SCS Draft Interim Standard For Natural Forest and Plantation Forest Management Certification in Indonesia Under the Forest Stewardship Council

A. INTRODUCTION

This document contains the Indonesia Interim Standard used by Scientific Certification Systems. The scope of this standards includes both natural and plantation forests. Once there is an official FSC accredited standard for use in Indonesia, all further evaluations will be done against said standard. This standard complies with all applicable FSC International policies, standards, and advice notes. This standard was developed by adapting the SCS Generic Interim Standard for local application in Indonesia. The adaptation process included reviewing other FSC Interim forest certification standards in use and relevant local laws. Prior to the full assessment SCS will solicit input from local auditors, stakeholders, and others familiar with forest certification in Indonesia to produce Version 2.0 of this standard.

B. STANDARD USE

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

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

PRINCIPLE #1: COMPLIANCE WITH LAWS AND FSC PRINCIPLES

Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.

1.1. Forest management shall respect all national and local laws and administrative requirements. **Note: Non-conformance to this Criterion constitutes a *Major Failure* and precludes award of certification until appropriately corrected.**

Performance Indicators:
1.1.1) FME shall demonstrate a record of compliance with relevant provincial and local laws and regulations.

1.1.2) FME shall have texts of existing relevant national laws available in the forest management unit. Relevant laws are listed in Annex 1.
1.1.3) If FME has law compliance issues, the issues shall have being resolved expeditiously with the designated government authorities.
1.1.4) FME shall guarantee and respect human rights.

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

Performance Indicators:

1.2.1) FME shall be up-to-date on all applicable payments of local taxes, timber rights or leases, fees, royalties, etc.

1.2.2) Where FME is not up-to-date on payments, a plan for completing all payments shall have been agreed to with relevant institutions.

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

Performance Indicators:
1.3.1) FME shall be aware of and understand the legal and administrative obligations with respect to relevant international agreements to which Indonesia is a signatory. These are listed in Annex 2.

1.3.2) FME operations shall meet the intent of applicable conventions including CITES, Convention on Biological Diversity and ILO conventions (29, 87, 98, 100, 105, 111, 138, 182 and other binding conventions).

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 by the involved or affected parties.

Performance Indicators:

1.4.1) Conflicts between laws, FSC P&C and international treaties or conventions shall be identified by FME and brought to the attention of SCS (or SCS auditors during certification assessment).

1.4.2) FME should work in conjunction with the appropriate regulatory bodies and other parties to resolve conflicts between laws/regulations and FSC Principles or Criteria.

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

Performance Indicators:

1.5.1) The forest management unit(s) shall be protected from unauthorized harvesting activities and other activities not controlled by forest manager or local people with use rights.

1.5.2) For large operations, a system shall exist for monitoring, documenting and reporting to the appropriate authority instances of illegal harvesting, settlement, occupation or other unauthorized activities.

1.5.3) FME shall secure forest area and document size of change in closure of land area due to encroachment, conversion of forest area functions, fires and other impediments.

1.6. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria. **Note: Non-conformance to this Criterion constitutes a *Major Failure* and precludes award of certification until appropriately corrected.**

Performance Indicators:
1.6.1) For large operations, FME shall have a publicly available policy or statement committing the organization to adhere to the FSC certification standards on the forest under assessment.

1.6.2) FME shall not implement activities that blatantly conflict with the FSC P&C on forest areas outside of the forest area under assessment.

1.6.3) FME shall disclose information on all forest areas over which the FME has some degree of management responsibility to demonstrate compliance with current FSC policies on partial certification and on excision of areas from the scope of certification.

PRINCIPLE #2: TENURE AND USE RIGHTS AND RESPONSIBILITIES

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

2.1. Clear evidence of long-term forest use rights to the land (e.g. land title, customary rights, or lease agreements) shall be demonstrated. **Note: Non-conformance to this Criterion constitutes a *Major Failure* and precludes award of certification until appropriately corrected.**

Performance Indicators:
2.1.1) FME shall have documented evidence of legal, long term (at least one rotation length or harvest cycle) rights to manage the lands and to utilize the forest resources for which certification are sought.
2.1.2) FME shall guarantee land utilization as a forest area.

2.1.3) FME shall clearly delineate boundaries between forest concession areas and local community areas, with approval by interested parties.

2.1.4) FME shall ensure that boundary delineation process is collaboratively conducted by relevant parties.

