent outbreaks of pest, disease, fire and invasive plant introduction	<ol style="list-style-type: none"> 1. <i>Management plan</i> 2. <i>Records on species selection</i> 3. <i>Monitoring plan and records</i>
Indicator 10.7.2	Verifiers & Guidance:
Integrated Pest and fire management plans shall exist.	<ol style="list-style-type: none"> 1. <i>Documented fire plan</i> 2. <i>Pest management policy</i> Discussions with staff
Indicator 10.7.3	Verifiers & Guidance:
Plantation management shall take measures to minimise the use of chemical pesticides and fertilisers	<ol style="list-style-type: none"> 1. <i>Nursery management procedures</i> 2. <i>Field visits</i> Discussions with staff

Criterion 10.8		Appropriate to the scale and diversity of the operation, monitoring of plantations, shall include regular assessment of potential on-site and off-site ecological and social impacts, (e.g. natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social well-being), in addition to those elements addressed in principles 8, 6 and 4. No species should be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection of local rights of ownership, use or access.
Indicator 10.8.1	Verifiers & Guidance:	
Monitoring shall include evaluation of potential on-site and off-site ecological and social impact of plantation activities	<ol style="list-style-type: none"> 1. <i>Monitoring schedules</i> 2. <i>Monitoring results</i> 3. <i>Evidence of use of monitoring results in plantation management</i> EPA 's Sector-Specific Environmental Impact Assessment Guidelines for Forest and Wood Industries	
<hr/>		
Indicator 10.8.2	Verifiers & Guidance:	
Application to SLIMF (2) only (note indicator 10.8.1 does not apply except when required by law or FC administrative directive) Plantation management shall document negative environmental and social impact and design and implement measures to address the impacts	<ol style="list-style-type: none"> 1. <i>Documented evidence of negative impacts</i> 2. <i>Field visits</i> Discussions with other stakeholders	
<hr/>		
Indicator 10.8.3	Verifiers & Guidance:	
Land acquisition for plantation establishment shall not impact negatively on the communities and / or resource use by the local people	<ol style="list-style-type: none"> 1. <i>Land acquisition records</i> 2. <i>Field visits</i> Discussion with local communities and other stakeholders	
<hr/>		
Criterion 10.9		Plantations established in areas converted from natural forests after November 1994 normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the certification body that the manager/owner is not responsible directly or indirectly of such conversion.
Indicator 10.9.1	Verifiers & Guidance:	
Plantation shall not be established on land converted from natural forest since November 1994, unless clear evidence exist that the current manager/owner was not responsible.	<ol style="list-style-type: none"> 1. <i>Evidence of previous land use</i> 2. <i>Date of plantation establishment</i> 3. <i>Field visits</i> Discussions with other stakeholders.	
<hr/>		
Indicator 10.9.2	Verifiers & Guidance:	
Where conversions after November 1994 have occurred, steps shall be taken that convincingly compensate for such conversions based on interviews or other evidence gathered from other stakeholders and interested parties	<ol style="list-style-type: none"> 1. <i>Evidence of compensating activities</i> 2. <i>Field visit</i> Discussions with other stakeholders and interested parties	
<hr/>		

APPENDIX A

A.	NATIONAL LEGISLATION
	<p>Legal Rights to Harvest:</p> <ul style="list-style-type: none"> • Land tenure and management rights <i>Legislation covering land tenure rights, including customary rights as well as management rights that includes the use of legal methods to obtain tenure rights and management rights. It also covers legal business registration and tax registration, including relevant legal required licenses.</i> • Concession licenses <i>Legislation regulating procedures for the issuing of forest concession licenses, including use of legal methods to obtain concession license. Especially bribery, corruption and nepotism are well-known issues in connection with concession licenses.</i> • Management and harvest planning <i>Any legal requirements for management planning, including conducting forest inventories, having a forest management plan and related planning and monitoring, as well as approval of these by competent authorities.</i> • Harvesting permits <i>Legislation regulating the issuing of harvesting permits, licenses or other legal document required for specific harvesting operations. It includes the use of legal methods to obtain the permit. Corruption is a well-known issue in connection with the issuing of harvesting permits.</i>
1.	Timber Resource Management Act 1997 Timber Resource Management Amendment Act, 2002 Act 617
2.	Timber Resources Management Regulation of 1998, LI 1649 and (Amendment) LI 1721 of 2003
3.	Forestry Commission Act 1999
4.	Trees and Timber Amendment Act 493 1997
5.	Provincial ordinances
6.	Manual of Procedures Sections A, B C, D, E, G Plantation Manual of Procedures A, B and
7.	National Forest Inventory of 1984-9 (provides baseline data about the FMU as well as the national status of the forest resource)
	<p>Taxes and Fees</p> <ul style="list-style-type: none"> • Payment of royalties and harvesting fees <i>Legislation covering payment of all legally required forest harvesting specific fees such as royalties, stumpage fees and other volume based fees. It also includes payments of the fees based on correct classification of quantities, qualities and species. Incorrect classification of forest products is a well-known issue often combined with bribery of officials in charge of controlling the classification.</i> • Value added and sales taxes <i>Legislation covering different types of sales taxes which apply to the material being sold, including selling material as growing forest (standing stock sales).</i> • Income and profit taxes <i>Legislation covering income and profit taxes related to the profit derived from sale of forest products and harvesting activities. This category is also related to income from the sale of timber and does not include other taxes generally applicable for companies or related to salary payments.</i>
8.	Companies Code 1963 and/or Incorporated Private partnerships Act 1962
9.	Investment Act
	<p>Timber Harvesting Activities</p> <ul style="list-style-type: none"> • Timber harvesting regulations <i>Any legal requirements for harvesting techniques and technology including selective cutting, shelter wood regenerations, clear felling, transport of timber from felling site and seasonal limitations etc. Typically this includes regulations on the size of felling areas, minimum age and/or diameter for felling activities and</i>

