

# Standards for Voluntary Forest Certification of Natural Forests in Colombia According to the FSC Scheme

# PRINCIPLE 1 - OBSERVANCE OF 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 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** The forest manager shall comply with all Colombian policies which refer to good forest management, stated in Annex 3.

**CRITERION 1.2** All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.

**Indicator 1.2.1** Official documents shall be presented for the canceling of all rights, taxes, national or local fees and contributions to the corresponding bodies for laboral and other legal payments.

Indicator 1.2.2 All payment receipts shall be kept in record and available for their

consultation.

In the case of tax or contribution exceptions, proving documents

shall be presented.

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

**Indicator 1.3.1** The forest manager shall comply with the international agreement policies, as they are presented in Annex 4.

**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** Conflicts of the relationship between the rules and regulations with the Principles and Criteria, shall be officially communicated to the FSC if no agreement has been achieved.

**CRITERION 1.5** Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.

**Indicator 1.5.1** The forest management shall use all the legal means available to avoid forbidden activities within the managed area. In the community regions, community agreements and or arrangements shall be signed to identify and control such activities.

**CRITERION 1.6** Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.

**Indicator 1.6.1** The forest manager<sup>1</sup> have signed in writing their permanent commitment to the FSC Principles and Criteria.

**Indicator 1.6.2** The forest manager has subscribed in writing his commitment to develop a forest activity within the selected territory for a long time period.<sup>2</sup>

**Indicator 1.6.3** The forest managers aid and promote good forest management and forest certification.

# PRINCIPLE 2 - TENURE AND USE RIGHTS AND 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.<sup>3</sup>

<sup>1</sup> A forest manager is a natural or judicial body which is the owner and/or manager and/or representative of a forest management operation and who, as such, requests an assessment for a voluntary forest certification according to the FSC scheme.
2 See Annex 5 - Glossarv.

<sup>&</sup>lt;sup>3</sup> In the case of privately owned property (those backed by a public deed, or individual or collective property titles), only the property's owner or legal representative shall be authorized to function as forest manager. In the case of public rights ownership (for public use, owned by the public), the State shall have the right to name individuals or public bodies through licensing, permit, authorization or concession.



Indicator 2.1.1 The land ownership shall be backed by one of the following documents:

- a) Land title
- b) Document granted by the state acknowledging customary rights.
- Document for the constitution of shelters and/or indigenous reservations, for afro-Colombian communities and others.
- d) A State authorization, permit, license o concession for the forest management of public forests.

**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** It shall be proven through internal consultation that the communities have developed a consultation and decision-making process in relation to the forest activities to be performed in their territories.

Indicator 2.2.2 The forest management plans have been developed and agreed upon through community participation, including participative planning, execution and supervision practices that insure the local control of the forest management process.

**Indicator 2.2.3** If the forest management has been granted to a third party, in the cases allowed by the law, there are agreements or contracts between these third parties and the communities.

**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** The conflict resolution mechanisms related to claims about the tenure and use of the land must be stipulated in the contract or agreement celebrated between the community and the forest manager.

**Indicator 2.3.2** Verification mechanisms shall be included in the land tenure agreements and or arrangements.



**Indicator 2.3.3** The communities are fully informed about their rights and responsibilities so as to avoid, as far as possible, any future complaints.

**Indicator 2.3.4** There is no evidence of conflict between the forest manager and his neighbors (including the local communities).

**Indicator 2.3.5** The interference of the armed conflict does not prevent the forest manager from exercising his functions.

# PRINCIPLE 3 - INDIGENOUS PEOPLES' RIGHTS<sup>4</sup>

The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.

**CRITERION 3.1** Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.

**Indicator 3.1.1** The ethnic groups and local communities have been duly informed about the stands governing the country's forest management standards.

**Indicator 3.1.2** The forest manager develops the forest management plans in agreement with the community, following all the community's internal procedures.