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.

Performance Indicators:
2.2.1) All legal or customary tenure or use rights to the forest resource of all local communities shall be clearly documented by the forest managers. These rights shall be formalized through a local decree (perda) and/or through the determination of the boundaries of rights areas through participatory mapping.

2.2.2) FME shall provide evidence that free and informed consent to management activities affecting use rights has been given by local communities or affected parties.

2.2.3) FME planning processes shall include participation of local communities or parties with legal or customary tenure or use rights.

2.2.4) FME shall ensure community consent to management activities was granted in a manner that:
• Allowed adequate time to make decisions according to customary procedures;
• Ensured a full and open provision of information in forms and languages to make them understandable; and,
• Ensured the absence of duress, intimidation, threat and negative activities.

2.2.5) FME shall guarantee full inter-generational community access and control over traditional forest areas and forest product utilization.

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.

Performance Indicators:
2.3.1) FME shall use mechanisms for resolving disputes over tenure claims and use rights that respectfully involve the disputants and are consistent in process.
2.3.2) FME should not be involved in outstanding disputes of substantial magnitude on the candidate forest area that involve a significant number of interests.

2.3.3) FME shall demonstrate significant progress achieved to resolve major disputes.

2.3.4) FME shall document and maintain records of communication on disputes and their resolution, including evidence that the dispute have been resolved.

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.

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. **Note: Non-conformance to this Criterion constitutes a *Major Failure* and precludes award of certification until appropriately corrected.**

Performance Indicators:
3.1.1) FME shall identify Indigenous peoples with customary/traditional rights to forest resources (timber and non-timber) where indigenous people have established customary or legal rights to the land or forest resources and their entitlements formally recognized in written agreements. Specific areas should be marked on maps. The rights identified shall be recognized through a local decree (perda) and/or through the determination of the boundaries of rights areas through participatory mapping.

3.1.2) No forest management operations shall take place in areas identified under 3.1.1 above, without clear evidence of free and informed consent of the indigenous peoples claiming such land, territories or customary rights.

3.1.3) Agreements with indigenous groups shall be honored.

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

Performance Indicators:
3.2.1 There shall be no evidence or indication that the FME threatens the rights and resources of indigenous peoples.

3.2.2 FME shall minimize impact of management unit on social and cultural integration.

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.

Performance Indicators:
3.3.1) Special sites of indigenous cultural, ecological, economic or religious significance shall be documented in management planning documents. They should be identified on maps or in the forest.

3.3.2) Policies and procedures shall include the involvement of indigenous people, or specialists they designate, in the identification of special sites.

3.3.3) Special sites should be identified in management/operational plans. When definitive identification is difficult, FME shall undertake and document diligent efforts to identify special sites.

3.3.4) Special sites shall be protected during forest operations.

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.

Performance Indicators:

3.4.1) Written or verbal agreements on terms of compensation shall exist when there is use of traditional knowledge for commercial purposes.

3.4.2) Compensation systems for the use of traditional knowledge shall be in place prior to commencement of forest operations which affect indigenous interests.

PRINCIPLE #4: COMMUNITY RELATIONS AND WORKER'S RIGHTS

Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities.

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

Performance Indicators:

4.1.1 Local communities and residents shall be given equal or preferential opportunities

in forest management activities in terms of employment, training, and provision of supplies to FME, and other benefits or opportunities.

4.1.2 Empowerment of community and employees shall be promoted through the establishment and/or strengthening of community/employee institutions.

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

Performance Indicators:

4.2.1) Wages and other benefits (health, retirement, worker's compensation, housing, food) for full-time staff and contractors are fair and consistent with (not lower than) prevailing local standards.

4.2.2) FME shall implement a program of worker safety

4.2.3) Health and safety measures comply with national minimum requirements.

4.2.4) Workers (staff and contractors) are provided with safety equipment in good working order, appropriate to the tasks of workers and the equipment used (e.g. local norms are important, ideally the following: hard hats, hearing protection, high visibility vests, steel toe boots and chainsaw proof chaps).

4.2.5) FME shall maintain up to date records of work-related accidents, and preferably all safety performance. Records should demonstrate a decreasing accident rate and improved safety performance.

4.2.6) FME policies and practices shall ensure equal treatment of employees in terms of hiring, advancement, dismissal, remuneration and employment related social security.