	<p><i>elements that shall be preserved during felling etc. Establishment of skidding or hauling trails, road construction, drainage systems and bridges etc. shall also be considered as well as planning and monitoring of harvesting activities. Any legally binding codes for harvesting practices shall be considered.</i></p> <ul style="list-style-type: none"> • Protected sites and species <i>Covers legislation related to protected areas as well as protected, rare or endangered species, including their habitats and potential habitats</i> • Environmental requirements <i>Covers legislation related to environmental impact assessment in connection with harvesting, acceptable level for soil damage, establishment of buffer zones (e.g. along water courses, open areas, breeding sites), maintenance of retention trees on felling site, sessional limitation of harvesting time, and environmental requirements for forest machineries.</i> • Health and safety <i>Legally required personal protection equipment for persons involved in harvesting activities, use of safe felling and transport practice, establishment of protection zones around harvesting sites, and safety requirements to machinery used. Legally required safety requirements in relation to chemical usage. The health and safety requirements that shall be considered relate to operations in the forest (not office work, or other activities less related to actual forest operations).</i> • Legal employment <i>Legal requirements for employment of personnel involved in harvesting activities including requirement for contracts and working permits, requirements for obligatory insurances, requirements for competence certificates and other training requirements, and payment of social and income taxes withhold by employer. Furthermore, the points cover observance of minimum working age and minimum age for personal involved in hazardous work, legislation against forced and compulsory labour, and discrimination and freedom of association</i>
10.	Forest and Wildlife Policy 1994
11.	Wildlife Conservation Regulations 1971 LI 685 and its amendments of 1983 L.I 1284; 1988 L. I 1357; 1989 L. I 1452
12.	Environmental Health Act
13.	National Health and Safety Regulations
14.	Labour Act 651 of 2003
15.	Environmental Management Plan - EPA 490/94
16.	Environmental Protection Agency (EPA) Sector-Specific Environmental Impact Assessment Guidelines for Forest and Wood Industries.
17.	National Wildfire Management Policy 2006.
18.	The Ghana National Fire Service Act, 1997
	<p>Third Party Rights</p> <ul style="list-style-type: none"> • Customary rights <i>Legislation covering customary rights relevant to forest harvesting activities including requirements covering sharing of benefits and indigenous rights</i> • Free prior and informed consent (FPIC) <i>Legislation covering “free prior and informed consent” in connection with transfer of forest management rights and customary rights to the organisation in charge of the harvesting operation</i> • Rights of indigenous peoples <i>Legislation that regulates the rights of indigenous people as far as it’s related to forestry activities. Possible aspects to consider are land tenure, right to use certain forest related resources or practice traditional activities, which may involve forest lands</i>
19.	
	<p>Trade and Transport</p> <ul style="list-style-type: none"> • Classification of species, quantities, qualities <i>Legislation regulating how harvested material is classified in terms of species, volumes and qualities in connection with trade and transport. Incorrect classification of harvested material is a well-known method to reduce/avoid payment of legality prescribed taxes and fees</i> • Trade and transport <i>All required trading permits shall exist as well as legally required transport document which accompany</i>