**In the forest management plans the ethnic groups and local** communities apply their own standards in relation to the labor and community relations.

**CRITERION 3.2** Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.

**Indicator 3.2.1** The forest manager shall acknowledge, in writing, the territory property of or influenced by the ethnic groups and local communities. These areas are marked in the maps and identified in the Forest Management Plan.

Indicator 3.2.2 The ethnic groups and the local communities acknowledge the land extension within their territory that shall be occupied by forest management, and are committed to respect it through a document duly signed by the traditional authorities that represent them.

<sup>&</sup>lt;sup>4</sup> The human groups of indigenous, afro-Colombian or local communities whose social, cultural and economic conditions set them apart from other national sectors, who are totally or partially under a traditional or other special form of government and that, independently of their judicial situation, have their own social, economic, cultural or political institutions, or a part of them.



Indicator 3.2.3 The forest management system shall record and consider the rights over the use of forest resources and established mechanisms to preserve the flow of goods and services to the ethnic groups and the local communities.

Indicator 3.2.4 The forest manager shall agree with the ethnic groups and local communities on conflict resolution mechanisms related to tenure resources and rights (e.g., the intervention of middlemen). The local communities and ethnic groups are informed about these mechanisms..

**CRITERION 3.3** Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers.

In agreement with the communities, the forest manager shall identify in the management plan and mark in the maps the sites that have a special cultural, ecological, economic or religious meaning for the ethnic group and local community territories.

In agreement with the communities, the forest manager has defined measures to appropriately protect sites that have a special cultural, ecological, economic or religious meaning. These measures include conflict resolution agreements and mechanisms.

**Indicator 3.3.3** If archaeological sites should be found, the forest manager shall inform the appropriate government body and (ICANH) and comply with the use restrictions defined by this institution.

**Indicator 3.3.4** In agreement with the communities, sites that have a special cultural, ecological, economic or religious meaning shall be identified and marked in the field.

**CRITERION 3.4** Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.5

<sup>5</sup> Since 1996, after the Third Conference of the Parties of the Convention on Biological Diversity, which took place in Buenos Aires, the Indigenous peoples, Afro-American communities and local communities of Colombia, as well as communities from other American countries, established a moratorium to bio-prospection within their territories, and established particular agreements about traditional knowledge, until their respective countries define legislation that develops Article 8 of the Agreement and establish mechanisms for the protection of traditional knowledge.



**Indicator 3.4.1** The ethnic groups and local communities have expressed their will to share knowledge about the use of forest species.

**Indicator 3.4.2** Through their traditional representatives, the ethnic groups and local communities have agreed with the forest manager which kind of knowledge shall be shared, the opportunities and the type of compensation.

**Indicator 3.4.3** The compensations agreed upon by the ethnic groups and local communities with the forest manager include a clear acknowledgement of their contributions on the management plan.

**Indicator 3.4.4** The forest manager shall identify the traditional knowledge that is being applied and the origin of this knowledge.

# PRINCIPLE 4 - COMMUNITY RELATIONS AND WORKERS' 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 The forest manager has preferred to hire workers from the same region.

Indicator 4.1.2 The forest manager promotes training processes to count with qualified labor.

Indicator 4.1.3 The activities described in the Forest management plan shall be harmonized with the development plans of the ethnic groups and local communities.

**CRITERION 4.2** Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.

**Indicator 4.2.1** The workers of the forest management unit have been hired in compliance with all current legal labor requirements.<sup>6</sup>

**Indicator 4.2.2** Economic and non-economic retribution received for the forest management work shall equal or surpass the national or regional standard values for similar activities.

<sup>&</sup>lt;sup>6</sup> Where hiring is concerned, public bodies must comply with 1993's Law 80 - Estatuto General de Contratación de la Administración Publica (General Hiring Statutes for Public Administration). Private bodies shall comply with the dispositions of 1961's Law 141 and its modifying laws - Código Sustantivo del Trabajo. (Substantive Labor Code).



