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Requirements for PEFC scheme users

**PEFC ST 1003:200x**  
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**Requirements for Sustainable Forest Management  
Standards – Part 2: Requirements for tropical natural  
forests**



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## Foreword

The PEFC Council (the Programme for the Endorsement of Forest Certification schemes) is a worldwide organisation promoting sustainable forest management through forest certification and labelling of forest based products. Products with PEFC claim and / or label deliver confidence that raw material originates in sustainably managed forest.

The PEFC Council provides endorsement of national forest certification schemes which are required to comply with the PEFC Council requirements subject to regular evaluations.

The PEFC requirements for sustainable forest management standards are published as two parts:

- a) Part 1: Requirements for temperate, boreal and plantation forests,
- b) Part 2: Requirements for tropical natural forests.

The document had been developed in an open, transparent, consultative and consensus based process covering a broad range of stakeholders.

This document cancels and replaces Annex 3 of the PEFC Council Technical Document (Forest certification schemes and their implementation).

## Introduction

Sustainable forest management (SFM) is a holistic approach that is defined as the stewardship and use of forests and forest land in a way and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil now and in the future, relevant ecological, economic and social functions, at local, national and global levels and does not cause damage to other ecosystems.

Sustainable forest management (SFM) has been, since the UNCED in Rio in 1992, a leading concept in international deliberations and work. The result today is a broad consensus on principles, guidelines, criteria and indicators for SFM on international governmental level. One such process is the Ministerial Conference on the Protection of Forests in Europe (MCPFE), ongoing process in which hundreds of experts from a very wide range of stakeholder groups have been involved. Other similar intergovernmental processes are Montreal process for boreal forests, ITTO (International Tropical Timber Organisation) for tropical forests or ATO (African Timber Organisation) / ITTO for tropical African forests.

The PEFC Council requirements for national forest certification schemes and their forest management standards are based on and respect results of those intergovernmental processes.

The term “shall” is used throughout the document to indicate those provisions which are mandatory and strictly to be followed in order to conform with the document. The term “should” is used in this document to indicate recognised means of meeting the requirement and that amongst several possibilities one is recommended as particularly suitable without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required.

## Scope

The document covers requirements for forest management standards which are applicable to tropical natural forests.

The requirements of this document shall be met by the forest management standards submitted for the PEFC endorsement as requirements for owners or managers applying for forest certification as well as contractors and other entities operating on the defined forest area for which the forest management standard has been implemented.

The requirements are based on ATO/ITTO Principles, Criteria and Indicators for Sustainable Forest Management for African natural tropical forests.

## 1 Normative references

ATO/ITTO Principles, Criteria and Indicators for Sustainable Forest Management for African natural tropical forests

## 2 Terms and Definitions

### 2.1

#### Forest manager

An entity that has a legal title and responsibility to perform forest management activities and to implement the requirements of sustainable forest management standard.

Note: Forest manager can be a forest owner, concessionaire, etc.

### 2.2

#### Genetically modified trees

trees in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination, taking into account applicable legislation providing a specific definition of genetically modified organisms.

Note 1: the following techniques are considered as genetic modification resulting in genetically modified trees (EU Directive 2001/18/EC):

(1) recombinant nucleic acid techniques involving the formation of new combinations of genetic material by the insertion of nucleic acid molecules produced by whatever means outside an organism, into any virus, bacterial plasmid or other vector system and their incorporation into a host organism in which they do not naturally occur but in which they are capable of continued propagation;

(2) techniques involving the direct introduction into an organism of heritable material prepared outside the organism including micro-injection, macro-injection and micro-encapsulation;

(3) cell fusion (including protoplast fusion) or hybridisation techniques where live cells with new combinations of heritable genetic material are formed through the fusion of two or more cells by means of methods that do not occur naturally.

Note 2: the following techniques are not considered as genetic modification resulting in genetically modified trees (EU Directive 2001/18/EC):

(1) in vitro fertilisation,

(2) natural processes such as: conjugation, transduction, transformation,

(3) polyploidy induction.

