FSC Nicaragua National Forest Stewardship Standards for Small and Low Intensity Managed Forest (SLIMF)



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FOREST STEWARDSHIP STANDARD

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The Forest Stewardship Council (FSC) is an independent, not for profit, non-government organization established to support environmentally appropriate, socially beneficial, and economically viable management of the world's forests.

FSC's vision is where the world's forests meet the social, ecological, and economic rights and needs of the present generation without compromising those of future generations

Developed under the direction of:
Consejo Nicaragüense de Certificación Forestal Voluntaria
CONICEFV

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Initials and Acronyms

CEFPAC Project: Forest Certification for Small and Medium-Size Agroforest Producers and Indigenous Peoples in Central America

CIDT Intersectorial Commission on Territorial Boundaries
(Initials in Spanish)

CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

CONICEFV Nicaraguan Council on Voluntary Forest Certification
(Initials in Spanish)

EIA Environmental Impact Assessment

FSC Forest Stewardship Council

AMI Annual Mean Increment

INAFOR National Forest Institute
(Initials in Spanish)

MAGFOR Ministry of Agriculture and Forestry
(Initials in Spanish)

NTON Technical Norm for Sustainable Management of Natural Hardwood and
(Initials in Spanish) Pine Forests

AOP Annual Operating Plan

NTFP Non-Timber Forest Products

P&C Principles and Criteria

SERENA Technical Secretariat for Natural Resources
(Initials in Spanish)

SLIMF Small and Low Intensity Managed Forest

FMU Forest Management Unit

UAM Municipal Environmental Unit
(Initials in Spanish)

Introduction

The standard for small and low intensity managed forests is an expression of the consensus of small and medium-size agroforest producers, who represent an important segment of this production sector. It is an indication of voluntary, creative participation in the search for responses to contribute to local development of responsible management of natural forests in Nicaragua.

A process has been generated with the participation of Nicaraguan civil society that reflects the will to contribute to promoting responsible forest management in this country.

Forest certification is a transparent, voluntary process, with independent assessment based on market forces and promotion of responsible use, through which recognition is given to good forest management and forest products that originate from well-managed forests.

Voluntary forest certification is understood to be good forest management that is:

Environmentally appropriate, when it preserves biological diversity, its associated values and resources, fragile ecosystems and the landscape, and maintains and/or enhances the forest's ecological functions and integrity.

Socially beneficial, when it ensures the existence, application and respect for the legal and/or customary rights of indigenous peoples and ethnic communities related to tenure, use and access to their lands, territories and resources, as well as respect for workers' rights. All of this within the framework of promoting human development and gender equality.

Economically viable, when forest operations can be sustained over time, generating economic benefits for forest managers, proprietors of enterprises, and forest owners, within the legal framework related to fiscal and other payments established in the laws of the Government of Nicaragua, without detriment to forest productive capacity and ecological functions.

Adherence to the FSC Scheme, Principles and Criteria

The proposed standards have as their platform the FSC (Forest Stewardship Council) Principles and Criteria, and their objective is to promote responsible forest management

The proposed standards are a joint effort of stakeholders linked to the forest sector in Nicaragua. That is to say, the indicators and verifiers are principally a contribution by agroforest producers, in the context of the NEPENTHES/DANIDA Project: "Forest certification for small and medium-size agroforest producers and indigenous peoples in Central America" (CEFPAC), conducted by the Nicaraguan Council for Voluntary Forest Certification (CONICEFV, for its initials in Spanish), whose principal line of work is the development of indicators corresponding to each of the FSC Principles and Criteria.

It should be emphasized that the standards in question were developed in consistency with the laws, regulations, procedures and requirements, and according to the FSC's mechanisms for dispute resolution.

Context and Validity of the Standards

Definition of Small and Low Intensity Managed Forest (SLIMF):
In Nicaragua, a small and low intensity management operation is defined as a primary or secondary natural forest with an area of up to 1,000 hectares of productive forest, with either mechanized or non-mechanized harvesting; and where the rate of harvesting of the Forest Management Unit (FMU) is less than 20% of the Annual Mean Increment (AMI).

The SLIMF standards in Nicaragau, strive fundamentally:

1. For FSC certification to be accessible to small and medium-size enterprises, most of which are agroforest producers.

In the standards, there are specific verifiers for Management Units located in the Autonomous North Atlantic Region (RAAN, for its initials in Spanish), because of the particularities of its socioeconomic and environmental context, legislation and history.

Scope of the Standard:
These standards are applicable to natural hardwood and pine forests throughout all of the nation's territory, with the exception of mangrove forests and plantations.

The standards shall be reviewed every five years and are subject to amendments if necessary. Their up-dating must be requested by the CONICEFV and approved by the FSC.

Amendments to Law 462 Conservation, Promotion and Sustainable Development of the Forest Sector Law and its regulations, as well as to the technical norms of the National Forest Institute (INAFOR, for its initials in Spanish), would affect the standards, due to the extensive use of reference to the tools for forest management established by the above-mentioned legal framework, and will have as a consequence a revision of the proposed standard.

Fundamental Principles

These standards are based on the following fundamental principles related to nature conservation and human development in conditions of justice and fairness:

1. Legality Principle

The legal framework for voluntary forest certification in Nicaragua lies in international and national laws.

2. Gradualness Principle

Sustainability is not a condition or goal, but rather it is a process and a permanent attitude of continuous improvement. This takes on more value in forest management, since it deals with living, dynamic, complex processes of a physical and biological nature, and in the case of forest certification, also those of a social, cultural and economic nature. This principle orients certifiers towards a sense of flexibility in assessing and determining conditions according to each particular case.

3. Precautionary Principle

When there are sufficient indications that a practice or omission in forest management might cause serious or irreversible environmental damages, forest managers cannot justify these by arguing a lack of information and/or scientific certainty in that regard. Forest certification should establish conditions intended to avoid or mitigate such damages.

4. Principle of the best available technology

Continuous improvement in forest management is also related to technological development. In this sense, and depending on the availability in the market and financial and organizational capacity, as well as social criteria, forest managers should progressively introduce technologies to minimize negative environmental impacts and increase efficiency in overall use of forest resources.

5. Principle of fairness and harmony among people.

Forest certification is a profoundly human process that encourages new and better forms of relationships among people, and between them and nature. Forest certification should promote benefits and opportunities for all social sectors, considering that forest management should not be understood as an activity that is exclusively for men, since in practice it includes the efforts of women and boys and girls, in rural families. Similarly, the growing participation and contributions of women as technicians and professionals has been and is indispensable in consolidating forest management processes in Nicaragua. Therefore, forest certification should promote harmonious and equitable relations between men and women of different ages and social levels.

Process of Development of the SLIMF Standards

A total of 164 stakeholders in the forest sector (134 men and 30 women) participated in the process of developing the SLIMF standards, particularly small and medium-size agroforest producers and indigenous communities and officials of government institutions, such as the National Forest Institute (INAFOR), the Ministry of Agriculture and Forestry (MAGFOR), the Technical Secretariat for Natural Resources (SERENA) for the Autonomous North Atlantic Region, the Environmental Secretariats of the Municipal Councils of the Department of Nueva Segovia, Puerto Cabezas and Rosita, and local non-governmental organizations.

The reference used to generate the SLIMF standard was application of the methodology developed by the Honduran Council for Voluntary Forest Certification, within the framework of a project from 2003 to 2005 designed for owners of small and medium-size forests, which consists of having the participants in the SLIMF process adapt the FSC international indicators to their environmental, social and economic reality. The methodology for developing the SLIMF standards incorporated a focus on gender, considering the interests and perspectives of women.

The workshops to generate the standard were given in Spanish and Miskito, with translators used for the latter.

From the above, it is considered that the SLIMF Standards are a genuine proposal by agroforest producers that involve organized groups with different legal configurations, or individuals, in the various national socio-cultural contexts, which include indigenous peoples and ethnic communities.

The development process is described below:

The consultation process to develop the first draft was held in three workshop sessions in the months of September, October, November and December 2009, in which the following topics were discussed:

Module I - Training about Forest Certification, including as topics: concept, types of certification, history, origin, mission and activities of the FSC, functioning of the FSC, steps and components of certification and the ten P&C of FSC certification. The first round of three workshops was held in Nueva Segovia and in the RAAN in Puerto Cabezas and Rosita, and a meeting to present the Work Plan for developing the SLIMF Standards.

Module II - Analysis of each of the ten FSC P&C with a target group, based on generator questions developed in a simple manner, in order to define indicators and their verifiers (second and third rounds of workshops in the sites mentioned). Also a meeting was held to present the contributions to the SLIMF standards made by the working groups in each site.

The second draft of the SLIMF Standard incorporated the recommendations derived from public consultation and from the Standard Development Group (GDE, for its initials in Spanish), made up of members of the CONICEFV and of the environmental social and economic chambers. The purpose of the group is to review and ensure the technical quality of the draft documents generated during the process. For this purpose, the group met on July 9 and 15, 2010, in the Council's offices in Managua.

The field test of the SLIMF Standards was conducted in two stages. The first was held in pine forests in Jalapa, Nueva Segovia, from July 20 to 23, 2010; and later in a natural hardwood forest in Bonanza from September 6 to 9, 2010, in the Autonomous North Atlantic Region (RAAN). With the field test, a third draft of the SLIMF Standards was produced, which incorporated the contributions from the public consultation.

Regional workshops were held to review the third SLIMF draft in Rosita/ RAAN on November 9 and 10, 2010; and in Ocotal, Nueva Segovia, on November 16 and 17, 2010. The contributions from the GDE were also incorporated. Its meeting was held on November 12, 2010, resulting in the fourth draft of the SLIMF Standards. On December 3 2010, it met to review the fourth SLIMF draft, in order to arrive at the fifth document now serving as reference.

It should be emphasized that the drafts generated in the development process for the SLIMF Standard were opened for public comments in order to gather the opinions of all stakeholders, and therefore these were taken into consideration to enrich the Standard.

Structure of the Standards

The Small and Low Intensity Managed Forest Standards are based on the FSC's P&C, specifically from 1 to 9, developed in accordance with their structure.

The indicators and their respective verifiers were developed by the Nicaraguan Council for Voluntary Forest Certification (CONICEFV), as the result of the process of consultation with small and medium-size agroforest producers, enterprises, and representatives of the government institutions linked to the forest sector.

In order to differentiate, the Principles are written in bold type and are easily identified. The Criteria are identified with two numerals; the first identifies the Principle to which they correspond and the second identifies the Criterion itself. For example: 1.1 means Principle 1 and Criterion 1. The indicators are identified as 1.1.1, 1.1.2, 1.1.3, etc., and the verifiers are identified with bullets.

