

Certification Standard of the
FSC- Forest Stewardship Council for Management of Plantations in Brazil
V3-0

A. INTRODUCTION

This document contains the Interim Standard used by Scientific Certification Systems for conducting forest certification evaluations of plantations in Brazil. The scope of this standard includes only plantation forests. Once there is an officially FSC accredited standard for use in evaluations of plantations in Brazil, all further evaluations will be done against said standard. This standard complies with all applicable FSC International policies, standards, and advice notes.

SCS consulted the conditions that FSC International levied on the FSC National Initiative for Brazil's plantation standard, the approved FSC Plantation Standard for Colombia, and the SmartWood Standard for Plantations in Brazil (V1-0, January 2006) in the updating of this interim standard for Brazil.

B. STANDARD USE

Conformance with this interim standard shall be determined by evaluating observed performance at the Forest Management Unit (FMU) level against each indicator of the standard, and in comparison with any performance threshold(s) specified for the indicator. The indicators here apply to all forests covered by the scope of the standard, including SLIMFs, unless otherwise specified.

In the process of adapting this standard for the assessment of a particular forest operation, it may be restructured in order to improve its implementation on the ground or to ease stakeholder interpretation of the standard, but only if pre-approved by the SCS Director of Forest Management Certification. Restructuring or adapting this standard shall not affect the requirements for conformance and certification decision making. If a complaint or appeal is filed, the complete standard shall be considered definitive.

Glossary

For the purpose of this document, the following words are to be understood as described below:

Adjacent Areas: Areas neighboring the target area. They can be established by an imaginary border limit or not, or be established by existing physical and geographical occurrences.

Apprentices: Teenagers older than 14 years of age who are legally permitted to work by the Child and Adolescent Protection Law (Law 8.069/ 1990) as long as the person has access to a technical school education, considering that the activity is compatible with the person's physical and intellectual development and with guaranteed access to regular school education, according to the terms established by the current law.

Biological Control Agents: Living organisms used to eliminate or regulate the population of other living organisms.

Biological Diversity Values: The intrinsic ecological, genetic, social, economic, scientific, educational, cultural, recreational and esthetical values of biological diversity and its components. (See the Convention on Biological Diversity, 1992).

Biological Diversity: The variety among living organisms from all sources including, inter-alia, terrestrial, marines and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems. (see Convention on Biological Diversity, 1992).

Chain of Custody: The channel through which products are distributed from their origin in the forest to their end-user(s).

Silvo Agro-Chemicals: The range of fertilizers, insecticides, fungicides used to protect the production sector, storage and benefit of agricultural products, pasture, protection of native or planted forests, other ecosystems, urban hydro and industrial environments from damaging actions of live organisms considered harmful and protect the fauna and flora.

"Company's Store" System (AVIAMENTO): A system of commercialization by which the proprietor of an enterprise organizes the sale of products on credit to its employees. Usually this is done out of the "company's store", usually a small and simple building. The prices of supplies and merchandise are generally higher than the ongoing commercial price. Eventually workers or clients become obliged to work in order to comply to pay their never-ending debt.

Connectivity: Measurement of the degree of linkage between remaining vegetation types, which remain after fragmentation of their habitats.

Criterion: A form of judging whether or not a Principle has been fulfilled.

Customary Rights: Rights, which result from a long series of habitual or customary actions, constantly repeated, which, have, by repetition and uninterrupted acquiescence, acquired the force of law within a geographical or sociological unit.

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Degraded Areas: Areas covered or not by vegetation, which was altered by human actions and no longer, possesses its original ecological function and can no longer sustain the economic function to which they were destined.

Ecological Functions: Functions, which affect the environment and the flora and fauna striving for equilibrium between the physical surroundings, the environment and the flora and fauna in a given area.

Ecological Process: Processes through which forest ecosystems maintain their structure and dynamics, including the regeneration after natural disturbances and harvesting of forest products and ensuring the production of environmental service.

Ecosystem-Productivity: Rate of accumulation of biomass in a given area over a certain period of time, usually expressed as metric tons per hectare.

Ecosystem: A community of all plants, animals and their physical environment, functioning together as an interdependent unit.

Endangered Species: Any species which is likely to become extinct within a foreseeable future throughout all or significant portion of its range if the conditions which causes the endangerment continue to be active.

Endemic Species: Native species which are restricted to a defined geographical area.

Environmental Policy Act (EPA): It is a form established by the Law nº 9.393/1996, issued by IBAMA according to the IBAMA 162 decree of 12/18/1997, in which the rural proprietor identifies existing permanent preservation areas (PPA 's) inside the property. The use of the EPA is limited for the evaluation of the RTX (Rural Territorial Tax).

Exotic Species: Introduced species, in a given area which are out of their natural area of occurrence.

Forest Management Plan and Annual Operational Plan: The forest management plan and the annual operational plan which are written documents based on technical criteria, to conform to the environmental legislation and with other national laws. The management plan refers to the ordering of forest activities in a given Forest Management Unit as a whole, and the annual operational plan refers to specific activities during a current year.

Forest Management: The administration of a “Forest Management Unit” to obtain products, services and economic and social benefits respecting the mechanisms for its environmental sustainability.

Forest Manager: Person legally responsible for the administration the forest management unit.

Forestry Management Unit: Continued area or not defined submitted to forestry management corresponding or not to the total area of the property or tenure that include productivity, maintenance, harvesting and preservation area.

Forest Plantation: Areas, which result from human activities of planting tree seedlings or sowing, with or without intensive forest management treatment.

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Forest Services: A set of benefits generated by natural or cultivated ecosystems, such as carbon sequestration, conservation of water resources, conservation of biodiversity, recreational activities, climate regulation, retention of sediments, pollinators, and plague enemies, etc.

Fragment: Remainder of a natural ecosystem isolated due to natural or human barriers.

Genetically Modified Organisms: Biological organisms which have been induced by various means to go through genetic structural changes which would not occur naturally or spontaneously.

High Conservation Value Forests: High conservation value forests are the ones which possesses the following characteristics: (a) Forest areas containing globally, regionally or naturally significant concentrations of a 1) biodiversity values (e.g. endemism, endangered species, refugia); and/or a 2) large landscape level forests contained within or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance; (b) Forest areas which are in or contain rare or threatened ecosystems; (c) Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control); (d) Forest areas fundamental to meeting the basic needs of local communities (e.g. subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, economic or religious significance identified in cooperation with such local communities).

Hydrological Basin: Total drainage area made up by smaller watersheds that feed a certain network of rivers and its branches.