4.2.7) FME shall implement a periodic review on the welfare of employees.

4.2.8) FME shall establish cooperation with health authorities and minimize impact of the management unit on community health.

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 Organization (ILO). **Note: Non-conformance to this Criterion constitutes a *Major Failure* and precludes award of certification until appropriately corrected.**

Performance Indicators:

4.3.1) FMEs, by their actions and policies, shall respect the rights of workers (staff and contractors) to organize or join trade unions and to engage in collective bargaining

as outlined in ILO Conventions 87 and 98.

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.

Performance Indicators:
4.4.1) In conjunction with local stakeholders and other interested parties, the FME shall evaluate socio-economic impacts associated with forest management activities. The evaluation shall be in accordance to the scale and intensity of operations.

4.4.2) FME shall demonstrate that input from community participation was considered and/or responded to during management planning and operations.

4.4.3) Consultations shall be maintained with people and groups (both men and women) directly affected by management operations.

4.4.4) FME shall maintain an up-to-date list of adjoining landowners and/or identify adjoining landowners on maps.

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.

Performance Indicators:
4.5.1) FME shall make all reasonable efforts to avoid losses and damages affecting local peoples, and in resolving grievances related to legal rights, damage compensation and negative impacts.

4.5.2) Procedures for consistently and effectively resolving grievances and determining compensation for loss or damage shall be implemented.

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.

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.

Performance Indicators:

5.1.1) Budgets shall include provision for environmental and social as well as operational costs necessary to maintain certifiable status (e.g. management planning, road maintenance, silvicultural treatments, long-term forest health, growth and yield monitoring, and conservation investments).
5.1.2) The income predicted in the operating budgets shall be based upon sound assumptions.

5.1.3) FME shall maintain a sustainable financial condition of the company with investment and reinvestment for forest management.

5.1.4) FME should hire/train professional staff for protection, production and management of forest and business.

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

Performance Indicators:
5.2.1) FME shall seek the "highest and best use" for individual tree and timber species.

5.2.2) FME shall encourage utilization of frequently occurring, lesser known, or less commonly utilized plant species for commercial and subsistence uses.

5.2.3) Non-timber forest products (NTFPs) should be considered during forest use and processing.

5.2.4) Local processing shall be emphasized where possible.

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

Performance Indicators:
5.3.1) Harvesting techniques shall be designed to avoid log breakage, timber degradation and damage to the forest stand and other resources.

5.3.2) Waste generated through harvesting operations, on-site processing and extraction shall be minimized.

5.3.3) FME should implement Reduced Impact Logging techniques.

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

Performance Indicators:
5.4.1) FME shall foster product diversification and exploration of new markets and products (also Criterion 5.2).

5.4.2) FME shall support local value added processing.

5.4.3) FME shall guarantee economic resources of the community are capable of supporting the continuation of intergeneration livelihood.

5.4.4 FME shall develop domestic capital and contribute to regional economic development.

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

Performance Indicators:
5.5.1) FME shall protect the full range of forest services associated with the defined forest area including: watersheds, commercial and recreational fisheries (or the supply of water to downstream fisheries), visual quality, contributions to regional biodiversity, recreation and tourism.

5.5.2)FME shall protect riparian zones along all watercourses, streams, pools, springs and lakes/ponds, consistent with the requirement of national regulations or best Management practices.

5.5.3) FME should map riparian protection zones that enhance the value of forest services and resources, such as watershed and fisheries.

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

Performance Indicators:
5.6.1) Appropriate to the scale and intensity of operations, estimates of total periodic timber growth on the defined forest area - by species categories - shall be generated through a combination of empirical data and published literature.

5.6.2) Allowable harvest levels shall be based on conservative, well-documented and most current estimates of growth and yield.

5.6.3) Harvesting shall be based on a calculated periodic allowable harvest (e.g. annual allowable cut) and actual harvests do not exceed calculated replenishment rates over the long term.

5.6.4) FME shall ensure the continuity of production at all planning and implementation levels.

5.6.5) FME shall ensure that annual production is in accordance with the capability of forest productivity.

5.6.6) FME shall guarantee the existence and variety of Non-Timber Forest Products.

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.

6.1. Assessments of environmental impacts shall be completed -- appropriate to the scale, intensity of forest management and the uniqueness of the affected resources -- and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.

Performance Indicators:
6.1.1) Environmental assessments shall be completed during management planning.