### **3 SFM standard requirements for tropical forests**

#### **3.1 General requirements**

The requirements for sustainable forest management defined by regional, national or sub-national forest management standards shall:

- a) include management and performance requirements that are applicable at the forest management unit level, or at another level as appropriate to ensure that all requirements are met at the forest management unit level.

Note: An example of situation where a requirement can be defined at other than forest management unit level (e.g. group/regional) is monitoring of forest health. Through performing monitoring of forest health at the regional level and communication of its results to the FMU level the objective of the requirement is met without the necessity to carry out the monitoring individually at every forest management unit.

- b) be clear, objective based and auditable,
- c) apply to activities of all operators in the defined forest area who have a measurable impact on achieving compliance with the requirements.

### 3.2 Specific requirements

**Principle 1: The forest management unit (FMU), designated for whatever form of land-use, shall be sustainably managed with a view to supplying the required goods and services.**

***Criterion 1.1 Forest management shall comply with the national policies and legislation in force in the country where it is implemented, and also with all the international treaties the country has ratified.***

**Indicator 1.1.1** Forest management shall respect all local and national laws and meets all administrative requirements.

Forest management shall comply with legislation applicable to forest management; including forest management practices; nature and environment protection; protected and endangered species; property, tenure and use rights of indigenous people; health, labour and safety issues.

Forest management shall provide for adequate protection of the forest from unauthorised activities such as illegal logging, illegal land use, illegally initiated fires, and other illegal activities.

**Indicator 1.1.2** The taxes, royalties and other fiscal payments established by law shall be paid.

***Criterion 1.2 The FMU is managed with well-defined and clearly established objectives compatible with sustainable forest management.***

**Indicator 1.2.1** The management of the FMU shall be implemented on the basis of a legally assigned title deed, for a duration compatible with the defined objectives of the FMU with a view to achieving sustainable forest management.

**Indicator 1.2.2** The forest manager shall demonstrate that it employs labour with adequate competence in forest management.

**Indicator 1.2.3** The forest manager shall have a complete and approved forest management document, which includes a forest management plan, a harvesting plan, a wildlife management plan, and other relevant documents, stating the FMU's objectives, which are compatible with sustainable forest management.

*Sub-indicator 1.2.3.1 The preliminary studies (multi-resource inventory, ecological study, socioeconomic study, etc) should be carried out in conformity with national and international guidelines, and are available and correctly documented.*

*Sub-indicator 1.2.3.2 All the uses of the forest and forest products should be identified.*

*Sub-indicator 1.2.3.3 The FMU should be subdivided in accordance with different management constraints identified during the preliminary studies and in accordance with the adopted objectives.*

*Sub-indicator 1.2.3.4 The maps showing the FMU and its subdivisions, the distribution of resources, the village settlements, etc, should be prepared and available.*

*Sub-indicator 1.2.3.5 The area to be covered and the volume of produce that can be harvested during the management exercise should be known and indicated on maps.*

*Sub-indicator 1.2.3.6 The annual allowable cut, minimum diameter for exploitation and maximum number of trees harvestable per hectare should be clearly stated and described in the management document.*

**Indicator 1.2.4** The forest management document or relating documentation shall set the operating modalities and the rights and obligations of the forest manager and sub-contractors operating in the FMU.

Note: Documentation specifying the operating modalities and the rights and obligations of the forest manager is for example a concession agreement.

*Sub-indicator 1.2.4.1 Specific clauses relating to financial, technical and social management as well as measures for the protection of the forest should be clearly defined in the forest management document of relating documentation.*

*Sub-indicator 1.2.4.2 Sanctions for non-compliance with the management prescriptions outlined in the forest management document of relating documentation are provided for when not specified by law.*

**Indicator 2.2.5** The forest management document and relating documentation shall be formally approved by the relevant authorities.