Indigenous lands and territories: Lands traditionally occupied and permanently inhabited by indigenous peoples or used for their productive activities and indispensable for the preservation of the environmental resources necessary for their well-being and physical and cultural reproduction, in accordance their customs and traditions. Indigenous People are considered the collectivities, which are distinct from the national society by recognition of their historic relation to Amerindian antecessors before the European colonization and also including certain specific African originated population, which fled away after the Slavery Freedom Law in Brazil was decreed, but still live together in very remote areas known as Quilombos. The people from these very close populations are known as Quilombolas. For the purpose of this document (Standard's), to describe a more specific social relation, those aforementioned African originated populations and the native Indian populations may be inserted or are adjacent to the forest management unit (FMU) in analyses into the Certification process, and therefore the term Indigenous People is used in a broader meaning covering those populations and the native Indian settlements, which have cultivated specific and ancestral traditions which should be respected and preserved.

Invasive Plants: Plants capable of spontaneously colonize new environments through its own mechanisms of natural regeneration.

Landscape: Portion of territory defined by legal or geomorphologic elements. It may include one or more watersheds, or parts of watersheds. It includes the physical, biological and anthropic components contained in a given area.

Legal Reserve Area: Area located inside a property or rural tenure land dedicated to permanent preservation, destined to the sustainable use of its natural resources, conservation and rehabilitation of

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ecological processes, conservation of biodiversity and shelter and protection of native fauna and flora except the APP (Permanent Preservation Area) area.

Local Community: human groups living in or adjacent to the forest management unit area, which may or may not include traditional communities (see traditional peoples).

Local Laws: includes all legal norms or legal rules given by government organisms whose jurisdiction are less than those at the national level, such as Agencies, Departmental, Municipal, State and other norms.

Local Processing: The first transformation of forestry raw materials, which occurs on site where the timber is felled within the forest management unit.

Long Term: the timetable or scale of the forest owner (or forest tenure) or manager according to the objectives of the management plan, the rate of harvesting, and the commitment to maintain continuous forest coverage. The length of time involved will vary according to the context and ecological conditions, and will depend on how long it takes a given ecosystem to recover its natural structure and composition after harvesting or disturbance, to produce mature or primary conditions.

Management Unit Integrity: the composition, dynamics, functions and structural attributes of a natural ecosystem.

Micro Watershed: total water drained area that feeds a certain river and or its branches.

Mosaic: in the forest plantation system is a set of sub areas (known as blocks patches or plots) in a given forest management unit and within the landscape which has as much diversity as the natural forest - composite by age, rotation, geographic location, species, sorts, clones, genes or stages of development and/or forest management.

Native Forest: Forest areas where great part of the main physical and biological characteristics and key elements of the original ecosystem such as complexity, structure and diversity are present.

Native Species: specie that occurs naturally in a given region.

Natural Cycles: Nutrients and mineral cycles as a result of interactions between soils, water, plants and animals in a certain environment that affects the ecological productivity of a given site.

Natural Landscape: A geographical mosaic composed of interacting ecosystems resulting from the influence of geological, topographical, soil, biotic, climatic and human interactions in a given area.

Non-Timber Forest Products: All plant and animal products from within the forest with the exception of wood.

Land Tenure: Socially defined agreements made up by individuals or groups and recognized by legal statutes, or by customs, relative to the “rights and obligations” related to the property, occupation, access and or use of a unit of private property or its associated resources (i.e. individual trees, plant species, water resources, mineral resources, etc.).

Permanent Preservation Area- APP: Protected area of land with or without native vegetation destined to

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be a preserve for water streams, the landscape, geological stability, biodiversity, natural occurrences of fauna and flora, the soil and to assure the well being of human populations.

Plagues: Living organisms (insects) fungus, bacteria, and virus) that utilize plants as host or as food purposes on plants and alter their normal growth and development patterns to a level which causes economic damages to forest plantations.

Plot/Block or Patch: Small continuous division of the Forest Management Unit, used for planning the forest operations.

Principle: An essential rule or element, in FSC's case, of forest stewardship.

Rare Species: Any species with small world populations which at present time do not fall into the "endangered" or "vulnerable" categories, but which are at risk. In general these are species located in restricted habitats and geographical areas or in larger areas but with small populations.

Regeneration: Process through which an ecosystem is managed with the objective of maintaining forest production capacity and the ecological processes, which maintain it.

Rehabilitation: Recuperation, Restoration.

Rotation Harvesting: The period of time between harvesting all or part of the forest plantation, in a particular area, and the next harvesting period in the same area according to the area's forest management plan, considering the intention of the forest plantation.

RPPN (NHPR-Natural Heritage Private Reserve): Category of forest conservation unit where the owner does not loose the property right over the conservation area. The permanent conservation of such area is ensured through the payment of property registration in the Land Registers Office, approved by the legal environment Authority.

Social and Environmental Impacts: Any modification, whether or not beneficial, derived from the forest management unit's activities, products or services.

Succession: Progressive changes in species composition and forest community structure caused by natural processes (non-human) overtime.

Silviculture: A set of procedures for maintenance of cultivation of a forest for different uses.

Traditional Community/People: A human group distinct from national societies due to its social, cultural and economic conditions organized totally or partially according to its own customs or traditions, or by a special legislation and which, no matter the legal status, conserves its own social, economic and cultural institutions or part of them. In this document, the term traditional communities are used to describe a more specific social relationship adjacent to the forest management unit.

Traditional Knowledge: All individual or collective knowledge, innovations and practices, of indigenous or traditional peoples, with real or potential value, whether protected or not by intellectual property laws.

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Use Rights (or Rights of way): Rights for the use of forest resources that can be defined by local customs, mutual agreements or prescribed by other entities with holding rights. These rights may restrict the use of particular resources to specific levels of consumption or specific harvesting techniques.

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DEFINITIONS USED IN THIS DOCUMENT:

- 1 – The term MUST implies obligation.
- 2 - The Principles and Criteria here defined are applicable for all the areas defined as FOREST MANAGEMENT UNITS taking into consideration the peculiarities, scale of the enterprise, and the intensity of harvest for each one.
- 3- The general term used in this document to refer to the areas where the Principles, Criteria and Indicators are applicable is the FOREST MANAGEMENT UNIT.
- 4 – In this document, FOREST WORKER refers to DIRECTLY-HIRED WORKERS and to Third party CONTRACTED LABOR.
- 5 – As a general rule, in the case of Community forest management, the peculiarities and the scale of the enterprise should be taken into account.

Certification Standards of the
FSC- Forest Stewardship Council - for Management Plantations in Brazil

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.

P1.c1 Forest management shall respect all national and local laws and administrative requirements.

P1.c1.il. The forestry operation demonstrates knowledge of laws pertinent to activities carried out in the forest management unit.

P1.c1.i2. The forestry operation demonstrates registries of compliance with relevant federal and regional/state/local laws and regulations.

P1.c1.i3. The forestry operation complies with the Forest Code, especially in reference to Areas of Permanent Preservation and the annotation on legal reserves.

P1.c1.i4. The forestry operation has proof of procedures taken or to be implemented, as well as their dates of execution, in case of pending legal or administrative actions related to forestry, environmental, labor, and tax legislation.

P1.c2. All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.

P1.c2.i1. The forestry operation has proof that it is up-to-date with all of its realized or scheduled payments related to salaries, taxes, fees, royalties, and other debts.