6.1.2) Environmental assessments shall consistently occur prior to site disturbing activities.

6.1.3) Environmental impacts of on-site processing facilities shall be controlled (e.g. waste, construction impacts, etc.).

6.1.4) Landscape level impacts of forest management (e.g. cumulative effects of forest operations within and nearby the FMU) shall be considered.

6.1.5) **Applicable to SLIMF FMEs only** (note: above indicators do not apply) Before initiating any operation, the possible negative environmental impacts shall be identified and the operation is designed to minimize them. Assessments do not need to be documented unless legally required.

6.1.6) FME shall ensure that planning and implementation of forest classification is based on their functions and types.

6.1.7) FME shall identify the proportion of well-designed protected area (considering endangered/endemic/protected species, unique ecosystems, High Conservation Value Forests) from the total area of the FMU that should be protected; this shall be confirmed and/or recognized by all parties concerned.

6.2. Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collecting shall be controlled.

Performance Indicators:
6.2.1) The likely presence of rare, threatened or endangered species and their habitats (e.g. nesting and feeding areas) shall be assessed on the basis of the best available information. (A list of endangered and threatened species in Indonesia is attached in Annex 3.)

6.2.2) Timber species on either local and/or international endangered or threatened species lists (e.g. CITES, national lists) shall not be harvested.

6.2.3) Appropriate to the scale and intensity of management, conservation zones, Protection areas or other protection measures shall be established based on Technically sound requirements for the protection of rare, threatened and Endangered species and their habitats.

6.2.4) Conservation zones should be demarcated on maps, and where feasible, on the ground.

6.2.5) Effective procedures shall be implemented during forest operations to protect conservation zones, identified species and their habitats.

6.2.6) Hunting, fishing, trapping and NTFP collecting shall be controlled in the forest.

6.2.7) **Applicable to SLIMF FMEs only:** (note: indicators 6.2.1 – 6.2.5 do not apply) Where information exists on rare, threatened and endangered species and their habitat, the FME shall use this information to protect these resources.

6.2.8) FME shall effectively promote the importance of conserving the forest ecosystem as a life support system and the negative impact of over-harvesting activities on the forest ecosystem.

6.3. Ecological functions and values shall be maintained intact, enhanced, or restored, including:

a) Forest regeneration and succession.
b) Genetic, species, and ecosystem diversity.
c) Natural cycles that affect the productivity of the forest ecosystem.

Performance Indicators:

6.3.1) The forest manager shall have site-specific data or published analyses of local forest ecosystems that provide information on the FMU with regards to:
• regeneration and succession;
• genetic, species and ecosystem diversity; and,
• natural cycles that affect productivity.

6.3.2) Forest management systems shall maintain, enhance or restore ecological functions and values of the FMU based on the data in 6.3.1. Management systems

shall include:
• Silvicultural and other management practices which are appropriate for forest; ecosystem function, structure, diversity and succession;
• Where appropriate, a program for the restoration of degraded sites; and,
• Natural regeneration, unless data shows that enrichment planting or artificial reforestation will enhance or restore genetic, species or ecosystem diversity.

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.

Performance Indicators:

6.4.1) Representative samples of existing ecosystems shall be protected in their natural state, based on the identification of key biological areas and/or consultation with environmental stakeholders, local government and scientific authorities.

6.4.2) In conjunction with experts, restoration and protection activities shall be defined, documented, and implemented in the forest.

6.4.3) **Applicable to SLIMF FMEs only:** (note: above indicators do not apply) Where representative samples of ecosystems are known to exist in the FMU, these shall be protected.

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 to protect water resources.

Performance Indicators:

6.5.1) All forest operations with the potential for negative environmental impact (as identified in 6.1) shall have written guidelines defining acceptable practices which are available to forest managers and supervisors. Such operational guidelines shall meet or exceed national or regional best management practices.

6.5.2) Maps and/or work plans shall be produced at a scale that allows effective supervision of soil and water resource management and protection activities.

6.5.3) Topographic maps have been prepared before logging or road construction occurs.

6.5.4) Topographic maps should specify areas suitable for all-weather harvesting or dryweather only; and indicate locations for extraction (or haul) roads, loading ramps (or log yards), main skid (or snig) trails, drainage structures, buffer zones, and conservation areas.

6.5.5)Training shall be given to FME staff and contractors to meet guidance requirements.