**Indicator 1.2.6** The forest management document shall be effectively implemented as soon as it is approved.

*Sub-indicator 1.2.6.1 The prescription of the forest management document should be communicated and be available to all stakeholders.*

*Sub-indicator 1.2.6.2 The forest manager should implement measures ensuring that the activities of different stakeholders are in conformity with the prescriptions of the forest management document and relating documentation.*

*Sub-indicator 1.2.6.3 All the relevant stakeholders should be trained and/or sensitized on the implementation of forest management activities.*

*Sub-indicator 1.2.6.4 The limits and boundaries of the FMU and different subdivisions should be marked in the field.*

*Sub-indicator 1.2.6.5 The clearing of forest for farming and related agricultural activities in and around logging yards should be controlled and kept within acceptable limits.*

*Sub-indicator 1.2.6.6 Forest manager should document all management activities in a manner that enables their monitoring.*

*Sub-indicator 1.2.6.7 Regular and frequent field visits for evaluation should be undertaken by the forest manager.*

*Sub-indicator 1.2.6.8 Any non-compliance with management prescriptions is analysed and corrected.*

**Indicator 1.2.7** A minimum infrastructure needed for forest use should be maintained.

*Sub-indicator 1.2.7.1 The main buildings in the forest camps should be constructed from durable materials.*

*Sub-indicator 1.2.7.2 The network of main roads should be planned and constructed to last for the duration of the harvesting rotation.*

**Indicator 1.2.8** While appreciating the need to respect the confidentiality of information, the forest manager shall provide stakeholders with a summary of the basic components of the forest management document.

***Criterion 1.3 The sustainable production of timber is ensured both in quantity and quality.***

**Indicator 1.3.1** The pre-harvest inventory shall be carried out efficiently, in conformity with the standards in force, at least three months before harvesting.

*Sub-indicator 1.3.1.1 Trees to be harvested should be plotted preliminarily on a map and marked in the field.*

*Sub-indicator 1.3.1.2 Trees to be protected, such as seed-bearing or high potential trees, should be mapped out and visibly marked in the field before harvesting.*

**Indicator 1.3.2** The felling rotation and yield shall be clearly determined and respected in accordance with the principles of sustainable production.

*Sub-indicator 1.3.2.1 The calculation of yield and the determination of the rotation should be verifiable from the forest management document.*

*Sub-indicator 1.3.2.2 The minimum diameter of trees to be harvested should be based on the growth rates, on the rotation and on data obtained from the forest management inventory.*

*Sub-indicator 1.3.2.3 The forest management document should provide management options beyond the first rotation.*

**Indicator 1.3.3** All harvesting shall be in conformity with the forest management document and relating documentation.

*Sub-indicator 1.3.3.1 The annual harvesting plan and work program developed should be clear and realistic.*

*Sub-indicator 1.3.3.2 Each annual harvesting plan should be subject to approval before being carried out.*

*Sub-indicator 1.3.3.3 The order of harvesting should be respected and harvesting practice should be designed to prevent re-entry into harvested areas before the harvesting cycle is completed.*

*Sub-indicator 1.3.3.4 The standards of harvesting should be explicit and known by all.*

**Indicator 1.3.4** Wastage shall be minimized at all stages of production and processing.

*Sub-indicator 1.3.4.1 Reduced impact logging should be applied to optimize the volume of usable timber.*

*Sub-indicator 1.3.4.2 The greatest possible utilizable volume of the felled tree should be recovered.*

*Sub-indicator 1.3.4.3 No marketable component of the felled tree should be left behind in the forest.*

*Sub-indicator 1.3.4.4 There should be no evidence of decaying logs in timber stockyards (in the forest and processing mill, and in other stockpiles such as at railway sidings, etc).*

**Indicator 1.3.5** The forest manager shall provide all necessary documentation to monitoring and certification bodies to enable them to follow the chain of custody of each forest product from its origin.

**Indicator 1.3.6** The forest manager responsible for the FMU shall develop effective mechanisms for the optimal commercialization and promotion of its forest products.

***Criterion 1.4 The silvicultural techniques implemented in the FMU shall be compatible with the objectives of sustainable forest management and are well adapted to the needs of management in the FMU and to the expected production.***

**Indicator 1.4.1** Adequate efforts are made to define, verify and adjust, where necessary, silvicultural techniques.

**Indicator 1.4.2** All appropriate silvicultural treatments shall be applied at the level of the individual tree rather than at the forest stand level.

**Indicator 1.4.3** The harvesting of multi-purpose tree species for timber shall not negatively impact on their other forms of utilization.