For a clear definition of what is understood by small and low intensity managed forests in Nicaragua, refer to the norm approved by the FSC that is the basis for this work: FSC-POL-20-100 DEL 2003, FSC-STD-01-003 (Version 1-0) ES 2004.

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Principle 1. Compliance with National Laws and FSC Principles

Forest Management shall respect all national, regional, local and regulatory laws, and international treaties and agreements to which the country is a signatory, and shall 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 FMU shall be legally registered in accordance with applicable requirements, and has copies of all the documentation required for such registration.

Indicator 1.1.2. The FMU including its contractors shall demonstrate that it is familiar with and respects national, regional, and municipal laws; including those referenced in the Nicaraguan FSC standard.

Indicator 1.1.3. FMU shall respect all administrative rules and requirements related to forest management.

Verifiers:

- Consultation with government agencies at various levels.
- Interview with the forest supervisor or owner or with whoever holds legitimate rights to the resource.

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

Indicator 1.2.1. The FMU shall comply with all legal requirements related to payment of national, regional, and municipal taxes, and payments to the community, when applicable.

Verifiers:

- Proof of payment (receipts and vouchers)
- Fiscal and municipal certificates

Indicator 1.2.2. The enterprise shall ensure that the requirements of this Criterion are also met by contractors and others managing forestry operations on the property.

Criterion 1.3. In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, International Tropical Timber Agreement and Convention on Biological Diversity, shall be respected.

Indicator 1.3.1. The FMU shall know the local species covered by the Convention on International Trade in Endangered Species (CITES) and the necessary controls to ensure continued compliance with it.

Indicator 1.3.2. There shall be no evidence of any non-compliance by the forest manager with the applicable requirements of any international agreements listed in the Nicaraguan FSC standard.

Verifiers:

- Interviews with the forest owner and operators.

- Documents of training events (lists of participants).

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. If conflicts are identified between the national laws and the P&C, the FMU shall record and documents this and the National Office accompanies the forest owners to intercede with the competent authorities in the process of resolving these conflicts.

Indicator 1.4.2. The enterprise shall document the results of any such attempt to resolve the conflict, including written evidence of any government, certification body or FSC National Office formal interpretations, approvals, designations, authorizations, exceptions/ exemptions from requirements, which might allow the conflict to be resolved

Verifiers

- Documents of the conflict
- Interviews with the appropriate legal authorities
- Interviews with the forest owner

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

Indicator 1.5.1. The boundaries of the FMU shall be clearly identified on the ground at the main points of entry and areas of potential conflicts.

Verifiers:

- Verification on the ground (maps versus boundaries on the ground).

Indicator 1.5.2. The FMU shall conduct surveillance activities to identify and prevent damages (illegal logging, hunting, fires and third party invasions)

Verifiers:

- Verification on the ground.
- Protection plan.
- Complaint documents.
- Interviews with forest owners and supervisors and local residents.
- Reports issued by the competent authorities.

Indicator 1.5.3. Appropriate measures shall be taken if illegal activities are detected. Depending on the nature of the activity such measures may include:

- Reporting the activity to an appropriate authority;

- Disciplinary action or fines in the case that staff were involved;

- Working with the appropriate authorities, and always within the law, to control the unauthorized activity;

- Working with local communities and/or authorities to resolve underlying grievances leading to illegal or unauthorized activity;

- Pursuing legal action (e.g. prosecution) if necessary.

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

Indicator 1.6.1. The FMU shall sign a document of commitment to long-term management of forest resources in keeping with the FSC's P&C.

Verifiers:

- Signed commitment document available to the public.

Indicator 1.6.2. Forest management plans (see Principle 7) and ongoing operations shall be fully consistent with long-term compliance with the *FSC Principles and Criteria for Forest Stewardship*.

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 arrangements) shall be demonstrated.

Indicator 2.1.1. Long-term tenure or forest use rights shall be secure and legal.

Verifiers:

- Legal documents: Property titles, public deeds, Agrarian Reform titles, lease contracts, use and usufruct contracts, valid contracts for concession of areas under management, Royal title and Diagnosis of Territorial Boundaries and Endorsements of the Regional Council of the Regional Atlantic Government.
- Valid Forest Management Plan and AOP.
- Interviews with the community.

Indicator 2.1.2. The FMU shall guarantee that there are no lawsuits against the property filed by the Land Title Office or local courts, and that it is not in the process of division, unless the latter is because of family inheritance.

Verifiers:

- Document showing freedom from liens or a similar document.
- Interviews with the competent authorities.

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. The FMU shall recognize the legal and/or customary rights of communities or neighbors.

Verifiers:

- Legal reference documents.
- Interviews with the forest owner and neighboring communities.
- Endorsement by the community.

Indicator 2.2.2. Where communities have delegated control of their legal or customary tenure or use rights, or part thereof with free and informed consent, this shall be confirmed by documented agreements and/or interviews with the representatives of local 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. There shall be no important unresolved disputes related to tenure and forest use rights.

Verifiers:

- Interview with the forest owner, neighbors and communities.
- Consultations with forest management supervisory agencies.

Indicator 2.3.2. Disputes over tenure in managed areas shall be solved through local government agencies accepted by the parties involved or established by law (mediation) with the corresponding institutions.

Verifiers:

- Interview with the forest owner, neighbors and communities.
- Memorandum with signed agreements between the FMU and the neighboring communities.
- Consultation and reports from the institutions involved.

Indicator 2.3.3. The FMU shall know and have good relations with its neighboring communities

Verifiers:

- Interview with the forest owner and supervisor.
- Interviews with neighbors and groups from the local community.

Indicator 2.3.4. The FMU shall have an up-to-date list with the principal data about the neighbors with rights to plots in the FMU.

Verifiers:

- List of neighbors (Name, address) and a map or sketch of the location.

Indicator 2.3.5. The forest owner, associations or forest groups shall meet with the community at least once a year to inform, coordinate, and discuss any pending problems about forest management.

Verifers:

- Memorandum and list of participants in the assembly or meeting.
- Interviews with the officers or leaders of community groups.

Principle 3. Indigenous Peoples' Rights

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

In the case of management by an entity other than the Indigenous People themselves:

Indicator 3.1.1. The Forest Manager shall identify and map all lands or territories of Indigenous Peoples in which it may carry out management activities.

Indicator 3.1.2. Forest management in indigenous lands and/or territories shall be controlled by indigenous people and there shall be internal agreements approved by an assembly that legitimize the forest operation.

Verifiers:

- Contract between the FMU'S management and the indigenous peoples with legal or customary rights.

Indicator 3.1.3. If the indigenous people, through a legal contract, cede or delegate the forest management operation to third parties, this shall be done with free and informed consent and an equitable distribution of the profits and respect for the use or property rights of the indigenous people shall be defined.

Verifiers:

- Signed contracts validated by a notary.
- Interview with the forest owner and supervisor.
- Interview with community leaders.
- Interview with men and women in the community.
- Proof of investment in the community.

In the case of management by the Indigenous People themselves:

Indicator 3.1.4. The Indigenous People shall identify and map all lands or territories in which it may carry out management activities

Indicator 3.1.5. The identification and boundaries of any such lands or territories shall not be subject to any dispute of substantial magnitude.

Indicator 3.1.7 The Indigenous People shall demonstrate effective control over their land and resources through the implementation of a management plan as in Principle 7.

Criterion 3.2. Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples and ethnic communities.

Indicator 3.2.1. There shall be no evidence or indication that the FMU threatens the resources or rights of the indigenous peoples.

Verifiers:

- Interview with the FMU supervisor or manager.
- Interviews with leaders and the FMU's neighbors.
- Interviews with men and women in the community.
- Interview with the appropriate authorities.

Indicator 3.2.2. There is documentary evidence of the free and informed consent given by the indigenous peoples to allow third parties to perform forest management activities that do not affect their use rights in the FMU.

- Legal document signed between communities and third parties that is evidence of free and informed consent about forest management in the FMU.

Indicator 3.2.3. Documented actions shall be taken to prevent or mitigate adverse impacts.

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.

Indicator 3.3.1. Sites of special significance to the indigenous peoples shall be identified and included in the Forest Management Plan.

Verifiers:

- Up-dated Forest Management Plan and names of sacred sites.
- Interviews with personnel involved in forest operations and leaders of the indigenous peoples.
- Interviews with men and women from the indigenous peoples.
- Verification on the ground.

Indicator 3.3.2. Areas and evidence of cultural or archaeological significance shall be carefully managed for and protected in meaningful consultation with local Indigenous

People. Wherever cultural or archaeological evidence is observed or discovered, forest management operations cease immediately until direction has been obtained from the Indigenous People.

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.

Indicator 3.4.1. Indigenous Peoples' traditional practices or knowledge that has potential commercial value shall be recognised and shall be documented if feasible, whilst respecting the confidentiality of tribal knowledge and the protection of tribal intellectual property rights

Verifiers: Interviews with the forest administrator, indigenous and local communities.

Indicator 3.4.2 If such traditional knowledge is used by the forest management enterprise or by any other organization under agreement with the forest management enterprise, the relevant Indigenous Peoples shall be compensated for the fair market value of such knowledge, and in agreement with the Indigenous People concerned

Verifiers:

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[1].

Criterion 4.1. The communities within or adjacent to, the forest management area should be given opportunities for employment and training, and other services.

Indicator 4.1.1. In the event that the FMU needs to hire personnel, it shall give priority to employing people from the community, neighbors and from the region.

Verifiers:

- List of personnel hired, by place of origin.
- Interviews with the personnel.
- Stubs from the Nicaraguan Social Security Institute (INSS, for its initials in Spanish).

Indicator 4.1.2. The FMU's employees shall be trained in the basic subjects of forest management, in order to ensure that the Forest Management Plan is executed properly.

Verifiers:

- Memorandum on the training given and list of participants.
- Interviews with the personnel and employees hired.

[1] This criterion will not be relevant for small producers, because normally they do not employ people from outside of the community. If this case arises, it is only for a few people hired temporarily. In general, family labor is used.

Indicator 4.1.3. Local residents and neighbors shall have supervised access to the FMU area to harvest non-timber forest products and access to water.

Verifiers:

- Interviews with permanent and temporary employees and members.
- Supervision on the ground while forest harvesting work is being done.
- Interviews with men and women from the neighboring community.
- Agreements signed between the benefited community members, forest owner and supervisor.
- Endorsement by the community.
- Record of non-timber products that are allowed to be harvested from the FMU.