P1.c2.i2. Where there are disputes with respect to payments, the forestry operation has a plan to discharge the debts, made in agreement with the lender or institution.

P1.c2.i3. In case of exemptions, reductions or other agreements related to taxes, these are registered and have legal validity.

P1.c3. In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.

P1.c3.i1. The forestry operation complies with the intent of the applicable international treaties and conventions, including CITES, ITTA, CDB, and ILO (29, 87, 98, 100, 105, 111, 138, 182 and other associated conventions).

P1.c3.i2. The forestry operation must be aware of and understand the legal and administrative obligations with respect to international agreements.

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Verifiers:

- *Large forestry operations have a compendium of relevant international agreements that includes an explanation of how said agreements are respected in the management.*
- *Only applicable to SLIMFs (the previous verifier does not apply): Forest managers demonstrate a sensitivity to all binding international agreements and endeavor to respect their requirements, at a level of effort scaled to the size and intensity of the forest operation.*

P1.c4. 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.

P1.c4.i1. The forestry operation identifies the existence (or non-existence) of conflicts between laws, FSC P&C, and applicable international treaties and conventions.

P1.c4.i2. The forestry operation resolves identified conflicts through consultations with the certification body, FSC International, and FSC national initiative of Brazil.

Verifiers:

- *Identified conflicts and their resolution are included in the compendium made in P1.c3.i2.*
- *Only applicable to SLIMFs (the previous verifier does not apply): The forestry operation documents said conflicts and their resolution.*

P1.c5. The forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.

P1.c5.i1. The forestry operation take measures to protect and conserve the FMU against illegal harvest of timber or NTFPs, settlement, hunting and other unauthorized activities.

P1.c5.i2. The forest manager notifies the authorities of any infractions committed which could affect the integrity of the FMU.

P1.c5.i3. The forestry operation can demonstrate little or no evidence of occurrences of unauthorized activities in forest management areas.

Verifiers:

- *Large forestry operations incorporate a security program in their monitoring system with periodic formal inspections.*
- *Only applicable to SLIMFs (the previous verifier does not apply): Forest managers conduct inspections of the general state of the FMU during field visits or harvest operations.*

P1.c6. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.

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P1.c6.i1. The forestry operation demonstrates clear support of the FSC P&C; large forestry operations have written documents that declare their adherence and their intention to protect and manage the integrity of the FMU in the long-term, in accordance to the management plan.¹

P1.c6.i2. The forestry operation does not implement activities that conflict with the FSC P&C in forested areas outside the scope of the certificate.

P1.c6.i3. The forestry operation shall make available information on all of the the forested areas over which it has some grade of management responsibility (per FSC policies, e.g., “partial certification” and others).

PRINCIPLE #2: TENURE AND USE RIGHTS AND RESPONSIBILITIES

Long-term tenure and rights of the use to the land and forest resources shall be clearly defined documented and legally established.

P2.c1. Clear evidence of long-term forest use rights to the land (e.g. land title, customary rights, or lease agreements) shall be demonstrated.

P2.c1.i1. The forest managers/owners possess authentic, written documentation of legal and customary use rights to the defined forest area undergoing the certification evaluation.

P2.c1.i2. Whenever pending administrative or judicial matters exist and the forest managers can prove they have acted in an objective and agile manner to resolve those pending issues, and provide a list of those matters, the actions taken, those actions to be taken, and the time frame for their resolution.

P2.c1.i3. In cases of expansion of the certified forested area, the forest operation possesses documents and records which prove the rights to land tenure and / or use of newly acquired property.

P2.c2. 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.

P2.c2.i1. All legal or customary rights to use of the forest resource by local communities shall be clearly documented.

P2.c2.i2. The forestry operation provides evidence that local communities and affected parties give their free and informed consent for management activities that affect they local use rights.

P2.c2.i3. The forestry operation has maps, drawings or written documents which identify ownership or recognized customary uses of the land..

¹ The requirements of long term compliance with FSC are located in Annex 2

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P2.c3. 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.

P2.c3.i1. The forestry operation has a consistent, formal dispute process for the resolution of conflicts that involves the third party in question.

P2.c3.i2. In case of existing conflicts, the forestry operation demonstrates achieved progress in their resolution. If warranted, the agreements, adjustments and contracts made between the parties shall be respected.

P2.c3.i3. In case of administrative or legal dispute in FMU's, the agreements, contracts, and recognized modifications thereof between the involved parties are observed.

P2.c3.i4. The forestry operation shall not be involved in disputes of substantial magnitude in candidate forest areas that involve a significant number of parties. In such case, the area under litigation shall not be considered part of the FMU.

PRINCIPLE #3: INDIGENOUS PEOPLES' RIGHTS²

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

P3.c1. Indigenous people shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.

P3.c1.i1. The forestry operation identifies indigenous peoples and traditional communities with traditional/customary rights over forest resources (timber and non-timber) formally recognized in written agreements.

P3.c1.i2. The forestry operation has maps, drawings or other written documents which identify the indigenous or traditional community properties and / or the rights and customary use of the lands internal to or adjacent to the forest management unit.

P3.c1.i3. Forest operations shall begin only when disputes are resolved or after all reasonable means are taken to resolve such disputes.

P3.c1.i4. The forestry operation honors the agreements with indigenous groups and traditional communities.

P3.c2. Forest management shall not threaten or diminish, either directly or indirectly, the

² For this document **Indigenous People** means Indigenous people and also Traditional Communities (see the Glossary).

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resources or tenure rights of indigenous peoples.

P3.c2.i1. The management plan considers long-term activities and guarantees the maintenance of resources and land tenure, including economic, environmental, and social sustainability of the indigenous and/or traditional community.

P3.c2.i2. Agreement and negotiations shall be documented and have the participation of representatives of the indigenous and/or traditional community.

P3.c2.i3. The forestry operation shall take measures necessary to prevent, control and mitigate forestry management activities in order to guarantee that it does not harm the indigenous and/or traditional community.

P3.c3. 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.

P3.c3.i1. The forestry operation establishes policies and procedures involving indigenous peoples, or specialists designated by them, to identify special sites.

P3.c3.i2. Locations of special cultural, ecological, economic or religious significance shall be documented in operational plans or management plans, identified on maps or drawings, and protected during forest operations.

P3.c3.i3. The forestry operations conserves the confidentiality of sites of special significance, unless it receives documented permission from the indigenous and/or traditional community or their designated representatives.

P3.c4. 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.

P3.c4.i1. There shall be formal, documented agreements when there is use of traditional knowledge of indigenous and/or traditional communities for commercial purposes by the forestry operation.

P3.c4.i2. Systems for compensation for the use of traditional knowledge shall be established before the initiation of forest operations that affect the interests of indigenous and/or traditional communities.

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.

P4.c1. The communities within, or adjacent to, the forest management area should be given

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opportunities for employment, training, and other services.