6.5.6) Road construction, maintenance and closure standards shall be followed in the forest.

6.6. Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks. **Note: Non-conformance to this Criterion constitutes a *Major Failure* and precludes award of certification until appropriately corrected.**

Performance Indicators:

6.6.1) Forest managers shall employ silvicultural systems, integrated pest management and vegetation control strategies that result in the least adverse environmental impact. Pesticides are used only when non-chemical management practices have been proven ineffective or cost prohibitive.

6.6.2) If chemicals are used, the following requirements apply:
• A complete inventory of chemicals shall be provided by the FME and detailed inspections of storage areas or other facilities validate that inventory is complete and accurate;
• Records shall be kept of all chemical used by the FME including name of the product, location and method of application, total quantity of chemical used and dates of application.
• Safe handling, application (using proper equipment) and storage procedures shall be followed; and,
• Staff and contractors shall receive training in handling, application and storage procedures.

6.6.3) Chemicals prohibited by the FSC (FSC-POL-30-601), those banned in Europe, U.S. and target country, or World Health Organization Type 1A or 1B, and chlorinated hydrocarbon pesticides shall not be used. The exception is when a formal derogation has been granted by the FSC. In such cases, the FME follows the terms of the approved derogation.

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.

Performance Indicators:
6.7.1) Chemical, container, liquid and solid waste is disposed of in an environmentally sound and legal manner, whether from forest operations or processing facilities.

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.

Performance Indicators:
6.8.1) Use of biological control agents is documented, minimized, monitored and strictly controlled.

6.8.2) Use of genetically modified organisms (GMOs) is prohibited.

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

Performance Indicators:
6.9.1) Use of exotic species shall be discouraged and carefully controlled, i.e. when used it is for well-justified and specific purposes (e.g. environmental benefit) and monitored for environmental impact.

6.9.2) Where exotic species are planted, measures are in developed and implemented to prevent spontaneous regeneration outside plantation areas, unusual mortality, disease, insect outbreaks or other adverse environmental impacts.

6.10. Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion:
a) entails a very limited portion of the forest management unit; and
b) does not occur on high conservation value forest areas; and
c) will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit. **Note: Non-conformance to this Criterion constitutes a *Major Failure* and precludes award of certification until appropriately corrected.**

Performance Indicators:
6.10.1) FME shall not convert forests, or threatened non-forested habitat to plantations or non-forest land uses, except where the conversion meets the conditions of 6.10.2 – 6.10.5.

6.10.2) If conversion occurs, it shall not exceed 5% of the forest management unit over any 5 year period (see FSC-ADV-30-602)

6.10.3) The extent of any conversion should be acceptable to environmental organizations and regulatory agencies.

6.10.4) If conversion occurs, the forest manager shall demonstrate that any conversion produces long term conservation benefits across the FMU.

6.10.5) If the conversion occurs, plantations or non-forest uses shall not replace High Conservation Value Forest or ecologically classified wetlands.
6.10.6) FME shall not clear primary, degraded primary or mature secondary forests to create tree plantations.

6.10.7) If FME performs tree planting in natural forest areas, FME shall ensure such planting supplements natural regeneration, fills gaps, and/or contributes to genetic resource conservation rather than replaces the natural ecosystem.

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.

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.

Performance Indicators:
7.1.1) Management plan, appendices, or reference documents, shall include presentation of the following components:
a). Management objectives;
b). Description of the forest resources to be managed, environmental limitations, land use and ownership status, socioeconomic 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). Description and justification for use of different harvesting techniques and equipment;
e). Description and justification of forest management prescriptions and their silvicultural and ecological rationale i.e. based on site specific forest data or published analysis of local forest ecology or silviculture;
f). Rate of harvest of forest products (timber or non-timber, as applicable) and species selection including justification;
g). Measures for identifying and protecting rare, threatened and endangered species and/or their habitat;
h). Map(s) describing the forest resource including forest types, watercourses and drains, compartments/blocks, roads, log landings and processing sites, protected areas, unique biological or cultural resources, and other planned management activities;
i). Environmental safeguards based on environmental assessments (see criterion 6.1); and,
j). Plans for monitoring of forest growth, regeneration and dynamics.

7.1.2) NTFP resources and uses should be inventoried and their management explicitly considered during planning.

7.1.3) Maps that are presented shall be accurate and sufficient to guide forest activities (also see Criterion 6.5).