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. Workers shall wear basic safety equipment, available in the domestic market, such as helmets, hearing protectors, protective goggles, gloves and boots, which will be worn depending on whether their activity is in the sawmill or during harvesting.

Verifiers:

- Interviews with members and workers hired.
- Verification on the ground of proper use during forest operations.

Indicator 4.2.2. The FMU shall have a first aid kit[2].

Verifiers:

- Interview with the workers hired and members.
- Basic first aid kit.
- Interview with the personnel in charge of the first aid kit.

Indicator 4.2.3. The forest owner shall actively seek opportunities to train workers in first aid.

Verifiers:

- Interviews with the forest owner.
- Memorandums and training lists.
- Interview with the person in charge of the first aid kit.

Indicator 4.2.4. When the workers are not family members, the FMU shall pay wages and benefits to the personnel in accordance with the provisions of the Labour Code[3].

Verifiers:

- The FMU's wage schedule.[4]
- Documentary[5] proof issued by the competent institutions.

[2] The first aid kit includes snakebite antidote.
[3] This will include only workers exposed to high risk activities with a contract that is valid during the entire harvesting stage. The duration of the period of forest operations is usually six months, from the harvesting stage to sawn lumber.
[4] INSS, IR (if applicable) and INATEC (assumed by the employer).
[5] Payment document issued by the INSS and INATEC and proof of payment of wages withheld issued by the DGI.

- Interviews with the personnel.

Indicator 4.2.5. The FMU shall guarantee the safety of its personnel while performing forest operations.

Verifiers:

- Documentary proof issued by the insurance entity.
- Written basic, implemented procedure for high risk forest operations.

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 Labour Organisation (ILO)[6].

Indicator 4.3.1. The FMU shall recognize the right and responsibilities of its workers, without any restrictions or reprisals, to defend their rights and benefits.

Verifiers:

- Interviews with the forest owner.
- Interviews with the 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 (both men and women) directly affected by management operations.

Indicator 4.4.1. The FMU shall keep a record of changes and/or social benefits (employment, FMU's income[7], participation in community activities[8]).

Verifiers:

- Interview with the FMU's management, workers and neighboring communities.
- Up-to date record form.

Indicator 4.4.2. The Forest Manager shall implement a formal, documented process or system to seek the views of employees, members of local communities (both men and women) and other groups directly affected by management operations about the social impacts of those operations, and actions that the forest enterprise could take to avoid or reduce any negative impacts.

[6] This criterion will not be relevant for small producers, because normally they do not employ people from outside of the community. If this case arises, it is only for a few people hired temporarily. In general, family labor is used. Therefore, there are no unions. In general, forest owners are organized in cooperatives.

[7] In the case of forest groups, income per member, number of members, and the members' ages.

[8] In the case of FMUs larger than 500 hectares, according to Law 462 - Conservation, Promotion and Sustainable Development of the Forest Sector Law, they are required to development an Environmental Impact Assessment that includes the social aspect.

Criterion 4.5. Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.

Indicator 4.5.1. Problems that arise within and outside the FMU shall be resolved through mechanisms for grievances and/or compensation with recognized legal and local agencies.

Verifiers:

- Document on the compensation mechanism.
- Interview with the forest owner.
- Interviews with neighbors and communities.
- Interviews with the legal agencies involved.

Indicator 4.5.2. The forest owner shall be acquainted with and maintains a good understanding with the neighbors and recognized agencies.

Verifiers:

- Interview with the forest owner.
- Interviews with neighbors.
- Interviews with the appropriate agencies[9].

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 FMU shall look for the best possible market for its products.

Verifiers:

- Interview with the forest owner and/or the administrator of the forest certification group, if it is a group.
- Marketing documents (sales contract, purchase bid)
- Evidence of market consultations.

Indicator 5.1.2. The forest owner shall keep an expense and income book for forest operations[10] in order to make a calculation of economic viability.

Verifiers:

- Expense and income books and/or sales invoices.

[9] Municipal authorities, MARENA, INAFOR and SERENA.

[10] Harvesting, sawing, transportation, loading/unloading, taxes, invoices, forest inventory (AOP), closure, nursery/reforestation, equipment and tool maintenance expenses, signage, surveillance, training and information meetings.

- Interview with the forest owner and/or the administrator of the forest certification group, if it is a group.

Indicator 5.1.3. The budget of the FMU shall include costs for all significant activities and necessary investments (including the cost of meeting all social and environmental commitments) identified or implied in the forest management plan and associated policies and planning documentation

- Budget

Indicator 5.1.4. If the budget shows a deficit for the year, the forest manager shall demonstrate how the shortfall will be covered whilst ensuring that the management plan is implemented in the long term.

- Interview with the forest owner and/or the administrator of the forest certification group, if it is a group.
- Basic analysis of profitability according to the validity of the forest management plan.

- Interview with the FMU's administrator and/or manager reveals that he is familiar with the forest management plan, budget and finance sources.

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. The FMU shall promote local processing of forest products (sawn lumber, furniture and handcrafts) when there are technical conditions for this and it is economically profitable.

Verifiers:

- Waybills for transporting forest products.
- Sales invoices.
- Production inventory.

Indicator 5.2.2. When feasible and the law permits it, the FMU shall facilitate utilization by the communities of the residues left after harvesting and processing for domestic use (firewood, charcoal, handcrafts and organic fertilizer).

Verifiers:

- Interviews with the forest owner and with residents who utilize the harvesting residues.

Criterion 5.3. Forest management should minimize waste associated with harvesting and onsite processing operations and avoid damage to other forest resources.

Indicator 5.3.1. Forest Management shall minimize waste[11] in forests and unnecessary damage to the forest resource during forest operations.

[11] Waste is anything that is usable after harvesting (branches, sawdust, husks, acicula (pine needles), stumps and logs).

Verifiers:

- Verification on the ground of application of the NTON 18 001-01.
- Closure document.

Indicator 5.3.2. Harvesting techniques shall be designed to avoid log breakage, timber degrade and damage to the forest stand.

Indicator 5.3.3 Felling debris (branches, tops, etc) shall be used to protect soils on skid trails.

Indicator 5.3.4. Harvested and processed wood and/or products processed on-site shall be transported from the forest before any deterioration occurs.

Indicator 5.3.5. Removal of unused biomass shall be minimized; branches and bark pieces remain in the forest, as far as possible, and whole tree harvesting shall not practiced.

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 FMU should avoid dependence on a single product and promote local initiatives for the use and marketing of forest products

Verifiers:

- Sells reports

Indicator 5.4.2. Managers shall have assessed the possibility of selling or marketing such products or services locally, either on their own account or through the involvement of local enterprises.

(See also Criterion 5.2)

Criterion 5.5. Forest management operations shall recognize, maintain, and, where appropriate, enhances the value of forest services and resources such as watersheds and fisheries.

Indicator 5.5.1. The forest manager shall know the variety of services and forest resources.

Verifiers;

- Interviews with the administrator of the UMF..

Indicator 5.5.2. Forest management operations shall have no significant negative impact on the forest's services and resources (including, for example, watersheds, upstream and downstream commercial and recreational fisheries, landscape quality, contributions to regional biodiversity, recreation and tourism) are recognised in the forest management plan for the enterprise)

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

Indicator 5.6.1. In the FMU, harvesting shall be done according to the annual rate of cutting established in the forest management plan and calculated based on growth and

yield estimates regulated by the competent authorities. The annual harvest levels could change.

Verifiers:

- Forest management plan, AOP, and waybills for transporting roundwood and sawn lumber.
- Books for controlling expenses and income from lumber.
- Details of production by products
- Reports on field supervision of harvesting sites.

Indicator 5.6.2. Harvest levels in the forest management plan shall not exceed growth levels for the resources being harvested and the cycle proposed.

Indicator 5.6.3. When stock levels and growth are not well known (e.g. for certain NTFP species) the forest operation shall use conservative harvesting levels.

Verifiers:

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[12] shall be completed appropriate to the scale and 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 FMU shall make an EIA according to the legislation in force, prior to commencement of site-disturbing activities and has been reviewed and if necessary revised within the previous five year period

Verifiers:

- Forest management plan.
- Verification on the ground.
- EIA document.

Indicator 6.1.2. The FMU shall plan forest operations, including actions to mitigate negative environmental impacts generated by forest management.

Verifiers:

- Final report and/or closure document for the forest management plan.
- Verification on the ground of mitigation works.

[12] According to Article 17 of Law 462 – Conservation, Promotion and Sustainable Development of the Forest Sector Law: "Forest harvesting on plantations or forest lands larger than five hundred (500) hectares, with prior authorization, will require an Environmental Impact Assessment (EIA) in order to obtain the Environmental Permit issued by MARENA. It will be an integral part of the Management Plan". That is, it does not apply to forest owners with FMUs smaller than 500 hectares.

Indicator 6.1.3. A documented assessment of the environmental impacts of any processing facilities within the FMU under assessment shall have been completed (or has been reviewed and if necessary revised) within the previous five year period.

Indicator 6.1.4. The assessments of impacts referred to in Indicators 6.1.1 and 6.1.3 shall explicitly considers potential impacts on any High Conservation Values identified within the FMU.

Criterion 6.2. Safeguards shall exist that 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 plant collecting shall be strictly controlled.

Indicator 6.2.1. The FMU shall have a list of banned and CITES species and their habitats that are present in the FMU. (See Annex 3).

Verifiers:

- Interview with the forest owner and workers.
- List of CITES species.

Indicator 6.2.2. The forest management plan shall indicate conservation and protection areas in accordance with the laws in force in the country.

Verifiers:

- Forest management plan.
- Verification on the ground.

Indicator 6.2.3. The FMU shall include protection of threatened and endangered species as a topic in meetings with representatives of the community and the school.

Verifiers:

- Interview with local stakeholders in the community.
- Memorandum and list of participants in at least one training event on threatened species and ecosystems.

Indicator 6.2.4. The management plans and other relevant policies and procedures of the FMU shall clearly identify actions that are taken to protect maintain or enhance the presence of rare, threatened or endangered species and their habitats within the FMU as a whole.

Indicator 6.2.5. Conservation zones and protection area shall have been selected to maximise their contribution to the conservation of biodiversity in relation to their size (for example through the creation of conservation corridors, protected wetland areas and consolidation of natural areas). The size and location of conservation zones shall be sufficient overall to ensure the continuing presence of rare, threatened or endangered

species as listed, to protect existing examples of ecosystems in their natural state (see Criterion 6.4) and are not less than 10% of the area of the FMU under assessment.