*Sub-indicator 1.4.3.1 The tree species that produce both timber and non-timber forest products should be identified.*

*Sub-indicator 1.4.3.2 The application of any form of silvicultural treatment should not threaten the sustainable production and harvesting of other forest products.*

*Sub-indicator 1.4.3.3 The harvesting modalities of multi-purpose tree species in village settlements should be documented in the forest management document.*

**Indicator 1.4.4** The forest manager shall develop a staff training policy. The training of professional staff, forest workers and contractors shall cover requirements of the relevant sustainable forest management standard, relevant laws and treaties

***Criterion 1.5 Within the FMU, NTFPs shall be harvested on a sustainable basis, in consultation with relevant stakeholders.***

**Indicator 1.5.1** NTFPs should be used, and their bases for use shall be identified.

*Sub-indicator 1.5.1.1 The NTFPs harvested by forest manager for all types of commercial purpose and the associated type of production should be identified.*

*Sub-indicator 1.5.1.2 The list of NTFPs harvested solely to meet the subsistence needs of populations should be available.*

**Indicator 1.5.2** The necessary knowledge for the sustainable utilization of NTFPs shall be available.

*Sub-indicator 1.5.2.1 The distribution and density of species harvested for NTFPs should be known.*

*Sub-indicator 1.5.2.2 The phenology and productivity of such harvested species should be known.*

**Indicator 1.5.3** The use of NTFPs shall be rationalized.

*Sub-indicator 1.5.3.1 No individual tree should be needlessly destroyed or damaged during harvesting for NTFPs.*

*Sub-indicator 1.5.3.2 Procedures should be in place for monitoring and evaluating the impact of harvesting.*

*Sub-indicator 1.5.3.3 The harvesting should be managed according to available monitoring results.*

*Sub-indicator 1.5.3.4 The quantities harvested should be effectively marketed or consumed.*

*Sub-indicator 1.5.3.5 The NTFPs in high demand should be the subject of conservation management and their potential for domestication should be explored.*

***Criterion 1.6 Forest management shall be revised periodically, or when necessary due to unforeseen circumstances.***

**Indicator 1.6.1** There shall be a continuous monitoring/evaluation of the implementation of forest management. The monitoring shall include the implementation of the forest management plan implementation and the ecological, social and economic effects of forest management are monitored on the forest management unit and its surroundings.

*Sub-indicator 1.6.1.1 While respecting the confidentiality of information, the forest manager should provide, upon request, a summary of the monitoring results relating to:*

- the yield of all products extracted from the forest;*
- growth and regeneration rates, and the condition of the forest resources;*
- the composition of and changes observed in the flora and fauna;*
- the social and environmental impacts of extraction and other operations;*
- impacts in the areas of costs, productivity and efficiency of actions in relation to the implementation of forest management.*

*Sub-indicator 1.6.1.2 There should be a network of permanent sampling plots which is regularly measured and analyzed.*

*Sub-indicator 1.6.1.3 The actual harvest should be regularly compared to what was initially projected in the forest management document.*

**Indicator 1.6.2** The forest management document shall be revised according to a pre-determined periodicity defined at the national level and approved by the relevant authority.

*Sub-indicator 1.6.2.1 The procedures of regular or exceptional revision should be specified in the forest management document or in relating documentation.*

*Sub-indicator 1.6.2.2 All relevant monitoring and research results, as well as new scientific findings and technical data, should be taken into account during the process of review and revision of the forest management document.*

*Sub-indicator 1.6.2.3 The revisions should be approved by the relevant authority.*

## **Principle 2 The main ecological functions of the forest shall be maintained.**

### ***Criterion 2.1 The sustainable management of the forest resources shall be based on a dynamic acquisition of knowledge on ecology.***

**Indicator 2.1.1** Available knowledge allows an ecological assessment and diagnosis of the forest ecosystems.

*Sub-indicator 2.1.1.1 Updated maps should be available for vegetation type, growth stages and intensity of harvest.*

*Sub-indicator 2.1.1.2 There should be topographical, soil, hydrological network and infrastructure maps.*