P4.c1.i1. Employment selection records indicate that:

- i) Evidence that local labor force was given the chance to compete for the jobs which became available;
- ii) There is no evidence of any type of discrimination.

P4.c1.i2. The evidence of opportunities for access to better education are promotions, in partnership with the public sector and NGOs.

P4.c2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.

P4.c.2A. All employees used in the forest management area must have given access to health care, in conformance with existing legislation.

P4.c2A.i1. Evidence of existence that there are programs of medical health care for employees

P4.c2A.i2. Evidence of the existence of proofs of pre-employment medical examinations, regular examinations and outgoing medical examinations appropriate for each work function.

P4.c2A.i3. Evidence that the forest manager collaborates in the advertising of public health campaigns.

P4.c2A.i4. The conditions of housing and / or of the working camps for the workers in the forest management unit are appropriate.

P4.c2A.i5. A health care professional is present or available accordingly to the existing legislation.

P4.c2A.i6. First aid equipment / medicine is available at the workplace.

P4.c2B. Adequate sanitary and environmental conditions must be available for the workers for the carrying out of their functions.

P4.c2B.i1. Food and water of adequate quality and quantity are available for the employees.

P4.c2B.i2. The sanitary and environmental conditions of the workplace are monitored.

P4.c2C. Working conditions must be safe.

P4c2C.i1. There is a workplace safety plan, that includes at a minimum, monitoring of work accidents and incidents, and a timeline of activities done by the manager of the work safety department.

P4.c2C.i2 Machinery in use and other equipment has adequate safety protection.

P4.c2C.i3. Existence of an environmental risk prevention program.

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P4.c2.Ci4. Workers utilize, without cost to them, individual safety and protective equipment's required for the operations they carried out.

P4.c2C.i5. The individual use of safety equipments is monitored, guaranteed and mandatory.

P4.c2C.i6. Workplace accidents are recorded.

P4.c2C.i7. Existence of records of frequency and seriously of the accidents.

P4.c2C.i8. There is adequate communication equipment available at the workplace, considering the scale of the enterprise.

P4.c2C.i9. An Internal Accident Prevention Commission (CIPA) exists, when legally required. ³

P4.c2C.i10. The forest management unit has a safety specialist employee under contract whenever required by law.

P4.c2C.i11. Inclusive procedures exist that guarantee safe conditions for those passersby who will eventually go through the management area.

P4.c2D. Workers must receive training for the safe conduct of their specificity activities accordingly to the existing legislation.

P4.c2D.i1. There is a training safety program available

P4.c2D.i2. There is a regularly conducted training program for first aid to all supervisors.

P4.c2E. The transportation of workers must be carried out in appropriated vehicles and in appropriate manners and conditions that insure and guarantee the quality and safety of such transport, obeying the current legislation or specific agreements between the parties involved.

P4.c2E.i1. Vehicles are used must conform to the requirements of existing legislation and must be well maintained and cleaned.

P4.c2.E2. Procedures exist for monitoring vehicle traffic conditions.

P4.c2.F. The existence of signs/ banners and other eventual warnings must be available and in use to alert visitors, transports vehicles, machine operators and any others in the surroundings about the safety risks.

P4.c2F.i1. Signs and various warnings in existence on site.

P4.c2F.i2. Existence of information and procedures for identifying areas of potential risk.

³ CIPA means Internal Commission to prevent Accidents required by Brazilian law whenever there are 100 or more employees in a given Company.

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P4.c3. 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).⁴

P4.c3.i1.Evidence of effective compliance with union legislation.

P4.c3.i2.Agreements and documented negotiations with labor unions, or other formal representation legally recognized by the workers, are in existence.

P4.c4. 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.

P4.c4.i1.Evidence exists that the result of social impact studies are taken into consideration in management.

P4.c4.i2 Forest manager will provide communication programs and channels for dialogue, which allow the flow of concerns and communications from the community, people or groups of people directly affected to the forest management operations.

P4.c4.i3.There are programs of partnership with local government and / or entities, which do represent the local community, as well as projects of social interest in collaboration with research institutions and universities.

P4.c5. 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.

P4.c5.i1. Formal procedures exist which identify concrete cases of negative impact and provide satisfactory compensation.

PRINCIPLE # 5: BENEFITS FROM THE FOREST PLANTED MAN MADE FOREST

Forest management operations shall encourage the efficient use of the planted man made forest multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

P5.c1. 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.

5.1.1) The forest operation has sufficient financial capital and human resources to implement the management plan, over the long run.

5.1.2) The forest operation considers and dedicates adequate financial resources to cover the full

⁴ FSC guidelines for ILO conventions are respected

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costs of forest management, including environmental and social costs as well as operations necessary for the maintenance of certification.⁵

5.1.3) The forest management operation makes adequate investments of capital, machinery and human resources so as to maintain or restore the productive capacity, ecological integrity and socio-economic profile of the defined forest area.

5.1.4) Commercial (income generating) activities are financially viable, given short and medium-term market conditions and costs.

P5.c2. Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.

P5.c2.i1. There is efforts to assure the possible multiple uses of the timber and the forest plantation.

P5.c2.i2. There are actions to stimulate the processing of products in the local area or region.

P5.c2.i3. Existence of the possibility for potential use of timber and non-timber products of the FMU.

P5.c3. Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.

P5.c3.i1. Practices are employed which optimize use of the forest resources and that minimize harm to the residual stand.

P5.c3.i2. Suitable practices are employed for the removal of slash and on-site processing.

P5.c4. Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.

P5.c4.i1. Potential products and market opportunities are identified when applicable.

P5.c4.i2. Local initiatives for the use, processing and commercialization of forest products are stimulated.

P5.c4.i3. Goods and services of local suppliers are used.

P5.c5. Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.

5.5.1) The management plan addresses the full range of forest services associated with the defined forest area including: municipal watersheds, commercial and artesanal fisheries (or the supply of water to downstream fisheries), visual quality, contributions to regional biodiversity, recreation and tourism.

⁵ E.g., Management plans, road maintenance, silvicultural treatments, forest health, monitoring programs, etc.

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5.5.2) Timber management activities are designed and implemented, spatially and temporally, with due consideration to the impacts on other forest services.

5.5.3) Forest managers demonstrate an awareness of and sensitivity to non-timber forest services, many of which may not generate income.

5.5.4) Forest managers engage in regular dialogue with stakeholders and advocates of forest services that are subject to impact from forest operations.

P5.c6. The rate of harvest of forest products shall not exceed levels that can be permanently sustained.

P5.c6.i1. The forest operation maintains a forest inventory system appropriate to the scale of the operation.

P5.c6.i2. Appropriate to the scale of operations and the frequency of commercial activity, estimates of total periodic timber growth on the defined forest area—by species categories—are generated through a combination of empirical data and published literature; growth estimates are conservative.

P5.c6.i3. Harvest levels do not exceed rates of growth over the long-term.

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 doing so, maintain the ecological functions and the integrity of the forest.

P6.c1. 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.