NOTES: conservation zones are not necessarily forested land. They may include wetlands and open space, and may have dual purposes (e.g. they may be located partly on slopes susceptible to erosion, or in order to protect water sources). However, in all cases, the overall selection must be justified to maximise the conservation of biodiversity across the FMU.

Indicator 6.2.6: The management plans and other relevant policies and procedures of the FMU shall clearly identify actions that are taken to protect, maintain or enhance the presence of rare, threatened or endangered species and their habitats **(including banned and CITES species**) within the FMU as a whole

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; and c) Natural cycles that affect the productivity of the forest ecosystem.

Indicator 6.3.1. Forest management in the FMU maintains:

- A natural diversity in successive stages of growth.
- A composition of native species appropriate for the site.
- Evidences of other stages of growth, including large trees and dead fallen wood..
- Soil fertility is not threatened.

Verifiers:

- Observations of forest cover after harvesting.
- Harvesting and replanting plans

Indicator 6.3.2. The FMU shall mark the seed trees, ensuring the maintenance of genetic diversity.

Verifiers:

- Review of management plans and annual operating plans
- Field verification.

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.

NB The Indicators for this Criterion should be considered in conjunction with those for Criteria 6.2 and 6.3

Indicator 6.4.1. The forest management plan shall contain maps prepared with a methodology, indicating the areas with representative samples of the existing ecosystem and shall exclude them of the harvesting area.

Verifiers:

- Forest management plan.
- Verification on the ground.

Indicator 6.4.2. Management prescriptions shall be specified in the enterprise's forest management plan and other documents in order to protect the representative examples of ecosystems within conservation zones in their natural state and in the long term and ensure any management interventions are for their protection or restoration..

Indicator 6.4.3 Reference sites of the representative ecosystems within conservation zones, shall be identified and clearly marked on maps, and are monitored at least once a decade to identify and evaluate long-term changes. The FMU analyses and utilizes the results of the monitoring to evaluate management of the conservation zones.

Indicator 6.4.4 The conservation zones and protection areas designated by the forest enterprise that cover at a minimum an equivalent of 10% of the FMU area (see Criterion 6.2) shall include representative areas of any examples of ecosystems in their natural state as identified in 6.4.1.

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. In developing and executing the forest management plan, the technical norms of the pertinent entities shall be used in the planning process in order to minimize the impact on water resources.

Verifiers:

- Verification on the ground.
- Forest management plan.
- Interview with the FMU's management and/or owner.

Indicator 6.5.2. In the FMU shall prevent physical damage to the riverbanks, changes in water flows by the construction of bridges, construction of culverts and the creation of waste and pollution.

Verifiers:

- Verification on the ground.
- Forest Management Plan.

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 Types 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.

Indicator 6.6.1. If chemicals are used in the FMU, the list established by the FSC and the pertinent national laws shall be consulted;

Verifiers

- Interview with the forest owner and workers.
- Verification on the ground.

Indicator 6.6.2. A record shall be kept of the amount of chemical substances used in the FMU and there is an indication that alternative methods are being considered leading to a reduction in their use in the long term.

Verifiers:

- Record of the type, amount and use of chemical substances.

Indicator 6.6.3. Workers shall be trained in the use and storage of chemical substances and handling of any unused portions.

Verifiers:

- Consultation with the operators.
- List of participants in at least one training event.

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. In the FMU, get rid of packaging waste, chemical waste, fuel and oil in an environmentally appropriate way, outside the forest management área.

Verifiers:

- Interview with the FMU's owner and workers.
- Verification on the ground and at the sawmill.
- Registration of waste elimination.

Indicator 6.7.2. The off-site locations for disposal shall provide environmentally safe methods for the disposal of the FMU waste products

Criterion 6.8. 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.

Indicator 6.8.1. The FMU shall document, minimize and strictly control the use of biological control agents, in the event that they are used.

Verifiers:

- Verification on the ground.
- Interview with the forest owner.
- Documentation of the use of biological control agents.

Indicator 6.8.2. The FMU shall demonstrate that there is no use of genetically modified organisms in the FMU.

Verifiers :

- Verification on the ground.
- Interview with the personnel.

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

Indicator 6.9.1. Non-native species shall not be used in natural forests.

Verifiers:

- Interview with the corresponding government agencies[13].
- Verification on the ground.

Indicator 6.9.2.: Exotic species will be evaluated for possible adverse ecological impacts, and avoid such impacts.

Verifiers:

- Register of scientific investigations.
- Interviews with forest manager.

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;
b) Does not occur on high conservation value forest areas;
c) Will enable clear, substantial, additional, secure, long-term conservation benefits across the whole FMU.

Indicator 6.10.1. Conversion of natural forests to plantations shall not occur.

Verifiers:

- Verification on the ground.
- Closure document.

Indicator 6.10.2. Any area of the FMU that may be affected by natural phenomena, pests and diseases shall be recovered through a plan of enrichment with native species and/or a management plan for natural regeneration.

Verifiers:

- Plans for restoration, enrichment and natural regeneration.
- Report of inspection by the competent authorities[14].

[13] MAGFOR, MARENA.
[14] INAFOR, MARENA and MAGFOR.

Principle 7. Management Plan

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

Criterion 7.1. 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..**
I. **Description and justification of harvesting techniques and equipment to be used**

Indicator 7.1.1. The management plan and/or supporting documents shall specify the long-term management objectives for the area under evaluation (see also Criterion 1.6).

Indicator 7.1.2. The objectives of management shall include, inter alia, the conservation and/or restoration of representative samples of natural forest within the FMU (see also Criteria 5.5, 6.2).

Indicator 7.1.3. The management plan and/or supporting documents shall include:

7.1.3.1 a description of the forest resources to be managed,
7.1.3.2 environmental limitations,
7.1.3.3 land use and ownership status,
7.1.3.4 socio-economic conditions, and
7.1.3.5 a profile of adjacent lands (see also Criterion 5.5).

Verifier: Management plan

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

Indicator 7.2.1. The FMU's Forest Management Plan shall be reviewed and up-dated according to the valid legal framework.

Verifiers:

- Forest Management Plan

- Consultation with the appropriate authorities[15].

Indicator 7.2.2. The management plan (and supporting documentation) shall incorporate the results of monitoring by the forest enterprise up to the date of its last revision. (see also Criterion 8.4)

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

Indicator 7.3.1. Workers should be trained in basic aspects of forest management, according to their duties.

Verifiers:

- Verification in the cutting area
- Closure document.
- Interview with workers and lists of participants.

Indicator 7.3.2. All workers (including contractors and their workers) shall be supervised to ensure they implement their tasks effectively and safely, and the quality of their work is monitored by the enterprise itself.

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. The FMU shall have an up-to-date forest management plan and a public summary.

Indicator 7.4.2 There shall be a publicly available document which provides a summary of the enterprise's:

7.4.2.1 Management objectives;
7.4.2.2 Forest resources (including their environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands);
7.4.2.3 Silvicultural and/or other management system;
7.4.2.4 Rationale for rate of annual harvest and species selection;
7.4.2.5 Provisions for monitoring of forest growth and dynamics;
7.4.2.6 Environmental safeguards based on environmental assessments;
7.4.2.7 Plans for the identification and protection of rare, threatened and endangered species;
7.4.2.8 Justification of harvesting techniques and equipment to be used.

Verifiers:

- Summary of the forest management plan.
- Interviews with local stakeholders[16].
- List of participants and minutes of the public hearing.

[15] INAFOR and MARENA.
[16] INAFOR, MARENA, SERENA and municipal authorities

Principle 8. Monitoring and assessment

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

Criterion 8.1. The frequency and intensity of monitoring shall 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 shall be consistent and replicable over time to allow comparison of results and assessment of change.

Indicator 8.1.1 The FMU shall keep in its files the closure document from the corresponding entities covering at least the preceding two years.

Verifiers:

- Interview with the appropriate entities.
- Closure document.

Indicator 8.1.2 Procedures for collecting the data specified in Criterion 8.2, below, shall be clearly documented.

Indicator 8.1.3 The procedures shall describe the techniques for collecting the data for each Indicator of Criterion 8.2, and specify the frequency with which data is collected.

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

a) Yield of all forest products harvested.
b) Growth rates, regeneration and condition of the forest.
c) Composition and observed changes in the flora and fauna.
d) Environmental and social impacts of harvesting and other operations.
e) Costs, productivity, and efficiency of forest management.

Yield of all forest products harvested.

Indicator 8.2.1. The FMU's management shall know the costs and yields of forest operations.

Verifiers:

- Invoices and receipts.
- Interview with the forest owner.
- Budget.

Growth rates, regeneration and condition of the forest:

Indicator 8.2.2. Pre- and post- harvest inventory shall be carried out for all harvested areas**.**

Indicator 8.2.3. The FMU contributes labour and surveillance to eventual forest research projects undertaken in its forest and requests the entities conducting the research and

data collection to transfer what is learned about the results and to train members and workers.

- Agreements, correspondence or interviews with representatives of the above-mentioned stakeholders.

Composition and observed changes in the flora and fauna:

Indicator 8.2.4 The forest manager shall keep notes of the presence of any notable species of flora or fauna, sufficient to identify significant trends over time.

Verifiers:

- Data logging

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

Indicator 8.3.1. The FMU shall have a procedure for identifying all products that leave the forest to the point of sale.

Verifiers:

- Documentation on the origin and destination of all certified forest products.
- Authorized legal documents for verification on the ground.

Indicator 8.3.2. The FMU shall keep a record of transportation waybills that include volumes, species and customers for timber that is harvested and transported.

Verifiers:

- FMU certificate.
- Invoices and receipts.
- Field log.
- Forest waybill.

Indicator 8.3.3. The FMU shall include the number of the certificate issued by the certifying entity in sales invoices.

Verifiers;

- Invoices and receipts.
- FMU certificate.

Indicator 8.3.4. Roundwood in the all seasons yard (PTT, for its initials in Spanish) shall be marked and sawn wood in the sawmill yard by category: certified or not certified.

Verifiers:

- Verification in the yard.
- Interview with the FMU's management and/or supervisor.
- Inventory of roundwood and/or sawn lumber.

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

Indicator 8.4.1. The supervisor shall incorporate the results of monitoring in the forest management plans according to the norms of the competent governmental institutions.

Verifiers:

- Monitoring report.
- FMU's file.

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. The FMU should have a summary of the results of monitoring available to the public.

- Monitoring summary.
- Interviews with neighbors and the community.
- Interview with the forest owner.
- Dissemination of the results of the monitoring report.

Principle 9. Maintenance of High Conservation Value Forests

Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.

Criterion 9.1. Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to the scale and intensity of forest management.