*Sub-indicator 2.1.1.3 Databases on forest fauna and flora should be available.*

*Sub-indicator 2.1.1.4 Maps should be available on the distribution of fauna showing zones of high density and any migration routes.*

*Sub-indicator 2.1.1.5 There should be updated maps or data on the distribution of species to be harvested and those that are endangered, rare or endemic.*

*Sub-indicator 2.2.1.5 Initiating of forest fires should only be permitted if that is necessary for the achievement of the management goals of the FMU.*

**Indicator 2.1.2** Impact studies shall be carried out, in relation to the scale of harvesting, in accordance with the level and extent of scarcity of any resources of concern. These studies shall be incorporated into the forest management document.

*Sub-indicator 2.1.2.1 Permanent sampling plots of intact and harvested forests should be regularly monitored and documented (growth, phenology, regeneration, etc).*

*Sub-indicator 2.1.2.2 The impacts of the harvesting methods and their intensities on the forest stand should be monitored.*

*Sub-indicator 2.1.2.3 The impacts of the harvesting activity on key or sensitive species should be monitored and documented.*

**Indicator 2.1.3** New scientific and technical data shall be synthesized periodically.

**Indicator 2.1.4** The results of monitoring and new scientific findings or technical data shall be taken into account to improve forest management and harvesting practices.

### ***Criterion 2.2 The impact of harvesting activities on the structure of the forest shall be minimized.***

**Indicator 2.2.1** Reduced impact logging techniques defined at the national level shall be implemented.

*Sub-indicator 2.2.1.1 Directional felling should be employed in order to spare young and emergent trees as far as possible.*

*Sub-indicator 2.2.1.2 The skidding of logs, should not contribute to the needless destruction of trees.*

*Sub-indicator 2.2.1.3 Haulage/skidding machines should keep their blades above the soil and should not create significant ruts on the roads and trails as they move around the forest.*

*Sub-indicator 2.2.1.4 The dimensions of all infrastructure (primary and secondary roads, quarries, timber yards, skid trails) should be optimized in order to limit its environmental impact.*

*Sub-indicator 2.2.1.5 Timber harvesting to provide services and construction material in villages and logging camps should be regulated.*

**Indicator 2.2.2** The harvesting methods shall not impair the original structure and diversity of the forest.

*Sub-indicator 2.2.2.1 The area of artificial openings should not exceed those of natural openings.*

*Sub-indicator 2.2.2.3 The forest structure should be similar before and after harvesting.*

*Sub-indicator 2.2.2.4 Post-harvest species composition and density of undergrowth do not show increased abundance of invasive species.*

*Note: An example of invasive species can be populations of lianas in the families Marantaceae and Zingiberaceae in Congo basin.*

*Sub-indicator 2.2.2.5 Pioneer and light-demanding tree species should not crowd out important forest-floor habitats.*

**Indicator 2.2.3** Conversion of forests to other types of land use, including timber plantations, shall not occur unless in justified circumstances where the conversion:

- (i) is in compliance with national and regional policy and legislation relevant for land use and forest management and is a result of national or regional land use planning governed by a governmental or other official authority including consultation with materially and directly interested persons and organisations,
- (ii) entails a limited proportion of forest type,
- (iii) does not have negative impacts on threatened (including vulnerable, rare or endangered) forest ecosystems, culturally and socially significant areas, important habitats of threatened species or other protected areas and,
- (iv) makes a contribution to long-term conservation, economic, and social benefits (for example through the rehabilitation of degraded forests).

**Criterion 2.3 The impact of harvesting activities on biodiversity shall be minimized.**

**Indicator 2.3.1** At the FMU forest concession level, decisions concerning forests with high conservation value shall be taken within the context of the precautionary principle.

**Indicator 2.3.2** Adequate procedures and guidelines shall exist and shall be implemented to identify and protect, in a manner which is representative of the diversity of habitats and at a scale adapted to the subject to be preserved:

- endangered, rare or threatened species of fauna and flora; and
- other biological components of the forest of particular interest, such as reproduction sites, rare habitats and key species.