**Indicator 4.2.3** Industrial security standards shall be applied in all the stages of forest management.

**Indicator 4.2.4** The forest manager shall guarantee access to social security and health services for all the workers.

**Indicator 4.2.5** There are healthy, clean and safe work conditions for all workers in the forest management unit, considering each region's particularities, and:

- a) Quality of food and water,
- b) Camping conditions for the workers in the forest management units,
- c) Regular health check-ups according to each activity,
- d) Ergonomic conditions according to each activity,
- e) Risk maps in existence,
- f) Monitoring of the environmental work conditions.

**Indicator 4.2.6** The workers use special individual protection equipment applicable to the particular operations and activities. There are regulations which forbid working without this equipment.

**Indicator 4.2.7** There is an internal accident prevention commission where are the forest workers are included.

**Indicator 4.2.8** There are educational practices related to accident prevention, use of equipment, and hygiene and security procedures

**Indicator 4.2.9** Security procedures for the management, storage and use of equipment and produce shall be applied.

**Indicator 4.2.10** There are policies to define adequate rest periods between work periods.

Indicator 4.2.11 In the case of an accident there shall be medical assistance in a short time. The forest manager shall answer for any damages to the workers' health, in accordance with current policies.

**Indicator 4.2.12** A first-aid training program shall be applied periodically.

**Indicator 4.2.13** There are formal records that note the reduction in the time, frequency and seriousness of the work accidents, including the publication of the results.

**Indicator 4.2.14** There is information, instructions and signs that allow passers-by to identify situations that might put their security at risk.



**CRITERION 4.3** The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labor Organization (ILO)<sup>7</sup>

**Indicator 4.3.1** The forest manager shall guarantee the free association and union rights that protect workers in compliance with the national legislation.

**Indicator 4.3.2** There are verification and follow-up mechanisms signed by the forest workers.

**CRITERION 4.4.** Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups directly affected by management operations.

**Indicator 4.4.1** The magnitude of the operations has been consulted and agreed upon with the population benefited or affected by the forest management.

**Indicator 4.4.2** The forest management plan is made public within the community using every means available to guarantee full coverage.

**Indicator 4.4.3** The forest management plan includes mechanisms for the assessment of the social impact of the forest management.

**Indicator 4.4.4** The forest manager shall periodically report the development of the management unit before the local authorities and communities.

**Indicator 4.4.5** The forest manager shall allow citizen groups to verify the full compliance with the social aspect of the management plans.

**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 costumary rights, property, resources, or livelihoods of local peoples. Measures shall e taken to avoid such loss or damage.

Indicator 4.5.1 The community and its representatives, together with the forest manager, shall agree upon the conditions preceding the beginning of the operation, in relation to the state and quality of the resources, current harvests and the standard of life through minute taking.

<sup>&</sup>lt;sup>7</sup> As for the ILO Conventions, the dispositions on this subject included in the current FSC Guides shall be applied.



**In the case of any damage, the forest manager and the damaged** community shall agree upon a form of evaluation and compensation mechanisms of the damage and establish the conflict resolution instances.

# 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 toward 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** The forest manager keeps an updated investment and costs plan which contemplates all the activities described in the Management Plan.

**Indicator 5.1.2** The forest management unit generates enough economic resources to achieve the forest management described in the Management Plan.

Indicator 5.1.3 The forest management must be financially assessed or audited.

Indicator 5.1.4 There is a plan to minimize dependency upon external financial agents.

**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** There are mechanisms to guarantee a greater added value in relation to the different products.

**CRITERION 5.3** Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.



**Indicator 5.3.1** The planning of tree cutting is based upon practices that seek to reduce waste, including:

- (a) Detection of hollow trees to avoid their use.
- (b) The trees are cut close to the ground, even when they have "bambas".
- (c) The cut is oriented so as to minimize the impact for the remaining goods.
- (d) Previous cut of lianas.
- (e) The trees to be cut must be located and marked so as to minimize the possibility of loss of trees or trunks in the forest.