Indicator 9.1.1. The FMU shall carry out an assessment of the FMU sufficient to identify all parts of the FMU that have each of the following attributes:

HCV1. Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).

HCV2. Forest areas containing globally, regionally or nationally significant 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.

HCV3. Forest areas that are in or contain rare, threatened or endangered ecosystems.

HCV4. Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).

HCV5. Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).

HCV6. Forest areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).

Verifiers:

- Forest Management Plan.
- HCVF document
- Interview with the appropriate government agencies.

Indicator 9.1.2 The FMU shall clearly map all areas within the FMU which have each of the six attributes listed under Indicator 9.1.1.

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. The FMU shall implement adequate protective measures for sites identified as HCVF.

Verifiers:

- Sketch of locations.
- Verification on the ground.

Indicator 9.2.2. The forest managers shall have consulted with local stakeholders with relevant expertise or knowledge on the management options to maintain or enhance the identified High Conservation Values within the FMU.

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 forest management plan shall describe measures to ensure maintenance of the attributes of the High Conservation Value forest.

Verifiers:

- Forest management plan.
- Verification on the ground.

Criterion 9.4. Monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.

Indicator 9.4.1. The FMU shall conducts surveillance and monitoring of High Conservation Value forest in order to prevent external actions that might damage it and to assess the effectiveness of the measures applied.

Verifiers:

- Closure document.
- Specific protection plan within the Forest Management Plan.

Glossary

SLIMF: (Small and Low Intensity Managed Forest) This policy was designed by the FSC to allow certifiers to identify operations that are eligible for assessment and oversight using simplified certification procedures and reducing certification costs for small and/or low intensity forest operations.

Closure document: A document prepared by the INAFOR at the request of the FMU after an annual cutting area has been harvested, which states that the activities covered in the operating plan were performed satisfactorily and therefore steps can be initiated for a new operating plan.

High Conservation Value Forests: High Conservation Value Forests are those that possess one or more of the following attributes:

a) Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refuges) and/or large landscape level forests, contained within or containing the management unit, where valuable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.

b) Forest areas that are in or contain rare, threatened or endangered 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 basic needs of local communities (e.g. subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).

Chain of custody: The process of monitoring the distribution channel for the product from the forest to its end use.

Forest certification: A voluntary, independent process based on an assessment of the environmental, social and economic aspects of forest operations.

Natural cycles: Nutrient and mineral cycles in forest ecosystems that affect the productivity of the area. Natural cycles involve interactions between soil, water, plants and animals.

Criterion: A means of judging whether a Principle (of Forest Management) has been fulfilled or not.

Use rights: Rights for the use of forest resources that can be defined by local customs, mutual agreements or prescribed by other entities holding access rights. These rights may restrict the use of some resources, particularly in regard to specific levels of consumption and harvesting techniques.

Biological diversity: The variability among living organisms from all sources, including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexities

of which they are a part; this includes diversity within species, between species and of ecosystems. (See Convention on Biological Diversity, 1992).

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

Threatened species: Any species that is likely to become endangered within the foreseeable future throughout all or a portion of its range.

Endangered species: Any species that is in danger of extinction within the foreseeable future throughout all or a significant portion of its range.

Native species: A species that occurs naturally in the region; endemic to the area.

Exotic species: An introduced species that is not native or endemic to the area.
Forest integrity: The composition, dynamics, functions and structural attributes of a natural forest.

Long term: The time scale of the forest owner, manager or concession holder as manifested in the management plans, the rate of harvesting and the commitment to maintain permanent forest cover. The length of time involved will vary according to the context and ecological conditions, and will be a function of how long it takes a given ecosystem to recover its natural structure and composition following harvesting or disturbance, or to produce mature or primary conditions.

Local laws: These include all legal norms given by organisms of government whose jurisdiction is less than the national level, such as departmental, municipal and indigenous norms.

Forest Management/Manager: These terms include the people responsible for the operational management of the forest resource and of the enterprise, the management system and structure and planning and field operations.

Genetically modified organisms: Biological organisms that have been induced by various means to have genetic changes.

Other forest types: Forest areas that do not fit the criteria for plantation or natural forests and which are defined more specifically by FSC-approved national and regional standards of forest stewardship.

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

Plantation: Forest areas lacking most of the principal characteristics and key elements of native ecosystems, which result from planting or silvicultural treatments.

Principle: An essential rule or element; in this case, in forest management.

Non-timber forest products: All forest products except timber. These include other materials obtained from trees, such as resins and leaves, as well as any other plant and animal products.

Indigenous peoples: "The descendants of the peoples who inhabited the present territory of a country, wholly or partially, at the time when persons of a different culture or ethnic origin arrived there from other parts of the world, overcame them and, by conquest, settlement, or other means reduced them to a non-dominant or colonial situation; who today live more in conformity with their particular social, economic and cultural customs and traditions than with the institutions of the country of which they now form a part, under State structure which incorporates mainly the national, social and cultural characteristics of other segments of the population which are predominant." (Working definition adopted by the United Nations Working Group on Indigenous Peoples).

Chemicals: The range of fertilizers, insecticides, fungicides and hormones that are used in forest management.

Succession: Progressive changes in species composition and forest community structure caused by natural processes (nonhuman) over time.

Tenure: Socially-defined agreements held by individuals or groups, recognized by legal statutes or customary practice, regarding the “bundle of rights and duties” of ownership, holding, access and/or usage of a particular land unit or the associated resources there within (such as individual trees, plant species, water, minerals, etc.)

Indigenous lands and territories: The total environment of the lands, air, water, sea, sea-ice, flora and fauna, and other resources which indigenous peoples have traditionally owned or otherwise occupied or used. (Draft Declaration of the Rights of Indigenous Peoples, Part VI).

Biological diversity values: The intrinsic ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components. (See Convention on Biological Diversity, 1992).
Communities: A group of people who live together under certain rules or who have the same interests or characteristics.

Annex

Annex 1
List of participants in the process of developing the Small and Low Intensity Managed Forests Standard in Nicaragua.

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30	Odi Useda	Dipilto	Nueva Segovia
31	Andrés Rosales	Santa Clara	Nueva Segovia
32	Marcelino Moncada	Santa Maria	Nueva Segovia
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34	Holman Davis Rodríguez	Mozonte	Nueva Segovia
35	Heinner Josué Hernández	Mozonte	Nueva Segovia
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53	Darwin de Jesús	Mozonte	Nueva Segovia
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55	Jaime Ramos	Ocotal	Nueva Segovia
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57	Adrian Cesar Suárez	Maniwuatla	RAAN
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61	Mauricio Ordoñez Alvarez	Sahsa	RAAN
62	Roy Brown Kailam	Boom Sirpi	RAAN
63	Jimmy Hernández Patterson	Yulu Siksikwas	RAAN
64	Clenton Rasfiels Sebastián	Klingna	RAAN
65	Wilmor Pinok Sulian	Sukatpin	RAAN
66	Simón Medaviz Pablo	Praka	RAAN
67	Pedro Ocean William	Yulo Siksikwas	RAAN
68	Roberto Omier Retilio	Kwakil	RAAN
69	Henrique Heppinston Torres	Auya Pihni	RAAN
70	Luis Tacio Herbacio	Panua	RAAN
71	Bernardina Taylor Muller	Sumubila	RAAN
72	Mateo Ocampo	Butko	RAAN
73	Edgar Vallecillo García	Naranjal	RAAN
74	Santo Mejía	Lapan	RAAN
75	Thompson Flores	Sin Sin	RAAN
76	Silvestre Petter	Santa Marta	RAAN
77	Joaquín Rugama	Truhlaya	RAAN
78	Félix Mora García	Kilometro 51	RAAN
79	Ezequiel Andrew	CEPISA /Las Crucetas	RAAN
80	Nicasio Pudis Emsly	Sin Sin	RAAN
81	Florentino Taylor A. Pinios	Sin Sin	RAAN
82	Herman Saya	Taura	RAAN
83	Rufino Johnson	Layasiksa	RAAN
84	Zundel Escobar Reyes	Puerto Cabezas	RAAN
85	Mike Jerry Garth	Puerto Cabezas	RAAN
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87	Kenia Mercado	Puerto Cabezas	RAAN
88	Moses Lampson	Puerto Cabezas	RAAN
89	Marisleyda M. Barrera Quant	Puerto Cabezas	RAAN
90	Carmen Algina Howard	Puerto Cabezas	RAAN

91	Wesley Young Zúniga	Puerto Cabezas	RAAN
92	Gerardo René Gutiérrez	Puerto Cabezas	RAAN
93	Lesbia García Ingram	Puerto Cabezas	RAAN
94	Mary Jane Labonte Mercado	Puerto Cabezas	RAAN
95	Jilevy Spellman Muller	Puerto Cabezas	RAAN
96	Urbano Absalón Evaristo	Puerto Cabezas	RAAN
97	Angel Brooks Casanova	Puerto Cabezas	RAAN
98	Ned Archibold	Puerto Cabezas	RAAN
99	Sand Marthing	Puerto Cabezas	RAAN
100	Dona Zamora López	Puerto Cabeza	RAAN
101	Eva María Padilla	Puerto Cabeza	RAAN
102	Manuel Castillo	Suakatpin	RAAN
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104	Heberto Saballos	Puerto Cabeza	RAAN
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106	Emetrio Ruiz Ochoa	Rosita	RAAN
107	Karina Martínez Ruiz	Rosita	RAAN
108	Carlos On Sang	Rosita	RAAN
109	Francisco Martínez Vásquez	Puerto Cabezas	RAAN
110	Harold Mauricio Rodríguez	Rosita	RAAN
111	José Juan Aguilar Meneses	Rosita	RAAN
112	Demetrio Frank Gómez	Rosita	RAAN
113	Omar Antonio Mercado	Rosita	RAAN
114	Lionzo Altamirano Rostrán	Rosita	RAAN
115	Amílcar Salvador Borge	Rosita	RAAN
116	Marco Julio Hislop	Rosita	RAAN
117	Aurelia Paterson	Rosita	RAAN
118	Victoria García Budier	Rosita	RAAN
119	Hugo Godoy Alfaro	Rosita	RAAN
120	Cornelio Rio Regez	Rosita	RAAN
121	Camilo Frank López	Andalucía	RAAN
122	Divinston Frank López	Rosita	RAAN
123	Ronni Sneyder Ismail	Rosita	RAAN
124	Gertrudis Urrutia Álvarez	Rosita	RAAN
125	Abraham Clark Rosales	Rosita	RAAN
126	Aidalina Ruiz Molina	Rosita	RAAN
127	Sarai López Cáceres	Rosita	RAAN
128	Brenda Jarquín Manzanares	Rosita	RAAN
129	Justo Taylor	Rosita	RAAN
130	Leandro Pekitte Taylor	Rosita	RAAN
131	Javier Judith López	Rosita	RAAN
132	Ivania Murillo Garmendia	Bonanza	RAAN
133	Juan Ramón Duarte	Bonanza	RAAN
134	Gregorio Rojas Rodríguez	Bonanza	RAAN
135	Omar Fuerte Sujo	Bonanza	RAAN
136	Carlos A. Corea Síu	Bonanza	RAAN
137	Sonia García Aguilar	Rosita	RAAN
138	Teresa Pineda Lagos	Bonanza	RAAN
139	Bernardino Pristel Bans	Rosita	RAAN