*Sub-indicator 2.3.2.1 Sensitive areas selected during the ecological survey and assessment should be included in the protected zones.*

*Sub-indicator 2.3.2.2 There should be map showing the protected zones and other forest areas where harvesting is excluded.*

*Sub-indicator 2.3.2.3 The limits of protected zones should be clearly defined and marked in the field.*

*Sub-indicator 2.3.2.4 Standardized data on fauna and flora should be available.*

**Indicator 2.3.3** The diversity and relative abundance of fauna species shall not change significantly.

*Sub-indicator 2.3.3.1 National and international regulations on the protection and hunting of, and trade in, animal species or parts of animal species should be known and respected.*

*Sub-indicator 2.3.3.2 There is an internal rule forbidding and also penalizing the transportation and trade of bush meat, and also the transport of guns and weapons for hunting in the vehicles of the forest manager.*

*Sub-indicator 2.3.3.3 Access to the forest concession should be controlled and reserved for use only by authorized vehicles.*

*Sub-indicator 2.3.3.4 Secondary roads/paths should be closed after harvesting, except those required for forest monitoring or for local development.*

*Sub-indicator 2.3.3.5 The non-fragmentation of tree populations should be ensured by the maintenance of a continuous canopy, which may be broken to a minimal extent by the network of primary and secondary paths/roads.*

*Sub-indicator 2.3.3.7 Commercial hunting and non-selective hunting methods should be forbidden in the FMU.*

*Sub-indicator 2.3.3.8 The inappropriate hunting, collection and trapping of bush meat should be controlled.*

**Indicator 2.3.4** The diversity and density of flora species shall not be significantly modified by harvesting.

*Sub-indicator 2.3.4.1 Rare and endemic species with a confined area of distribution should be protected.*

*Sub-indicator 2.3.4.2 The species' diversity of plants in the undergrowth of forests restored after harvesting should be similar to that noted in intact forests.*

*Sub-indicator 2.3.4.3 The use of biological control agents shall be documented, minimized, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols.*

**Indicator 2.3.5.** The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.

**Indicator 2.3.6** The use of genetically modified organisms shall be prohibited.

#### ***Criterion 2.4 The natural regeneration capacity of the forests shall be ensured.***

**Indicator 2.4.1** The conditions for natural regeneration shall be fulfilled and regeneration processes shall be maintained.

*Sub-indicator 2.4.1.1 The phenology and dispersal mechanisms of flora species should not be disrupted.*

*Sub-indicator 2.4.1.2 The number of seed-producing trees should be sufficient for adequate regeneration.*

*Sub-indicator 2.4.1.5 There should be no abnormal change in the size-class distributions of such harvested species.*

*Sub-indicator 2.4.1.6 The regeneration of secondary vegetation should occur on disused paths and tracks.*

**Indicator 2.4.2** Measures shall be taken to promote natural regeneration whenever necessary.

*Sub-indicator 2.4.2.1 Appropriate steps should be taken to protect degraded areas in order to foster their regeneration.*

*Sub-indicator 2.4.2.2 Healthy mother trees or seed-bearing trees should be protected and preserved within stands of forest to be harvested in the future, in order to maintain, as far as possible, the structure of the forest and the pattern of species' distribution characteristic of that structure.*

*Sub-indicator 2.4.2.3 The harvesting of forest products/produce (fruits, kernels, bark, wood for service, and ornamental plants) should ensure the maintenance of adequate stocks of seed-bearing trees and fruits.*

**Indicator 2.4.3** For enrichment planting in harvested natural forests or in agroforestry systems, the use of indigenous species with proven commercial value should be preferred.

***Criterion 2.5 The impact of harvesting activities on water, soils and slopes shall be minimized.***

**Indicator 2.5.1** The flow rate and quality of water shall be maintained.

*Sub-indicator 2.5.1.1 No water retention areas shall be created and there should be no disruption to drainage in the FMU.*

*Sub-indicator 2.5.1.2 The formation of sandbanks and any form of in-fill in watercourses and swamps should not significantly disrupt water flows.*

*Sub-indicator 2.5.1.3 Used oils shall be recovered.*

*Sub-indicator 2.5.1.4 There shall be no sign of chemical contamination of food chains or aquatic ecosystems (eg sick or dead invertebrates, fish or mammals, abnormal invasion of seaweeds).*

**Indicator 2.5.2** The impact of harvesting activities on the biological, physical and chemical characteristics of soils and on hillslopes shall be minimized.