P6.c1.i1. Evaluations contemplate studies of fauna flora, habitats, water resources, and sites of historical, archaeological, cultural, or speleological and scenic values.

P6.c1.i2. There are maps or drawings available of the areas or sites identified in the studies.

P6.c1.i3. There are records of the periods in which the studies were carried out.

P6.c1.i4. The management and operational plans will take into consideration the results of those studies.

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P6.c2. 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.

P6.c2.i1. Habitats and natural protected areas are mapped.

P6.c2.i2. Endemic, rare or threatened species that occur in the forest management unit or neighboring areas is listed.

P6.c2.i3. Reserves for refuge, feeding and reproduction of rare or threatened species and/or sites for nesting colonies are established and identified.

P6.c2.i4. Complementary actions are taken for the maintenance or the promotion of the diversity of the native species.

P6.c2.i5. The layout of the managed area is favorable to the movement of fauna and flora.

P6.c2.i6. There is an efficient system of controls that does not allow forest operations in areas that have been identified and established as areas of rest, reproduction, and corridors for wild animals.

P6.c2.i7. There is clear evidence of controls of hunting, fishing, timber harvesting and of other forest products.

P6.c2.i8. The workers and the surrounding communities are informed in relation to the conservation of biodiversity.

P6.c2.i9. Agreements exist with public or private agencies for inspection and / or research on the protection of these protected areas.

P6.c3. 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.

P6.c3.i1. Large fragments of natural areas exist, they are compared with the surrounding areas and their integrity is verified.

P6.c4. 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.

P6.c4.i1. The forest operation protects representative sample ecosystems in their natural state, based on the identification of ecologically important areas and/or consultation with stakeholders.

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Verifiers:

- *Areas destined for conservation and other high conservation value areas, legal reserves, and areas of permanent preservation represent naturally occurring ecosystems of the region.*
- *Native ecosystems present in the FMU are characterized and mapped in the management plan.*
- *Appropriate restoration, management, and protection activities are defined and documented in the management plan and implemented in the field.*
- *Existence of measures to prevent adverse effects to representative sample ecosystems in the management plan.*

P6.c4.i2. The forest operation incorporates the monitoring of representative sample ecosystems in its monitoring protocols.

Verifier:

- *Incorporation of representative sample ecosystems in the monitoring procedures defined in P8.c1.*

P6.c4.i3. Where deficiencies in representation exist within the landscape, forest managers take actions to make contributions to the regional network of representative ecosystems.

Verifiers:

- *The forest operation has documented evidence of consultation with stakeholders, such as managers of other regional protected areas.*
- *The forest operation incorporates representative sample ecosystems unique to its properties in the management and monitoring programs defined in P6.c4.i1 and P6.c4.2 or considers them for classification as HCVF.*

P6.c4.i4. Only applicable to SLIMFs (note: the previous indicators for P6.c4 do not apply): Existing representative sample ecosystems in the FMU are identified, documented, mapped, and protected during management operations.

P6.c5 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.

P6.c5.i1. In case of identification of possible impacts on forest operation or their infrastructure, which may cause mechanical disturbances there are means to avoid, mitigate and control them.

P6.c5.i2. Forest management take into account potential environmental impacts for the selection and use of equipment for specific forest operations.

P6.c6. 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 risks⁶.

⁶ In accordance with FSC policy.

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P6.c6.i1. There are records of all used chemical products or those currently in use, their respective application methods and volumes and their classification.

P6.c6.i2. The existence of procedures and practices for storage, transportation and use of the chemical products.

P6.c6.i3 The existence of a program of integrated management of forestry plagues and/ or diseases.

P6.c6.i4. The existence of a program of biological monitoring and controls

P6.c6.i5. Workers who may have contact with pesticides are given proper and previous training in procedures and the use of appropriate equipment, including storage, use and manipulation.

P6.c6.i6. Existence of a program for monitoring the health of workers exposed to pesticides.

P6.c6.i7. Existence of procedures for appropriate maintenance and storage of the used chemical application equipment.

P6.c6.i8.Existence of tests and experimentations are conducted often in partnership with other institutions, for the use of non-chemical weed control and plagues.

P6.C6.I9. There is evidence of the chemical pesticides banished by FSC are not used.

P6.c7. 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.

P6.c7.i1.Existence of a plan for the management of wastes, including identification, classification, definition, transportation and final disposal of generated wastes residues and their containers

P6.c7.i2. Appropriate procedures and infrastructure exists for the handling, treatment and final disposal of wastes.

P6.c7.i3. Emergency procedures exist for the case of any type of accident with chemical products.

P6.c8. 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.

P6.C8.I1. The FSC Guidelines, in accordance with not using of GMO's, are respected.

P6.c8.i2. The use of biological control agents is only employed in cases where it is demonstrably necessary, and only in compliance with procedures prescribed in laws and regulations. Use should be documented, monitored, minimized, and strictly controlled.

P6.c9. The use of exotic forest species shall be carefully controlled and actively monitored to

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avoid adverse ecological impacts.

P6.c9.i1. The forest operation selects species for commercial planting only if these species are adapted to the site (soils, topography, and climate) and the management objectives.

Verifier:

- *Existence of documented evidence based on peer-reviewed literature and field trials that justifies the viability of the selected species for commercial planting.*
- *Exotic species are used with precautions taken to avoid their adverse ecological impact (natural regeneration outside of planted areas, uncommon occurrences of mortality, disease, insect outbreaks and other adverse environmental impacts).*

P6.c9.i2. The forest operation prevents, controls, and monitors invasive, exotic species.

Verifiers:

- *Existence of a plan for the prevention, control and monitoring of invasive, exotic species.*
- *Implementation of control of invasive, exotic species inside and outside of commercial areas when these species interfere with the growth of commercial or native species.*

P6.c10. Forest conversion to plantations of 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.

P6.c10.i1. The forest conversion does not exceed 1% of the total area of the FMU.

P6.c10.i2. The conversion does not occur in high conservation value forests areas, nor in Areas of Permanent Preservation.

P6.c10.i3. It must be very clearly and technically justified that the conversion brings benefits for the conservation of the FMU.

P6.c11. Information of the use of pesticides must be furnished to those potentially affected, and specially to nearby agricultural producers in the region surrounding the forest management unit in order to inform them about the possible negative impacts on their people, water resources, fauna, native reserves, crops and animals.

P6.c11.i1. Information materials do exist and are divulged.

P6.c11.i2. There is evidence of the give-out and dissemination of appropriate information by management of the forest management unit.

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.

P7.c1. 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 system, 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.
- l) Description and justification of harvesting techniques and equipment to be used.

P7.c1.i1 There is a program for monitoring the social and environmental impacts of the presence of the forest management unit in the area.

P7.c1.i2 There is a plan for the highest possible or integral use of the forest resources under management

P7.c1.i3 There are technical specifications for the planning, construction and maintenance of the internal road network and for soil conservation of the forest management unit.