140	Julio Bendis Emus	Kakamuklaya	RAAN
141	Benicio González García	Rosita	RAAN
142	Abraham Lencho Anderson	Wasakin	RAAN
143	Morgan Johnny Simins	Wasakin	RAAN
144	Norman Fenly Montiel	Wasakin	RAAN
145	Ulises Flores Espinosa	Rosita	RAAN
146	Asencio Montalbán	Rosita	RAAN
147	Bridgieth Bleer	Wasakin	RAAN
148	Marlon Dalvez Casanova	Puerto Cabezas	RAAN
149	Roberto Marchena	Puerto Cabezas	RAAN
150	Nilska Zamora	Puerto Cabezas	RAAN
151	Karen Castellón	Puerto Cabezas	RAAN
152	Moisés Jirón	Leymus	RAAN
153	Emiliano Romero	Kuakil	RAAN
154	Moses Lampson	Puerto Cabezas	RAAN
155	Javier Juwith	Comunidad Batanea	RAAN
156	Thelma Taylor	Comunidad Fruta de Pan	RAAN
157	Geneautri Washington	Kuakil	RAAN
158	Iris Rodríguez	Managua	Managua
159	Celso Tórrez Ruiz	Quilalí	Nueva Segovia
160	Martha Pastrana	Comunidad Indígena Mozonte	Nueva Segovia
161	Mauricio Cajina	Ocotal	Nueva Segovia
162	Alejandro López Cálix	Ocotal	Nueva Segovia
163	Harold Solórzano	Ocotal	Nueva Segovia
164	Denis Jiménez	Dipilto	Nueva Segovia

Annex 2

Forest Sector Laws in Nicaragua

National Laws

1. Law on conservation, promotion and sustainable development of the forest sector 462
2. General Law on the Environment 217 and its amendments and additions 647
3. Penal Code 461
4. Law on Forest Bans 585
5. Water Law
6. Administrative rules DE 81-2007
7. Obligatory technical forest norms (NTON, for the initials in Spanish)
8. Forest Policy
9. Decree on protected areas 01-2007
10. Law on seas and coasts
11. Constitution of the Republic
12. Forest policy 03-06-08
13. Organic Law for the Executive Branch 290
14. Law on Municipalities (Law 40)
15. Law 641. Law on the New Procedural and Penal Code (CPP, for its initials in Spanish)

16. Law 469. Law on Cooperatives

Laws of the Autonomous Atlantic Regions of Nicaragua

1. Law 28 and its amendment: Law on Autonomy
2. Law 4-45: Law on the Community Property Regime of Indigenous Peoples and Ethnic Communities.

Conventions signed by Nicaragua

1- Convention on Biological Biodiversity
2- Convention on International Trade in Threatened Species of Flora and Fauna (CITES)
3- Framework Convention on Climate Change
4- ILO Convention, especially No. 87, concerning freedom of association and the right to organize, No. 155 concerning the safety and health of forest operators in the working environment.

Annex 3

Main Threatened and Endangered Species, CITES Appendix

National Species included in Appendices		
Fauna		
Appendix I		
REPTILES		
	Lagarto (American crocodile)	*Crocodrylus acutus*
	Tortuga Caguama (Loggerhead sea turtle)	*Caretta caretta*
	Tortuga Carey (Hawksbill sea turtle)	*Eretmochelys imbricata*
	Tortuga Tora (Leatherback sea turtle)	*Dermochelys coriácea*
	Tortuga Torita (Black sea turtle)	*Chelonia agassizi*
	Tortuga Verde (Green sea turtle)	*Chelonia mydas*
	Tortuga Paslama (Olive Ridley sea turtle)	*Lepidochelys olivacea*
BIRDS		
	Águila Real (Harpy eagle)	*Harpia harpyja*
	Halcón Peregrino (Peregrine falcon)	*Falco pregrinus*
	Milano Pico de Garfio (Cuban kite)	*Chondroierax uncinatus*
	Lapa Roja (Scarlet macao)	*Ara macao*
	Lapa Verde (Great green macao)	*Ara ambigua*
	Pancho Galán (Jabiru)	*Jabiru mycteria*
	Quetzal (Resplendent quetzal)	*Pharomachrus mocinno*
	Lora nuca amarilla (Yellow-naped amazon)	*Amazona auropalliata*
MAMMALS		
	Mono Congo (Mantled howler	*Alouatta palliata*

	monkey)	
	Mono Araña (Black-handed spider monkey)	*Ateles geoffroyi*
	Nutria (Neotropical Otter)	*Lutra longicaudis*
	Puma (Cougar)	*Felis concolor*
	Tigrillo (Ocelot)	*Felis pardalis*
	Caucelo (Tiger cat)	*Felis tigrina*
	Gato de monte (Margay)	*Felis wiedii*
	Leoncillo (Puma Yagouaroundi)	*Felis Yagouaroundi*
	Tigre (Jaguar)	*Panthera onca*
	Manatí (West Indian manatee)	*Trichechus manatus*
	Danto (Baird's tapir)	*Tapirus bairdii*
	Delfín, Bufo negro (Tucuxi dolphin)	*Sotalia fluviatilis*
Appendix II		
AMPHIBIANS		
	Ranita Dorada (Green-and-black poison dart frog)	*Dendrobates auratus*
	Ranita de Sangre (Strawberry poison dart frog)	*Dendrobate pumilio*
REPTILES		
	Boa Arborícola (Annulated tree boa)	*Corallus annulatus*
	Boa Arborícola (Amazon tree boa)	*Corallus enydris*
	Boa Común (Boa constrictor)	*Boa constrictor*
	Boita de Panamá (Panamanian dwarf boa)	*Ungaliophis panamensis*
	Cuajipal Caiman (Alligator caiman)	*Crocodylus chiapasius*
	Culebra Chatilla (Loxocemus bicolor)	*Loxocemus bicolor*
	Iguana Verde (Green iguana)	*Iguana iguana*
	Zopilota (Mussurana)	*Clelia clelia*
BIRDS		
	Águila Pescadora (Osprey)	*Pandion haliaetus*
	Águila crestada (Crested eagle)	*Morphnus guianensis*
	Aguilucho de las sierras (Ornate hawk-eagle)	*Spizaetus omatus*
	Aguilucho negro (Black hawk-eagle)	*Spizaetus tyrannus*
	Aguilucho blanquinegro (Black-and-white hawk-eagle)	*Spizaetus melanoleucus*
	Águila solitaria (Montane Solitary eagle)	*Harpyhaliaetus solitarius*
	Gavilán tarso afilado (Bicoloured hawk)	*Accipiter bicolor*
	Gavilancito (Tiny hawk)	*Accipiter superciliosus*
	Gavilán bicolor (Bicoloured hawk)	*Accipiter bicolor*
	Gavilán pecho blanco (White-	*Accipiter chionogaster*

	breasted hawk)	
	Gavilán blanco (White hawk)	*Leucopternis albicollis*
	Gavilán cola blanca (White-tailed hawk)	*Buteo albicaudatus*
	Gavilán cola rojiza (Red-tailed hawk)	*Buteo jamaicensis*
	Gavilán cola ancha (Broad-winged hawk)	*Buteo platypterus*
	Gavilán cola listada (Zone-tailed hawk)	*Buteo albonotatus*
	Gavilán de las rondas (Roadside hawk)	*Buteo magnirostris*
	Gavilán gris (Grey hawk)	*Buteo nitidus*
	Gavilán pollero (Short-tailed hawk)	*Buteo brachyurus*
	Gavilán de swainson (Swainson's hawk)	*Buteo swainsonii*
	Gavilán de las marismas (Northern harrier)	*Circus cyaneus*
	Gavilán crepuscular (Harris hawk)	*Parabuteo unicintus*
	Gavilán cangrejero (Common black hawk)	*Buteogallus anthracinus*
	Gavilán negro (Great black hawk)	*Buteogallus urubitinga*
	Gavilán palomero (Pigeon hawk)	*Quitina plumbea*
	Gavilán ranero (Crane hawk)	*Geranospiza caerulescens*
	Gavilán pescador (Black-collared hawk)	*Busarellus nigricollis*
	Gavilán semiplomizo	*Leucopternis semiplumba*
	Milano cabeza gris (Gray-headed kite)	Leptodon cayannensis
	Milano cola blanca (White-tailed kite)	*Elanus leucurus*
	Milano cola de tijera (Swallow-tailed kite)	*Elanoides forficatus*
	Milano pardo pecho blanco	*Campsonyx swainsonii*
	Milano bidentado (Double-toothed kite)	*Harpagus bidentatus*
	Milano caracolero (Snail kite)	*Rosthramus sociabilis*
	Caracara crestado (Crested caracara)	*Polyborus plancus*
	Caracara avispero (Red-throated caracara)	*Daptrius americanus*
	Gavilancito, merlín, esmerejón (Merlin)	*Falco columbarius*
	Sernícalo americano (American kestrel)	*Falco sparverius*
	Halcón murciélago (Bat falcon)	*Falco rufigularis*
	Halcón plomizo (Aplomado falcon)	*Falco femoralis*
	Halcón pechicanelo (Orange-breasted falcon)	*Falco deiroleucus*