*Sub-indicator 2.5.2.1 Harvesting and its related infrastructure should avoid buffer zones and other sensitive areas on slopes (low relief, river sides, steep slopes).*

*Sub-indicator 2.5.2.2 Erosion due to harvesting and related infrastructure should be within acceptable limits.*

*Sub-indicator 2.5.2.3 Disused secondary infrastructure (skid trails, timber yards, quarries) should be covered again by vegetation.*

**Indicator 2.5.3** Management systems shall promote the development and adoption of environmentally friendly, non-chemical methods of pest management and shall strive to avoid the use of chemical pesticides. World Health Organization 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, and any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training is provided to minimize health and environmental risks.

**Indicator 2.5.4** Chemicals, containers and liquid and solid non-organic wastes including fuel and oil are disposed of in an environmentally appropriate manner.

**Indicator 2.5.5** The setting up of necessary infrastructure for harvesting shall be optimized in relation to the topography of the sites and the location of the resource.

**Indicator 2.5.6** Water and soil restoration programs shall be implemented whenever necessary.

*Sub-indicator 2.5.3.1 Old infrastructure still in use should be upgraded and maintained so as to meet current standards.*

*Sub-indicator 2.5.3.2 All sites showing signs of severe erosion or other types of important water and soil degradation should be restored.*

**Principle 3 According to the importance and intensity of forest operations, the FMU manager shall contribute to the improvement of the economic and social well-being of workers in the FMU and of local populations.**

***Criterion 3.1 The rights and responsibilities of workers in the FMU and local populations shall be clearly defined, acknowledged and respected.***

Indicator 3.1.1 The legal and customary rights of local populations in respect to the ownership, use and tenure of the forest land and resources shall be clearly defined, acknowledged and respected. Forest management activities shall be conducted in recognition of the established framework of legal, customary and traditional rights, which shall not be infringed upon without the free and informed consent of the holders of the rights, including the provision of compensation where applicable. Where the extent of rights is not yet resolved or is in dispute there are processes for just and fair resolution. In such cases forest managers shall, in the interim, provide meaningful opportunities for parties to be engaged in forest management decisions whilst respecting the processes and roles and responsibilities laid out in the policies and laws where the certification takes place.

*Sub-indicator 3.1.1.1 The provisions of the forestry law on rights of use and ownership should be known and respected.*

*Sub-indicator 3.1.1.2 The rights of use within village boundaries should be respected.*

*Sub-indicator 3.1.1.3 As much as possible, local populations should have control over the forestry operations on their forest land and resources, unless they freely delegate this control to a third party.*

*Sub-indicator 3.1.1.4 Sites of religious, cultural or particular economic value should be clearly identified in collaboration with local populations and protected by those in charge of forest management.*

*Sub-indicator 3.1.1.5 Local populations should receive compensation for the use and application of their traditional knowledge and techniques in the forest area. This compensation is freely and formally accepted prior to the commencement of operations.*

**Indicator 3.1.2** The modalities of access to natural resources shall be clearly defined and respected by all.

*Sub-indicator 3.1.2.1 The provisions of the forestry law on the modalities of access to resources should be known and respected.*

**Indicator 3.1.3** All relevant labour code regulations shall be applied. Forest management shall comply with fundamental ILO conventions

Note: In countries where the fundamental ILO conventions have been ratified, the requirements of 7 (a) apply. In countries where a fundamental convention has not been ratified and its content is not covered by applicable legislation, specific requirements shall be included in the forest management standard.

*Sub-indicator 3.1.3.1 The labour code and other related regulations (collective agreements, rules of procedure, memoranda, etc) shall be respected.*

*Sub-indicator 3.1.3.2 Wages and social benefits should be comparable to national norms.*

**Indicator 3.1.4** Information shall be provided on and all stakeholders shall be fully informed of their rights and duties.