P7.c1. i4 There is a harvesting, transport and storage plan for the forest products.

P7.c1.i5 There is a prevention plan for the observation and control of forest fires, including fire tower(s) properly equipped including communication equipment, as well as a silvicultural plan (maintenance of corridors, fire lines or breaks, mowers, etc.) Determination of water capturing points, their indications and access points, quick and ready access to hand tools and other material and equipment, well trained crews and supervisors responsibilities clearly defined for fire fighting control and action.

P7.c1.i6. Description and justification of the harvesting techniques chosen and equipment to be used with objective to reduce the impacts of the harvesting activities.

P7.c1.i7. Maps or drawings (accordingly to the peculiarity, intensity and scale of the enterprise)

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of the forest zones describing the basis of the forest resources, including the protected areas, principal forestry types, topography, hydrology, previous existent infra structure, present use of the soils and neighboring areas.

P7.c1.i8. There is a description of the objectives of the management.

P7.c1.i9. Existence of plans for the identification and protection of rare species, endangered species, sites and reproduction areas of rare, threatened or endangered species, and fauna corridors.

P7.c2. The management plan shall be periodically revised to incorporate the results of monitoring and new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.

P7.c2.i1. There is defined procedures for revising the management plan.

P7.c2.i1.i2 There is previous versions of the management plan available, proving modifications, which have been implemented.

P7.c2.i3. There is knowledge by the planning and operations teams of the existing management plan and its modifications and changes

P7.c3. Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plan.

P7.c3.i1 Training programs and records must exist for all levels of the forest management unit, especially those for the chainsaw operators, personnel who apply chemicals like pesticides and fertilizers, and equipment operators, taking also into account the certification themes of the FSC and environmental education.

P7.c4. 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.

P7.c4.i1. The management plan summary is available for public consultation.

P7.c4.i2. Representative agents such as community leaders, labor unions, farmer's associations, and business leaders of the region are aware of the existence and the availability of the forest management plan's summary.

P7.c4.i3. Mechanisms are in place for eventual clarification of doubts about the forest 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, management activities and their social and environmental impacts.

P8.c1. The scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment should determine the frequency and intensity of monitoring. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.

P8.c1.i1 The monitoring information's are recorded, filed and available, and are used for revisions of the management plan.

P8.c2. 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.

P8.c2.i1. There are data tables or balance sheets that show yield and productivity of harvested forest products.

P8.c2.i2. There is a monitoring plan that shows the rates of forest growth, conditions of remaining native forests and undergrowth diversity of the forest plantations.

P8.c2.i3 There is a fragmentation level register and the connectivity between the components of natural ecosystems is protected.

P8.c2.i4. Existence of a register for observed changes in flora and fauna.

P8.c2.i5. There are registers of the fire frequency and the area affected in the FMU.

P8.c2.i6. Existence of evaluation of social and environmental impacts in the FMU in all phases of the operation.

P8.c2.i7. While respecting the confidentiality of information, there are systems for monitoring costs and productivity.

P8.c3. 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."

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P8.c3.i1. Forest managers receive training on FSC chain of custody procedures for Brazil.

P8.c3.i2. Written procedures for chain of custody exist to assure that logs sourced from the certified forest are considered certified.

P8.c4. The results of monitoring shall be incorporated into the implementation and revision of the management plan.

P8.c4.i1. There is record identifying changes in the management plan.

P8.c4.i2. Evidence exists, in the field, of changes made in forest operations procedures.

P8.c5. Respecting the confidentiality of information, the forest manager shall make public a summary report of the results of monitoring, including the factors listed in Criterion 8.2.

P8.c5.i1. A summary of monitoring results is maintained up-to-date and is made available to the public on request, either at no cost or at a nominal price.

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.

P9.c1. 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. ⁷

P9.c1.i1. The forest operation shall conduct an evaluation to identify HCVFs and HCVAs. Such evaluation shall include:

- Consultation of databases and maps of conservation areas;
- Interviews and/or consultation with environmental, social and anthropological specialists;
- List of threats to HCVFs/HCVAs;
- When there are existing threats to HCVFs/HCVAs, the forest operation identifies actions to deal with such threats.

P9.c1.i2. On large operations, the forest managers shall:

- Produce a written evaluation of HCVFs/HCVAs identifying them and the proposals to guarantee their protection;
- Conduct a reliable, technically qualified and independent review of the evaluation of HCVFs/HCVAs and the presented recommendations for the protection of their

⁷ P9.c1 is considered to be self-explanatory and does not require indicators for its evaluation in the field.

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attributes.

- Demonstrate the reliable actions are being taken to deal with HCVFs/HCVAs to protect them and/or reduce threats from management activities.

P9.c1.i3. Only applicable to SLIMFs (the previous indicators of P9.c1 do not apply): The forest operation shall conduct consultations with environmental, governmental or scientific stakeholders to determine if there are forested areas that should be considered as HCVF or HCVA. If there are HCVFs/HCVAs present, the forest operation shall take all of the reasonable measures to protect these values and/or reduce their threats.

P9.c2. The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.¹²

P9.c2.i1. The forest operation maintains and provides a list of pertinent stakeholders for HCVF/HCVA consultation to the certification body.

P9.c2.i2. Stakeholder consultation clearly describes the identified conservation attributes, as well as proposed strategies for their maintenance or reduction of threats.

Verifiers:

- *Stakeholder consultation indicates that the forestry operation considers and consistently protects the values of HCVF/HCVA.*
- *Large operations document HCVF/HCVA consultation strategies used with stakeholders, as well as the measures adopted to respond to such consultation.*

P9.c3. 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.

P9.c3.i1. If HCVFs ou HCVAs are present, the forest operation describes the measures taken for the maintenance and/or enhancement of their values in the management plan.

P9.c3.i2. The measures taken for the maintenance and/or enhancement of HCVFs/HCVAs are consistent with a precautionary approach.

P9.c3.i3. The measures to protect the values of HCVF/HCVA are described in the public summary of the forest operation's management plan.

P9.c4. Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes. 8

P9.c4.i1. The forest operation develops and incorporates measurable indicators in its monitoring system for HCVFs/HCVAs.

Verifiers:

⁸ P9.c4 is considered to be self-explanatory and does not require indicators for its evaluation in the field.

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- *The forest operation describes said indicators in the section on HCVFs/HCVAs of the management plan.*
- *The forest operation produces periodic monitoring results of HCVFs/HCVAs.*

P9.c4.i2. Annual monitoring of HCVFs/HCVAs occurs in accordance to the established procedures in the management plan, in a technically appropriate manner during the planned timeframe.

P9.c4.i3. The forest operation incorporates the results of monitoring in the modification of management and protection policies of HCVFs/HCVAs, as well as in the revision of the management plan.

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.

P10.c1. 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.

P10.c1.i1. The forest operation's management plan for the defined plantation forest area includes written objectives.

P10.c1.i2. The plantation forest objectives include express policies for natural forest conservation as well as restoration of degraded natural forest areas.