	Guás selvático (Collared forest falcon)	*Micrastur semitorquatus*
	Guás cagón (Laughing falcon)	*Herpetotheres cachinnans*
	Lora frente roja (Red-lored Amazon)	*Amazona autumnalis*
	Lora corona azul Amazona farinose (Red-lored Amazon)	*Amazona autumnalis*
	Cotorra frente blanca (White-fronted Amazon)	*Amazona albifrons*
	Perico verde jalacatero (Green parakeet)	*Aratinga holochlora*
	Perico frente oliva (Olive-throated parakeet)	*Aratinga nana*
	Chocoyo frente carmesí (Finsch's parakeet)	*Aratinga finschi*
	Chocoyo frente naranja (Orange-fronted parakeet)	*Aratinga canicularis*
	Chocoyo zapoyolito (Orange-chinned parakeet)	*Brotogeris jugularis*
	Cotorra corona blanca (White-crowned parrot)	*Pionus senilis*
	Loro capucha café (Brown-hooded parrot)	*Pionopsitta haemototis*
	Chocoyo listado (Barred parakeet)	*Bolborhynchus lineola*
	Tucán pico aquillado (Keel-billed toucan)	*Ramphastus sulfuratus*
	Búho oscuro (Stygian owl)	*Asio stygius*
	Búho listado (Striped owl)	*Asio clamator*
	Búho penachudo (Crested owl)	*Lophostrix cristata*
	Búho de anteojos (Spectacled owl)	*Pulsatrix perspicillata*
	Tecolotito sabanero (Pacific screech owl)	*Otus cooperi*
	Tecolotito manchado (Whiskered screech owl)	*Otus trichopsis*
	Tecolotito bermiculado (Vermiculated screech owl)	*Otus vermiculatus*
	Búho negriblanco (Black-and-white owl)	*Ciccaba nigrolineata*
	Buho café (Mottled owl)	*Ciccaba virgata*
	Mochuelo pigmeo (Ferruginous pygmy owl)	*Glaucidium brasilianum*
	Mochuelo centroamericano (Least pygmy owl)	*Glaucidium minutissimum*
	Buho grande (Great horned owl)	*Bobo virginianus*
	Tecolotito volcanero (Unspotted saw-whet owl)	*Aegolius ridgwayi*
	Lechuza de los campanarios (Barn owl)	*Tyto alba*
	Colibrí rabiazul (Steely-vented	*Amazilia saucerrottei*

	hummingbird)	
	Colibrí canela (Cinnamon hummingbird)	*Amazilia rutila*
	Colibrí sable violáceo (Violet Sabrewing)	*Campylopterus hemileucurus*
	Colibrí barbudo (Band-tailed Barbthroat)	*Threnetes ruckeri*
	Colibrí pechiescamoso (Scaly-breasted Hummingbird)	*Phaeochroa cuvierii*
	Colibrí orejiviolaceo pardo (Brown violet-ear)	*Colibrí delphinae*
	Colibrí orejiviolaceo verde (Green violet-ear)	*Colibrí thalassinus*
	Colibrí cabeciazul (Violet-headed hummingbird)	*Klais guimeti*
	Colibrí gorjiverde (Emerald-chinned hummingbird)	*Abeillia abeillei*
	Colibrí zafiro oídos blancos (White-eared hummingbird)	*Hylocharis leucotis*
	Colibrí zafiro colidorado (Blue-throated goldentail)	*Hylocharis eliciae*
	Colibrí pechiazul (Blue-chested hummingbird)	*Amazilia amabilis*
	Colibrí frentiazul (Azure-crowned hummingbird)	*Amazilia cyanocephala*
	Colibrí coliazul (Blue-tailed hummingbird)	*Amazilia cyanura*
	Colibrí rabirrufo (Rufous-tailed hummingbird	*Amazilia tzacatl*
	Colibrí colirrayado (Stripe-tailed hummingbird	*Eupherusa eximia*
	Colibrí copete nevado (Snowcap)	*Michrochera albocoronata*
	Colibrí gorriviolaceo	*Eugene fulgens*
	Colibrí gorgiazul (Sparkling-tailed hummingbird)	*Tilmatura dupontii*
	Colibrí garganta rubí (Ruby-throated hummingbird)	*Archilochus colubris*
	Colibrí esmeralda cola de tijera (Fork-tailed "garden" emerald)	*Chlorostilbon canivetti*
	Colibrí crestinegra (Black-crested coquette)	*Lophornis helenae*
	Colibrí pochotero (Plain-capped starthroat)	*Heliomaster constantia*
	Colibrí piquilargo (Long-billed starthroat)	*Heliomaster longirostris*
	Colibrí gorgipúrpura (Green-breasted mountaingem)	*Lampornis sybillae*
	Colibrí enmascarado (Purple-crowned fairy)	*Heliothrix barroti*

	Colibrí ermitaño bronceado (Bronzy hermit)	*Glaucis aenea*
	Colibrí ermitaño enano (Little hermit)	*Phaethornis longuemareus*
	Colibrí ermitaño colilargo (Long-tailed hermit)	*Phaethornis superciliosus*
	Colibrí jacobino nuquiblanco (White-necked jacobin)	*Florisuga mellivora*
	Colibrí manguito colipúrpura (Green-breasted mango)	*Anthracothorax prevostii*
	Colibrí ninfa violeta y verde (Violet-crowned woodnymph)	*Thalurania colombica*
	Colibrí patirojo (Bronze-tailed plumeleteer)	Chalybura urochrysia
MAMMALS		
	Mono carablanca (White-headed capuchin)	*Cebus capucinus*
	Oso hormiguero gigante (Giant anteater)	*Myrmecophaga tridáctyla*
	Perezoso trigarfiado (Brown-throated sloth)	*Bradypus variegatus*
	Jabalí de collar (Collared peccary)	*Tayassu tajacu*
	Jabalí labiblanco (White-lipped peccary)	*Tayassu pecari*
	Delfín calderón negro (Short-finned pilot whale)	*Globicephala macrorhynchus*
	Delfín punteado (Spinner dolphin)	*Stenella longirostris*
	Delfín tornillo (Spinner dolphin)	*Stenella longirostris*
	Delfín (Short-snouted spinner dolphin)	*Stenella clymene*
	Delfín pez merlín (Bottlenosed dolphin)	*Tursiops truncatus*
	Delfín manchado del atlántico (Atlantic Spotted Dolphin)	Stenella plagiodon
ARACHNIDS		
	Araña picacaballo (Curlyhair tarantula)	*Brachypelma albopilosum*
GASTROPODS		
	Caracol gambute (Queen conch)	Strombus gigas
SEA CORALS		
	Anthozoa	
	Coral	*Antiphatari spp (*)*
	Coral negro	*Antiphates tanacetum*
	Coral negro	*Antiphates lenta*
	Coral negro	*Antiphates penaceae*
	Coral negro	*Aphaniphathes abietina*
	Coral	*Sleractinia spp (**)*

	Coral (Blushing star coral)	*Stephanocoenia michelini*
	Coral (Eight-ray finger coral)	*Madracis formosa*
	Coral Madrecis	*Madracis pharensis luciphila*
	Coral cuerno de alce (Staghorn coral)	*Acropora cervicornis*
	Coral cuerno de alce (Elkhorn coral)	*Acropora palmata*
	Coral (Thin leaf lettuce coral)	*Agaricia tenuifolia*
	Coral (Sunray lettuce coral)	*Leptoseris cucullata*
	Coral (Coral natans)	*Mycetophilia natans*
	Coral	*Diploria labrinthibris*
	Coral (Symmetrical brain coral)	*Diploria strigosa*
	Coral Cerebro (Golfball coral)	*Favia fragum*
	Coral Cerebro (Boulder star coral)	*Montastrea annularis*
	Coral (Pillar coral)	*Dendrogyra cylindrus*
	Coral	*Dichocoenia spp*
	Hydrozoa	
	Coral	*Milleporidae spp*
	Coral (Blade fire coral)	*Millepora complanata*
	Coral (Box fire coral)	*Millepora squarrosa*
	Coral (Mustard hill coral)	*Porites astreoides*
	Coral (Blue crust coral)	*Porites branneri*
	Coral (Finger coral)	*Porites porites*
	Coral (Lesser starlet coral)	*Siderastrea radians*
	Coral	*Siderastrea porites*
	Coral (Smooth flower coral)	*Eusmilia fastigiata*

Source: MARENA CITES NI. Web page: www.marena.gob.ni

Annex 4

List of Banned Chemicals

List of Chemical Pesticides Banned in Certified Forests (Taken from: Chemical Pesticides in Certified Forests: Interpretation of the FSC Principles and Criteria. FSC International Policy, 2002)

Name of chemical	Reason for prohibition
Aluminium phosphide	Toxicity similar to sodium cyanide. WHO Table 7.
Aldicarb	WHO Table 1, Class Ia.
Aldrin	CHC
Benomyl	Persistence: 6 - 12 months. Toxicity: LD50 100 mg/kg. LC50 60 - 140 microg/lL. Mutagen
Brodifacoum	WHO Table 1, Class Ia
Bromadialone	WHO Table 1, Class Ia.
Carbaryl	Toxicity: LD50 of 100 mg/kg in mice.
Chlordane	Organochlorine. Persistence: half-life of 4 years.

	Toxicity: oral LD50 in rabbits approx. 20-300 mg/kg.
DDT	CHC
Diazinon	Toxicity: 0.0009 mg/kg/day. LD50 2.75 - 40.8 mg/kg.
Dicofol	Persistence: 60 days. Biomagnification: log Kow 4.28
Dieldrin	CHC
Dienochlor	Organochlorine. Toxicity: LC50 of 50 microg/l in aquatic environments.
Difethialone	WHO Table 1, Class Ia.
Dimethoate	Toxicity: RfD 0.0002 mg/kg/day. LD50: 20 mg/kg in pheasants.
Endosulfan	Organochlorine. Toxicity: LD50 much less than 200 mg/kg in several mammals. RfD 0.00005 mg/kg/day.
Endrin	Organochlorine. Persistence: half-life >100 days. Toxicity: LD50 <200 mg/kg. Biomagnification high in fish.
Gamma-HCH, Lindane	CHC
Heptachlor	Organochlorine. Persistence: half-life 250 days. Toxicity: LD50 100-220 mg/kg in rats, 30-68 mg/kg in mice. RfD 0.005 mg/kg/day. Biomagnification: Log Kow 5.44.
Hexachlorobenzene	WHO Table 1, Class Ia.
Mancozeb	Toxicity: RfD 0.003 mg/kg/day.
Methoxychlor	Persistence: half-life 60 days. Toxicity: RfD 0.005 mg/kg/day. LC50 <0.020 mg/l for trout.
Metolachlor	Biomagnification: log Kow 3.45.
Mirex	Organochlorine. Persistence: half-life > 100 days. Toxicity: LD50 50-5000 mg/kg. Carcinogen. Bioaccumulation high.
Oryzalin	Persistence: Half-life 20-128 days. Toxicity: LD50 100 mg/kg in birds.
Oxydemeton-methyl, Metasystox	WHO Table 2, Class Ib.
Oxyfluorfen (Goal, Koltar)	Toxicity: RfD 0.003 mg/kg/day, Log Kow 4.47.
Paraquat	Persistence: > 1000 days. Toxicity: RfD 0.0045 mg/kg/day. Log Kow 4.47.
Parathion	WHO Table 1, Class Ia.
Pentachlorophenol	WHO Table 2, Class Ib.
Permethrin	Toxicity: Log Kow 6.10. LC50 0.0125 mg/litre in trout.
Quintozene	Organochlorine. Persistence: 1 - 18 months. Toxicity: high. Biomagnification: Log Kow 4.46.
Simazine	Toxicity: RfD 0.005 mg/kg/day.
Sodium cyanide	WHO Table 2, Class Ib.
Sodium fluoroacetate, 1080	WHO Table 1, Class Ia.
2,4,5-T	Organochlorine. Toxicity: medium to high in mammals. Often contaminated with dioxin.
Trifluralin	Toxicity: RfD 0.0075 mg/kg/day. Log Kow 5.07. LC50 0.02 mg/L.
Toxaphene (Camphechlor)	Organochlorine. Persistence: > 100 days, high. Bioaccumulation high.
Warfarin	WHO Table 2, Class Ib.
Pesticides containing lead (Pb), cadmium (Cd), arsenic (As), or mercury (Hg)	