*Sub-indicator 3.1.4.1 Targeted sensitization campaigns should be conducted.*

Indicator 3.1.5 Damages caused shall be compensated according to the norms in force or after negotiation.

*Sub-indicator 3.1.5.1 Specialized services should be consulted and their decisions respected.*

*Sub-indicator 3.1.5.2 The procedure to compensate for the damage caused to cultivated crops should be respected.*

***Criterion 3.2 The forest manager shall encourage the participation of local populations present in the FMU in the management of forest resources.***

Indicator 3.2.1 The forest manager shall set up ad hoc bodies for consultation and negotiation with local populations.

Indicator 3.2.2 The procedure for dialogue and the resolution of conflicts shall be functional both between stakeholders and within each stakeholder body.

Indicator 3.2.3 All stakeholders shall participate in the control of natural resources management on the basis of a protocol accepted by all.

Indicator 3.2.4 Procedures for consultation with populations during the establishment and demarcation of FMU boundaries are respected.

Indicator 3.2.5 Mechanisms for applying sanctions in the case of rule violations shall be in place and agreed by stakeholders.

***Criterion 3.3 All stakeholders consider the share of benefits derived from forests to be satisfactory.***

**Indicator 3.3.2** Local communities living in or near the harvested forest area shall benefit preferentially from opportunities in employment, training and other services.

*Sub-indicator 3.3.2.1 The forest manager should prefer employment of local people in case of equal competence.*

*Sub-indicator 3.3.2.2 The forest manager should maintain a recruitment and training policy for young people originating from local communities.*

*Sub-indicator 3.3.2.3 The forest manager should make provision for acceptance of trainees in its production units.*

**Indicator 3.3.3** In accordance with the importance and impact of the forest operations at the local level, the forest manager shall contribute to the development of the local economy.

*Sub-indicator 3.3.3.1 The forest manager should encourage the creation of small and medium-sized enterprises related to its forestry activities.*

*Sub-indicator 3.3.3.2 The forest manager should encourage local sub-contracting activities.*

*Sub-indicator 3.3.3.3 The forest manager should support local populations in their food-crop farming activities.*

***Criterion 3.4 According to the importance and impact of the forestry operations, the forest manager shall contribute to improving the health and education of local populations.***

**Indicator 3.4.1** The forest manager shall take preventive measures to minimize any professional hazards in relation to forestry activities.

*Sub-indicator 3.4.1.1 Working conditions shall be in accordance with the labour code and/or ILO recommendations.*

*Sub-indicator 3.4.1.2 There should be rules of procedures and memoranda that are widely circulated to remind employees about the observance of safety norms.*

*Sub-indicator 3.4.1.3 Appropriate safety gear and equipment should be distributed and worn by employees in their various working environments.*

*Sub-indicator 3.4.1.4 Employees should be regularly submitted to medical examinations in accordance with national norms.*

**Indicator 3.4.2** Health-related aspects of living conditions shall be improved for employees and their families.

*Sub-indicator 3.4.2.1 The forest manager should measures to ensure adequate public hygiene and health (e.g. the provision of safe drinking water and hygienic latrines, the disposal of household refuse, etc).*

*Sub-indicator 3.4.2.2 Health centres should exist, should have qualified staff living on-site, and function at a satisfactory level.*

*Sub-indicator 3.4.2.3 The provision of medicines to dispensaries should ensured.*

*Sub-indicator 3.4.2.4 There should be store well-stocked with canned and fresh foodstuffs (particularly those high in proteins to substitute for bush meat).*

**Indicator 3.4.3** The health conditions of local populations shall be improved as a result of the forestry activities.

*Sub-indicator 3.4.3.1 Local populations should have access to dispensaries.*

*Sub-indicator 3.4.3.3 The forest manager should sponsors programs on vaccination and sensitization campaigns on AIDS and sexually transmitted diseases.*

**Indicator 3.4.4** The forest manager shall contribute to the basic education of local populations and workers present in the FMU, in accordance with the contractual provisions established consistent with national norms.

*Sub-indicator 3.4.4.1 Children in local communities should have access to the forest manager's school infrastructure.*