P10.c1.i3. Plantation forest managers demonstrate a systematic pattern of implementing the management plan.

P10.c2. 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.

P10.c2.i1. The planning and distribution of plantations and the maintenance of natural ecosystems consider the local watersheds, wetlands, and the native forest remaining contained in the FMU.

P10.c2.i2. Planning of the mosaic (i.e., age, structure and size of trees in management sub-units) of the forest plantation is considered.

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P10.c2.i3. The annual clear cutting harvest plan will take into consideration the sustainability of the watershed areas within the forest management unit.

P10.c2.i4. Dimension, percentage and representation of natural ecosystems in protected areas

P10.c2.i5. Landscape planning is considered in the context of micro-watershed hydrology.

P10.c2.i6. The planning of the new plantations will favor the connectivity possibilities between the eventually existing fragments of the natural ecosystems.

P10.c3. 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, variation number and genetic composition of species, age classes and structures.

P10.c3.i1. Clones from different provenances and / or diverse species are recommended when used.

P10.c3.i2. Existence of controls of percentages, extension, and location by species or genetic material, age class and silvicultural system.

P10.c4. The selection of tree 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.

P10.c4.i1. The forest operation selects species for commercial planting only if these species are adapted to the site (soils, topography, and climate) and the management objectives.

Verifiers:

- *Existence of documented evidence based on peer-reviewed literature and field trials that justifies the viability of the selected species for commercial planting.*
- *Exotic species are used with precautions taken to avoid their adverse ecological impact (natural regeneration outside of planted areas, uncommon occurrences of mortality, disease, insect outbreaks and other adverse environmental impacts).*

P10.c4.i2. The forest operation prevents, controls, and monitors invasive, exotic species.

Verifiers:

- *Existence of a plan for the prevention, control and monitoring of invasive, exotic species.*
- *Implementation of control of invasive, exotic species inside and outside of commercial areas when these species interfere with the growth of commercial or native species.*

P10.c4.i3. The forest operation preferably implements the recovery of degraded areas with native species from the region.

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P10.c5. 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.

P10.c5.i1. The forest operation protects representative sample ecosystems in their natural state, based on the identification of ecologically important areas and/or consultation with stakeholders.

Verifiers:

- *Areas destined for conservation and other high conservation value areas, legal reserves, and areas of permanent preservation represent naturally occurring ecosystems of the region.*
- *Native ecosystems present in the FMU are characterized and mapped in the management plan.*
- *Appropriate restoration, management, and protection activities are defined and documented in the management plan and implemented in the field.*
- *Existence of measures to prevent adverse effects to representative sample ecosystems in the management plan.*

P10.c5.i2. The forest operation incorporates the monitoring of representative sample ecosystems in its monitoring protocols.

Verifier:

- *Incorporation of representative sample ecosystems in the monitoring procedures defined in P8.c1.*

P10.c5.i3. The percentage of the plantation forest operation that is devoted to natural forest cover exceeds regional plantation forestry norms.

P10.c5.i4. Only applicable to SLIMFs (note: the above indicators for P10.c5 are not applicable to SLIMFs): The management and layout of plantations should enhance ecological values, especially near conservation areas.

P10.c6. 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.

P10.c6.i1. Existence of a strategy for the protection of water resources, including erosion control (from the impact of soil preparation, planting, roads and harvesting), pollution control (from pesticides, fertilizers, machine oil, etc.) and monitoring of water resources.

P10.c6.i2. Existence of techniques adopted which help to conserve the soil.

P10.c6.i3. Maintenance or rehabilitation of the protective strips for the watersheds and / or water resources.

P10.c6.i4. Procedure existence for the preparation of the area, which reduces the use of fire as a management tool, and, whenever utilized, is accompanied by measures, which minimize possible adverse side effects.

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P10.c6.i5. Silvicultural techniques compatible with the local conditions for the forest management unit are in use.

P10.c7. 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.

P10.c7.i1. The quality of the wastewater (runoff) from the nursery is monitored.

P10.c7.i2. The occurrence of forest pests and diseases is monitored.

P10.c7.i3. Integrated methods for the control of pests and disease are implemented.

P10.c7.i4. The application and dosages of pesticides are justified.

P10.c7.i5. The use of pesticides is optimized by

- d) Reduction in quantity;
- ii) Substitution by products, which are more environmentally friendly and less aggressive.

P10.c8. 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.

P10.c8.i1. There are criteria for the acquisition of land, which respect the local people 's rights to property, either of use of possession and the way to access.

P10.C9. 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.

P10.c9.i1. The forestry operation possess documents with sufficient detail so that the the SCS auditing team can determine if the conversion of native forests and/or high conservation value ecosystems to plantations has occurred since November of 1994. (Note: for conversions after 1994 see criterion P6.c10.).

P10.c9.i2. The forestry operation can demonstrate, with clear, documented, and authenticated

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evidence, that it was not responsible for such conversion.

ANNEX 1. National Forest Laws and Administrative Requirements

Federal requirements

- Brazilian Forestry Code (Law 4771/65, modified by Law 7803/89)
- Interim Measure nº 2.166-67, de 24/08/2001, that changes the law 4.771/65 (Forest Code)
- Conservation Units National System Law (Law 9.985/2000)

All work-related tax payments in the federal sphere are mandatory, including:

- Social security payments
- Government Severance Indemnity Fund for Employees (FGTS) payments
- Labor union fees (Union Dues)

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ANNEX 2. List of Multilateral Environmental Agreements and ILO Conventions Ratified by Brazil

Multilateral Environmental Agreements:

- Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES) – ratified 1975
- Convention on Biological Diversity – ratified 1994
- International Tropical Timber Agreement – promulgated 1998
- United Nations Framework Convention on Climate Change – ratified 1994; Kyoto Protocol – ratified 2002

Ratified ILO Conventions:

Convention	Country	Ratification date	Status
C6 Night Work of Young Persons (Industry) Convention, 1919	Brazil	26:04:1934	ratified
C11 Right of Association (Agriculture) Convention, 1921	Brazil	25:04:1957	ratified
C12 Workmen's Compensation (Agriculture) Convention, 1921	Brazil	25:04:1957	ratified
C14 Weekly Rest (Industry) Convention, 1921	Brazil	25:04:1957	ratified
C16 Medical Examination of Young Persons (Sea) Convention, 1921	Brazil	08:06:1936	ratified
C19 Equality of Treatment (Accident Compensation) Convention, 1925	Brazil	25:04:1957	ratified
C21 Inspection of Emigrants Convention, 1926	Brazil	18:06:1965	ratified
C22 Seamen's Articles of Agreement Convention, 1926	Brazil	18:06:1965	ratified
C26 Minimum Wage-Fixing Machinery Convention, 1928	Brazil	25:04:1957	ratified
C29 Forced Labour Convention, 1930	Brazil	25:04:1957	ratified
C42 Workmen's Compensation (Occupational Diseases) Convention (Revised), 1934	Brazil	08:06:1936	ratified
C45 Underground Work (Women) Convention, 1935	Brazil	22:09:1938	ratified
C53 Officers' Competency Certificates Convention, 1936	Brazil	12:10:1938	ratified
C80 Final Articles Revision Convention, 1946	Brazil	13:04:1948	ratified
C81 Labour Inspection Convention, 1947	Brazil	11:10:1989	ratified
C88 Employment Service Convention, 1948	Brazil	25:04:1957	ratified
C89 Night Work (Women) Convention (Revised), 1948	Brazil	25:04:1957	ratified