**Indicator 5.3.2** The historical production data show a diminishment in waste, both in the cutting process and in the following transformation and transportation processes (extracted volume x processed volume).

- a) The piecing is planned before starting, and taking into consideration the different sizes to allow for making a maximum profit of the timber.
- b) The timber's extension must be fully profited (leaving smaller stumps)
- c) The wood's transportation is planned with an aim to minimize the damage caused by this work.

CRITERION 5.4 Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.

Indicator 5.4.1 The forest operation generates tangible benefits for the region's

inhabitants.

Indicator 5.4.2 The forest production is diversified, considered as more than a

forest product.

Indicator 5.4.3 The forest manager makes an effort to promote local initiatives

for the profiting, processing and commercialization of various forest products.

**Indicator 5.4.4** The forest manger shall make efforts to improve the growing entry into the market of less known timber species.

**Indicator 5.4.5** There are inventories of the wood and non wood products with marketing and production potential oriented to a good forest management.

**CRITERION 5.5** First management operations shall recognize, maintain and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.



Indicator 5.5.1

The forest manager shall identify the environmental services in

the forest.

**Indicator 5.5.2** Actions are taken to preserve and/or enhance forest services.

**CRITERION 5.6** The rate of harvest of forest products shall not exceed levels which can be permanently sustained.

**Indicator 5.6.1** There are mechanisms to calculate the annual profit rate.

Indicator 5.6.2 The harvest and extraction intensity cycles are based upon

experiences and knowledge validated to preserve the forests' productive capacity.

# 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 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** The Forest Management Plan identifies the possible negative impacts and establishes corrective measures for environmental and cultural aspects that might be generated by the forest operation.

**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** Protection zones are established and marked off, defining a configuration of the zones that allows for the genetic variability and viability of the populations, in accordance with the scale and intensity of the forest management.

Indicator 6.2.2 Activities take place which seek to reduce any stimulus for illegal hunting and an illegal traffic with species, such as: agreements with the community, environmental education sessions, controls or physical barriers, signs, research studies, temporary cages, feeding plots, amongst others.

Indicator 6.2.3 Measures are applied for the identification and protection *in situ* and / or *ex situ* of endemic species and endangered species. It is necessary tot ake into account the updated lists of these species available both nationally and internationally (Instituto de Investigaciones Alexander von Humboldt, CITES - Von Humboldt Research Institute).

**Indicator 6.2.4** An annual assessment of the situation of the ecosystems and endemic or endangered species has been established.

**Indicator 6.2.5** The inventory identifies rare, threatened and endangered species, as well as their habitats, so as to establish measures for their protection.

**Indicator 6.2.6** As part of the activities that precede the forest profiting, it is important to identifies the sites of reproduction of rare, threatened or endangered species, so as to establish measures for their protection.

**Indicator 6.2.7** The workers and communities are acquainted with the environment of the species and/or the special zones defined in this Criterion.

**CRITERION 6.3** Ecological functions and values shall be maintained intact, enhanced or restored, including: a) Forest regeneration and succession. B) Genetic, species and ecosystem diversity. C) Natural cycles that affect the productivity of the forest ecosystem.

**Indicator 6.3.1** There is a zoning by forest type in the management area, and within each type there are witness areas marked which remain intact so as to insure the species' genetic diversity.

**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** Representative samples of the affected area's ecosystems are identified in the maps and protected by any damage caused by forest profiting.



**CRITERION 6.5** Written guidelines shall be prepared and implemented to: control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources.

**Indicator 6.5.1** Guidelines for the control of erosion, minimizing damage to the forest during the profiting, the construction of forest roads and other mechanical disturbances exist and are applied, as well as guidelines for the protection of water resources.

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 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; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.<sup>8</sup>

**Indicator 6.6.1** Chemical products are used only when fully justified by the situation, strictly observing procedures.