Annex 5

GUIDE FOR EVALUATING GENERAL MANAGEMENT PLANS FOR PINE FORESTS

OFFICE REVIEW FOR APPROVAL

1. General Information

Name of the General Management Plan	Name of the forest owner
Beneficiary of the plan	Registration code
Beneficiary's identification number	File code
Name of the supervisor	Accreditation code

Date Received						Date Reviewed						Date Approved					
Day		Month		Year		Day		Month		Year		Day		Month		Year	

1.1. Location of the Property.

Site or district	Municipality	Department

1.2. Geographic Coordinates.

Name of the Topographic Sheet:					Number:
Coordinates in the document			Coordinates according to the map		
Point	Longitude	Latitude	Point	Longitude	Latitude

2. Current Use of the Land: Measured in hectares.

Type of use	Symbol	Area in Has.	Type of use	Symbol	Area in Has.
Productive harvestable area	11		Lake, river	50	
Productive non-harvestable area	12		Settlement	60	
Agroforest area	20		Crop	70	
Swamp	30		Livestock production	80	
Country rock	40		Total area of the premises		

3. Total forest by type of development:

Development type	Symbol	Area in Has.	Development type	Symbol	Area in Has.
Unforested	10		In development	30	
Regeneration	21		Mature	40	
Young forest	22		Total productive area		

4. Types of land tenure. On paper bearing a seal or an authenticated photocopy.

Recorded Public Deed (Royal Rights)			
Property Number	Volume	Page	Entry

Other types of land tenure					
Type of title	Yes	No	Type of title	Yes	No
Supplementary title			Right of possession		
Agrarian Reform Title					

5. General Contents of the Plan.

Contents of development	Yes	No	Contents of development	Yes	No
Summary			Repopulation plan		
Objectives			Cutting plan		
Location on topographic sheet			Protection plan		
Coordinates			Growth forecast		
Map of stands and infrastructure			Document of owner's commitment.		
Sheet describing the forest			Annual allowable cutting or Silvicultural Possibility		
Silvicultural treatments					

6. Technical data in the plan by strata.

Stratum	Number of stands	Area in Hectares	Volume M^3
Unforested area			
Forest in regeneration			
Young forest			
Developing forest			
Mature forest			
Total productive area			

7. General Technical Data in the Plan.

Technical data proposed in the plan		Data calculated by the Delegate	
Concept in M^3 per hectare	Amount	Concept in m^3 per hectare	Amount
Annual permissible cutting volume		Annual permissible cutting volume	
Volume period I		Volume period I	
Volume period II		Volume period II	

Volume period III		Volume period III	

8. Technical data in the plan per compartment or stand.
Specify errors and adjust the Management Plan by compartments.

Stand or compartment	Concept analyzed	Unit	Value in planned GFMP	Actual value
	Type of development	Code		
	Basal area	M^2/ha		
	Density	No./ha		
	Height	Ms.		
	DAP	Cms.		
	Age	Years		
	Pending	%		
	Distribution	Range		
	Texture	Code		
	Site index	Code		

9. Silvicultural Treatments.

Stand	Treatments 1	Period	Treatments 2	Period	Treatments 3	Period

Name and signature of the Evaluation Technician:
_____
Date: _____

GUIDE FOR EVALUATING GENERAL MANAGEMENT PLANS FOR PINE FORESTS
FIELD REVIEW FOR APPROVAL

GUIA PARA EVALUAR PLANES GENERALES DE MANEJO EN PINARES REVISION DE CAMPO PARA SU APROBACION

1.1 General Information in the Plan.

Name of the General Management Plan	Name of the forest owner
Beneficiary of the plan	File code
Name of the supervisor	Accreditation code

1.2 .Location of the Property.

Site or District	Municipality	Department

1.3 Verification of the coordinates of some vertices or boundary markers

Boundary stone or vertex		Coordinates in the Plan		Verified Coordinates	
No.	Brief description	Latitude	Longitude	Latitude	Longitude

2. Data from the forest inventory. Verification of 25% of the stands.

Stand number 1			
Concept analyzed	Unit	Value in the Plan	Actual Value
Type of development	Code		
Basal area	M^2		
Density	No./ha		
Height	Mts.		
DAP	Cms.		
Age	Years		
Pending	%		
Distribution	Range		
Texture	Code		
Site index	Code		

Stand number 2			
Concept analyzed	Unit	Value in the Plan	Actual Value
Type of development	Code		
Basal area	M^2		
Density	No./ha		
Height	Mts.		
DAP	Cms.		
Age	Years		
Pending	%		
Distribution	Range		
Texture	Code		
Site index	Code		

Stand number 3			
Concept analyzed	Unit	Value in the Plan	Actual value
Type of development	Code		
Basal area	M^2		
Density	No./ha		
Height	Mts.		
DAP	Cms.		

Age	Years		
Pending	%		
Distribution	Range		
Texture	Code		
Site index	Code		

3. Coincides with the identification of the stands:

Yes	
No	

4. Coincides with the signage in the Management Plan:

Yes	
No	

5. Conclusion: Note here if the inventory coincides or not with planning and delineation of the stands, adjusted to the methodology for development of the GMP. Approved or Not Approved.

_____
_____
_____
_____

Name and signature of the Evaluation Technician: _____
Date of the Review: _____

POST-HARVEST GUIDE FOR EVALUATING ANNUAL OPERATING PLANS FOR PINE FORESTS
FIELD REVIEW FOR FOLLOW-UP

1. General Information in the Plan

Name of the General Management Plan	Name of Annual Operating Plan
Name of the forest owner	Beneficiary of the Annual Operating Plan
Name of the Supervisor	Accreditation code
AOP code:	GMP code

Date of supervision						Date finalized						Evaluation (Mark X)
Day		Month		Year		Day		Month		Year		Correct execution
												Incorrect execution

1.1. Location of the Property.

Department	Municipality	Site or district

1.2. Geographic Coordinates.

Name of the Topographic Sheet:					Number:
Coordinates in the document			Coordinates according to the map		
Point	Longitude	Latitude	Point	Longitude	Latitude

2. EXECUTED.

2.1. Area and volume of trees planned to be harvested and to be left.

Annual harvest area in hectares	
Total trees authorized	
Total volume authorized	
Total trees to be left	
Total volume to be left	

3. INFRASTRUCTURE.

a. Roads

Description	Length in Kms.	Width in Ms.
Primary		
Secondary		
Tertiary		
Maintenance		

b. Gathering yards

Description	Amount	Dimensions	Total area affected
Mountainous			
All seasons			

4. STANDS EVALUATED:

Compartment Number: _____. Answer Yes or No, or show the amounts done.

Total area executed (Has)		Clearing (Has)		Round in linear Ms.	
Treatment given (code)		Volume harvested		Round in meters of width	
Trees harvested		Conservation works		Pest monitoring	
Trees left standing		Signage		Follow-up on natural regeneration	
Piling up of harvest residues		Protection of rivers, ravines, etc.		Surveillance brigades	
Damages to the forest		Fire control		Pest control	
Percentage of cutting done in trees and basal area		Stand identification and delineation		Stand pending execution or in execution	

Compartment Number: _____. Answer Yes or No, or show the amounts done.

Total area executed (Has)		Clearing (Has)		Round in linear Ms.	
Treatment given (code)		Volume harvested		Round in meters of width	
Trees harvested		Conservation works		Pest monitoring	

Trees left standing		Signage		Follow-up on natural regeneration	
Piling up of harvest residues		Protection of rivers, ravines, etc.		Surveillance brigades	
Damages to the forest		Fire control		Pest control	
Percentage of cutting done in trees and basal area		Stand identification and delineation		Stand pending execution or in execution	

Complies with the technical norms and administrative rules:

5. Control of stocks in mountain yards.

Sawlog number	Species	Average diameter	Length	Volume	Observation

The sawlog number should be the same as the number of the felled tree. If it is sawed, it should be numbered 1-A, 1-B, that is, sawlogs A and B were obtained from tree No. 1.

6. Report of Forest Transportation.

Note: This activity should be performed for the purpose of monitoring and assessing the percentage of volume transported and at the same time identifying whether the authorized permit has been exceeded.

Beneficiary of permit		Date of issuance of permit	
Permit No.		Permit expiration date	

No. of guides	Volume transported	Surplus volume transported	%	Observations

7. Control of Guides.

No. of Guides submitted to the delegation.	No. of Guides not used	Observations

Name and signature of the Evaluation Technician:

_____

Name and signature of the Supervisor:

_____

Accreditation code:

_____

Signature of participants:

_____

ANNEX 6

List of International Conventions

- *Convention on Biological Diversity* www.cbd.int
- *ILO Convention169 on Indigenous and Tribal Peoples in Independent Countries* www.**oit**chile.cl
- *Central American Convention on Forests www.iucn.org/places/orma*
- *KYOTO Protocol, United Nations Framework Convention on Climate Change* www.**cambio-climatico**.com/**protocolo-de-kyoto**
- *Convention for the Conservation of Biodiversity and the Protection of Wilderness Areas in Central America www.biodiv.org/biosafety/protocol.asp*
- *Convention on International Trade in Endangered Species of Wild Fauna y Flora www.conabio.gob.mx*
- *CITES Convention www.cites.org*
- *Ramsar Convention on Wetlands of International Importance* www.**ramsar**.org
- *ILO Convention 87 (Freedom of Association and Protection of the Right to Organise) www.ilo.org*
- *Convention establishing the Central American Commission on the Environment and Development* www.sica.int