	<p><i>transport of wood from forest operation</i></p> <ul style="list-style-type: none"> • Offshore trading and transfer pricing <i>Legislation regulating offshore trading. Offshore trading with related companies placed in tax havens combined with artificial transfer prices is a well-known way to avoid payment of legally prescribed taxes and fees to the country of harvest and considered as an important generator of funds that can be used for payment of bribery and black money to the forest operation and personal involved in the harvesting operation. Many countries have established legislation covering transfer pricing and offshore trading. It should be noted that only transfer pricing and offshore trading as far as it is legally prohibited in the country, can be included here.</i>
20.	Foreign Exchange Act 2006 (Act 723)
21.	Free Zones Act, 1995 (Act 504) Free Zones Amendment, Act 2002 (Act 618)
22.	Competitive Bidding for Timber Utilisation Contract Procedures Manual
	<p>Custom regulations <i>Custom legislation covering areas such as export/import licenses, product classification (codes, quantities, qualities and species)</i></p>
23.	
	<p>CITES <i>CITES permits (the Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as the Washington Convention)</i></p>
24.	
	Other
25.	Status Report on Collaborative Management Practices in the High Forest Zone' and Developments and Setbacks in Forest Conservation', by Kofi Smith
26.	Forest Protection in Ghana by Hawthorne and Abu-Juam (details Genetic heat index and the star system in Ghana)
27.	FSC list of prohibited pesticides (http://www.fsc.org)
28.	An Interpretation of Global HCVF Toolkit for use in Ghana. Tim Rayden et al, 2006
29.	Ecological Profile of Ghanaian Forest Tree. Hawthorne. OFI TFP 29
B.	REGULATIONS PERTINENT TO FORESTRY RELATED TO AND EMERGING FROM NATIONAL LEGISLATION AND OTHER LEGISLATIVE INSTITUTIONS:
30.	Environmental Protection Agency (EPA) Sector-Specific Environmental Impact Assessment Guidelines for Forest and Wood Industries.
C.	INTERNATIONAL AGREEMENTS PERTINENT TO FORESTRY
31.	Convention on Biological Diversity (CBD)
32.	Convention on the International Trade in Endangered Species (CITES)
33.	<p>International Labour Organisation (ILO) ILO Conventions: http://www.ilo.org/public/english/region/eurpro/london/country/ Forced Labour Convention, 1930. Freedom of Association and Protection of the Right to Organise Conventions, 1948. 29 Forced Labour Convention, 1930. 87 Freedom of Association and Protection of the Right to Organise Conventions, 1948. 98 Right to Organise and Collective Bargaining Convention, 1949. 97 Migration for Employment (Revised) Convention, 1949. 100 Equal Remuneration Convention, 1951. 105 Abolition of Forced Labour Convention, 1957. 111 Discrimination (Occupation and Employment) Convention, 1958. 131 Minimum Wage Fixing Convention, 1970. 138 Minimum Age Convention, 1973. 182 Worst Forms of Child Labour Convention, 1999.</p>

	ILO Code of Practice on Safety and Health in Forestry Work (ILO 1998) Recommendation 135 Minimum Wage Fixing Recommendation, 1970. Note: Conventions number 29, 87, 98, 100, 105, 111, 138 and 182 are Core Standards covered by the 1998 ILO Declaration on Fundamental Principles and Rights at Work and its follow up
34.	FAO model of forest harvesting practice, FAO, 1996
35.	International Tropical Timber Agreement (ITTA)
36.	Ramsar Convention
37.	International Conventions on Climate Change and Desertification
D.	LOCAL STANDARDS AND BEST OPERATING PRACTICES
38.	National Forest Inventory of 1984-9 may provide baseline data about the FMU as well as the national status of the forest resource.
39.	The Multi-Resource Inventory (MRI) of 2002
40.	Ghana Logging Manual



APPENDIX B

LIST OF RARE THREATENED AND ENDANGERED SPECIES LISTED FOR GHANA

List of, endangered timber species in Ghana (refer to as restricted timber species)

Local Name	Trade Name	Botanical Name
Edinam	Gedu-Nohor	Entandophragma anglolense
Penkwa	Sapele	E. Cylindricum
Efobrodedwo	Utile	E. Utile
Penkwa-akoa	Candollei	E. Candollei
Krumben	Mahogany	Kaya anthotheca/grandifolia
Dubine	Mahogany	K. Ivorensis
Odum	Iroko	Millicia excels/regia
Kusia	Opepe	Nauclea diderichii
Kokrodua	Afromosia	Pericopsis elata
Baku	Makore	Tieghemella heckeli
Hyedua	Black Hyedua	Guibotea ehii

APPENDIX C

LIST OF ISSUES OF CONTENTION RAISED BY STAKEHOLDERS IN TERMS OF THIS STANDARD

Issue Nr	Issue

End of Standard