**Indicator 6.6.2** Both national and international agrochemical use standards are complied. The updated listings of ICA, OMS y EPA<sup>9</sup> are taken into account.

**Indicator 6.6.3** Training workshops take place for the personnel in charge of the storage, handling, transportation, application and disposal of chemical products.

**Indicator 6.6.4** There is evidence of the use of biological and other clean control methods as part of an integrated pest management strategy.

**Indicator 6.6.5** Security measures for the personnel and the environment exist and are applied, in relation to the use and storage of chemical products.

**CRITERION 6.7** Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.

**Indicator 6.7.1** Waste disposal measures exist and are applied.

<sup>&</sup>lt;sup>8</sup> In relation to the full compliance with this, the relevant current FSC Guides shall be taken into account.

<sup>&</sup>lt;sup>9</sup> If in the zone to be certified there should be an evident controversy or formal complaint from some acknowledged interest group because of the use of a pesticide, the GTCFV or the FSC must be called to resolve the conflict.



**Indicator 6.7.2** There is a program to incorporate residues in a productive chain (recycling, compost, reutilization and management of residues, etc.).

**Indicator 6.7.3** There are appropriate procedures and infrastructure for the handling, treatment, disposal, final destiny or incineration of residues.

**CRITERION 6.8** The use of biological control agents shall be documented, minimized, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.<sup>10</sup>

**Indicator 6.8.1** There is a system for the recording, monitoring and control of the use of Biological Control agents.

**Indicator 6.8.2** The international agreements and national standards on biological control agents are applied.

**Indicator 6.8.3** No genetically modified organisms are used in the forest management unit.

**CRITERION 6.9** The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.

Indicator 6.9.1 Species that don't (or didn't) exist in the management unit are used only when fully justified by the situation, observing the strictest precautions to avoid adverse ecological impacts, including:

- (a) that they don't invade the region
- (b) that they're not toxic for the fauna and the population

**CRITERION 6.10** 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.

**Indicator 6.10.1** Actions a), b) y c) shall be considered in the case of forest conversion.

**Kommentar:** Versão ideal Adalberto Plínio - Champion

<sup>10</sup> In relation to the adequate use of biological control agents, the dispositions included in the current FSC guides shall be taken into account.



#### **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 for achieving them, shall be clearly stated.

CRITERION 7.1 The management plan and supporting documents shall provide:

- 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 systems, based on the ecology of the forest in question and information gathered through resource 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** The management plan includes important aspects such as:

- a) Location and limits of the Management Plan.
- b) Zoning (current y potential de la land use, witness areas, management units forestry, profiting units)
- c) Characterization of the physical environment (climate, soil, geology, physiography, hydrology)
- d) Biological characterization (structure, composition, diversity, dynamics, forest mass succession, habitats, productivity, wild fauna food sources)
- e) Socioeconomic and cultural characterization.
- f) Forest inventories according to the dispositions of the national, regional and local legislations. The results of these inventories must provide a trustworthy basis that will allow for the development of a multi-annual management plan.
- g) Ordering method (Minimum ordering unit, determination and justification of the species selection, cutting cycle, annual permissible cutting, minimum cut diameter)



- h) Forestry management System and Plan as a basis for the formulation of the Management Plan.
- i) Plan for the research and monitoring of the forests' dynamics.
- j) Operational harvest plan.
- k) Industrialization, market development and marketing plan.
- The management plan is supported by: Maps, Field records, Tables, Graphics, Diagrams, Photographs and Bibliography.

Indicator 7.1.2 There is an annual operative plan available to provide operative guidelines for the management activities and as an aid when monitoring the implementation of the activities.

Indicator 7.1.3 The management plan includes a chapter about the previous consultation and arrangement process, and the agreement signed with the ethnic groups and local communities affected by the forest management.

**CRITERION 7.2** The management plan shall be periodically revised to incorporate the results of monitoring of new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.