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C92 Accommodation of Crews Convention (Revised), 1949	Brazil	08:06:1954	ratified
C93 Wages, Hours of Work and Manning (Sea) Convention (Revised), 1949	Brazil	18:06:1965	ratified
C94 Labour Clauses (Public Contracts) Convention, 1949	Brazil	18:06:1965	ratified
C95 Protection of Wages Convention, 1949	Brazil	25:04:1957	ratified
C97 Migration for Employment Convention (Revised), 1949	Brazil	18:06:1965	ratified
C98 Right to Organise and Collective Bargaining Convention, 1949	Brazil	18:11:1952	ratified
C99 Minimum Wage Fixing Machinery (Agriculture) Convention, 1951	Brazil	25:04:1957	ratified
C100 Equal Remuneration Convention, 1951	Brazil	25:04:1957	ratified
C103 Maternity Protection Convention (Revised), 1952	Brazil	18:06:1965	ratified
C104 Abolition of Penal Sanctions (Indigenous Workers) Convention, 1955	Brazil	18:06:1965	ratified
C105 Abolition of Forced Labour Convention, 1957	Brazil	18:06:1965	ratified
C106 Weekly Rest (Commerce and Offices) Convention, 1957	Brazil	18:06:1965	ratified
C108 Seafarers' Identity Documents Convention, 1958	Brazil	05:11:1963	ratified
C109 Wages, Hours of Work and Manning (Sea) Convention (Revised), 1958	Brazil	30:11:1966	ratified
C111 Discrimination (Employment and Occupation) Convention, 1958	Brazil	26:11:1965	ratified
C113 Medical Examination (Fishermen) Convention, 1959	Brazil	01:03:1965	ratified
C115 Radiation Protection Convention, 1960	Brazil	05:09:1966	ratified
C116 Final Articles Revision Convention, 1961	Brazil	05:09:1966	ratified
C117 Social Policy (Basic Aims and Standards) Convention, 1962	Brazil	24:03:1969	ratified
C118 Equality of Treatment (Social Security) Convention, 1962	Brazil	24:03:1969	ratified
C119 Guarding of Machinery Convention, 1963	Brazil	16:04:1992	ratified
C120 Hygiene (Commerce and Offices) Convention, 1964	Brazil	24:03:1969	ratified
C122 Employment Policy Convention, 1964	Brazil	24:03:1969	ratified
C124 Medical Examination of Young Persons (Underground Work) Convention, 1965	Brazil	21:08:1970	ratified

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C125 Fishermen's Competency Certificates Convention, 1966	Brazil	21:08:1970	ratified
C126 Accommodation of Crews (Fishermen) Convention, 1966	Brazil	12:04:1994	ratified
C127 Maximum Weight Convention, 1967	Brazil	21:08:1970	ratified
C131 Minimum Wage Fixing Convention, 1970	Brazil	04:05:1983	ratified
C132 Holidays with Pay Convention (Revised), 1970	Brazil	23:09:1998	ratified
C133 Accommodation of Crews (Supplementary Provisions) Convention, 1970	Brazil	16:04:1992	ratified
C134 Prevention of Accidents (Seafarers) Convention, 1970	Brazil	25:07:1996	ratified
C135 Workers' Representatives Convention, 1971	Brazil	18:05:1990	ratified
C136 Benzene Convention, 1971	Brazil	24:03:1993	ratified
C137 Dock Work Convention, 1973	Brazil	12:08:1994	ratified
C138 Minimum Age Convention, 1973	Brazil	28:06:2001	ratified
C139 Occupational Cancer Convention, 1974	Brazil	27:06:1990	ratified
C140 Paid Educational Leave Convention, 1974	Brazil	16:04:1992	ratified
C141 Rural Workers' Organisations Convention, 1975	Brazil	27:09:1994	ratified
C142 Human Resources Development Convention, 1975	Brazil	24:11:1981	ratified
C144 Tripartite Consultation (International Labour Standards) Convention, 1976	Brazil	27:09:1994	ratified
C145 Continuity of Employment (Seafarers) Convention, 1976	Brazil	18:05:1990	ratified
C146 Seafarers' Annual Leave with Pay Convention, 1976	Brazil	24:09:1998	ratified
C147 Merchant Shipping (Minimum Standards) Convention, 1976	Brazil	17:01:1991	ratified
C148 Working Environment (Air Pollution, Noise and Vibration) Convention, 1977	Brazil	14:01:1982	ratified
C152 Occupational Safety and Health (Dock Work) Convention, 1979	Brazil	18:05:1990	ratified
C154 Collective Bargaining Convention, 1981	Brazil	10:07:1992	ratified
C155 Occupational Safety and Health Convention, 1981	Brazil	18:05:1992	ratified
C159 Vocational Rehabilitation and Employment (Disabled Persons) Convention, 1983	Brazil	18:05:1990	ratified
C160 Labour Statistics Convention, 1985	Brazil	02:07:1990	ratified

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C161 Occupational Health Services Convention, 1985	Brazil	18:05:1990	ratified
C162 Asbestos Convention, 1986	Brazil	18:05:1990	ratified
C163 Seafarers' Welfare Convention, 1987	Brazil	04:03:1997	ratified
C164 Health Protection and Medical Care (Seafarers) Convention, 1987	Brazil	04:03:1997	ratified
C166 Repatriation of Seafarers Convention (Revised), 1987	Brazil	04:03:1997	ratified
C167 Safety and Health in Construction Convention, 1988	Brazil	19:05:2006	ratified
C168 Employment Promotion and Protection against Unemployment Convention, 1988	Brazil	24:03:1993	ratified
C169 Indigenous and Tribal Peoples Convention, 1989	Brazil	25:07:2002	ratified
C170 Chemicals Convention, 1990	Brazil	23:12:1996	ratified
C171 Night Work Convention, 1990	Brazil	18:12:2002	ratified
C174 Prevention of Major Industrial Accidents Convention, 1993	Brazil	02:08:2001	ratified
C176 Safety and Health in Mines Convention, 1995	Brazil	18:05:2006	ratified
C178 Labour Inspection (Seafarers) Convention, 1996	Brazil	21:12:2007	ratified
C182 Worst Forms of Child Labour Convention, 1999	Brazil	02:02:2000	ratified

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For a database of endangered species in Brazil, please visit the CITES species database on the internet:

<http://www.cites.org/eng/resources/species.html>