**Indicator 7.2.1** There are prior versions of management plans where it is possible to verify the implemented changes.

**CRITERION 7.3** Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plan.

**Indicator 7.3.1** The workers are acquainted with the management plan and have demonstrated their capability to develop the stated activities.

**Indicator 7.3.2** Measures for the supervision and execution of the guidelines and activities considered in the management plan exist and are applied.

**Indicator 7.3.3** There is a continuous training program for the workers.

**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.

**Indicator 7.4.1** There is a summary of the Management Plan available.



Indicator 7.4.2 The field workers, as well as the technical and administrative personnel have access to the correct information about the implementation of the Management Plan.

# 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, amangement 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 assessment of change.

**Indicator 8.1.1** An adequate assessment and monitoring system for the execution of the Management Plan exists and is applied.

**Indicator 8.1.2** The monitoring information is recorded and used to revise the management plan and forest operations.

**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 conditions 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** There are updated forest production records.

**Indicator 8.2.2** A measuring system is applied for the growth rate, natural regeneration and forest conditions.

Indicator 8.2.3 The compositions and changes of the flora and fauna are

assessed.

**Indicator 8.2.4** A record is kept that allows for the assessment of the costs and input of the forest products.



**Indicator 8.2.5** A system is applied to monitor the social and environmental impact of the harvesting activities.

**CRITERION 8.3** Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain of custody".

**Indicator 8.3.1** Information and documentation is provided to the adequate monitoring or certification bodies for the follow-up of forest products in their different transformation and marketing stages.

**CRITERION 8.4** The results of monitoring shall be incorporated into the implementation and revision of the management plan.

**Indicator 8.4.1** There is an updated management plan that includes the monitoring results.

**Indicator 8.4.2** Any change to the management plan in relation to the forest operations are made evident in the field.

**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** There is a summary of the results of the monitoring Indicators publicly available.

# PRINCIPLE 9 - MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS.

Management activities in high conservation value forests shall maintain 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** The areas and/or attributes determined as of a high conservation value by the adequate national and regional authorities (Ministerio del Medio Ambiente - Ministry for the Environment and the CARS, and territorial bodies) and the communities shall be respected.

**Indicator. 9.1.2** The areas of a high conservation value are geo-referenced and mapped; there is also a document backing the definition of these areas.

**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 There is proof of a consultation with the interest groups (CARS, NGO's, Communities, Universities, Territorial Bodies y Companies, etc.) linked to the area that will be certified.

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** The measures identified in the environmental considerations of the management plan for the preservation and conservation of high conservation value areas have been implemented.

**Indicator 9.3.2** There is a document which summarizes the management plan, including the considerations about the high conservation value areas, which has been made available to the public.

**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** There is an annual monitoring report.

# PRINCIPLE 10 - PLANTATIONS<sup>11</sup>

Plantations shall be planned and managed in accordance with Principles and Criteria 1 -9, and

<sup>11</sup> Principle 10 about Forest Plantations and the respective Criteria are not developed within these standards, as a specific document for Forest Plantations has been developed, including all of the Principles and Criteria. In any case, if within a Natural Forests Management unit some practice should be included imputable to the concept of plantation, (e.g. forest enrichening, degraded area recovery, repopulation of species) it shall be assessed following the parameters of the Standards for Forest



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 conservation and restoration objectives, shall be explicitly stated in the management plan, and clearly demonstrated in the implementation of the plan.

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 sones 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 the plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape.

**CRITERION 10.3** Diversity in the composition of plantations is preferred, so as to enhance economic, ecological and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes and structures.

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.

**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.

**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

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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.

CRITERION 10.7 Measures shall be taken to prevent and minimize 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 fertilizers. Plantation management should make every effort to move away from chemical pesticides and fertilizers, including their use in nurseries. The use of chemicals is also covered in Criteria 6.6 and 6.7.

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.

**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.