7.1.4) Management plans or related annual operating or harvesting plan shall be available to staff and used in the forest.

7.1.5) **For large scale operations**, planning includes short (operational/annual), medium (tactical/3-5 yearly) and long (strategic, rotation/harvesting cycle) term plans covering all operations and these shall be documented.

7.1.6) **Applicable to SLIMF FMEs only**: (note: above indicators do not apply) A written management plan exists that includes at least the following:
a). The objectives of management;
b). A description of the forest;
c). How the objectives will be met, harvesting methods and silviculture (clear cuts, selective cuts, thinnings) to ensure sustainability;
d). Sustainable harvest limits (which must be consistent with FSC criteria 5.6);
e). Environmental/ social impacts of the plan;
f). Conservation of rare species and any high conservation values;
g). Maps of the forest, showing protected areas, planned management and land ownership; and,
h). Duration of the plan.

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.

Performance Indicators:
7.2.1) A technically sound and financially realistic timeframe exists for revision/adjustment of the management plan.
7.2.2) Management plan (and/or annual operating plan) revision or adjustments shall occur on a timely and consistent basis.

7.2.3) Management plan revisions shall incorporate the results of monitoring or new scientific and technical information regarding changing silvicultural, environmental, social and economic conditions.

7.2.4) **Large FMEs** shall identify positions and assign specific responsibility for timely updating of the management plan.

7.2.5) **Applicable for SLIMF FME-s only** (Note: above indicators do not apply) Management plan shall be reviewed at least every 5 years and updated, if necessary, incorporating the results of monitoring to plan and implement future management.

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

Performance Indicators:
7.3.1) Evidence of formal or informal training of forest workers to ensure proper implementation of the management plan shall exist in the forest. **Applicable to all FMEs including SLIMFs**.

7.3.2) For **large** FMEs, a formal training plan for staff and forest workers related to the management plan and its implementation shall be documented.

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. **Note: Non-conformance to this Criterion constitutes a *Major Failure* and precludes award of certification until appropriately corrected.**

Performance Indicators:

7.4.1) FME shall make publicly available a summary of the management plan including information on elements listed in criterion 7.1.

7.4.2) **Applicable for SLIMF FME-s only** (Note: above indicators do not apply): Upon request FME shall make available relevant parts of the management plan to stakeholders who are directly affected by the forest management activities of FME (e.g. neighboring landowners).

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.

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

Performance Indicators:

8.1.1) A plan and design, based on consistent and replicable procedures, shall exist for periodic monitoring and reporting.

8.1.2) The frequency and intensity of monitoring shall be based on the size and complexity of the operation and the fragility of the resources under management.

8.1.3) **Applicable to SLIMF FMEs only** (Note: above indicators do not apply): FME shall conduct regular and consistent monitoring in connection with harvesting operations and reforestation.

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.

Performance Indicators:
8.2.1) The monitoring plan shall be technically sound and identify/describe observed changes in conditions in terms of:
• Silviculture (growth rates, regeneration and forest condition, typically as part of a suitable continuous forest inventory system);
• Commercial harvest including NTFPs;

• Environment (environmental changes affecting flora, fauna, soil and water resources; outbreak of pests or invasive species, nesting sites for endangered bird species);
• Socioeconomic aspects (forest management costs, yields of all products, and changes in community and worker relations or conditions, accident rates); and,
• Identified high conservation value forest attributes.

8.2.2) **Applicable to SLIMF FMEs only** (Note: above indicators do not apply): FME shall at a minimum monitor and record information on the following conditions in terms of:
• Amount of products harvested;
• Regular monitoring of any identified high conservation values;
• Invasive exotic species;
• Growth and regeneration of managed species;
• Post harvest inspection for erosion and estimate of residual basal area; and,
• Periodic inventory (10 years).

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

Performance Indicators:

8.3.1) Volume and source data on harvested forest products shall be available (i.e. scaled, inventoried, measured) in the forest, in transport, at intermediate storage yards (e.g. log yards), and processing centers controlled by FME. (not applicable to SLIMFs)

8.3.2) Sales invoices and other documentation related to the sale, shipping and transport of certified products shall include the chain of custody certificate code in the correct format (e.g. SCS-FM/COC-XXXX). All documents should be kept in a central location and/or are easily available for inspection.

8.3.3) Certified forest products shall be clearly distinguished from non-certified products through marks or labels, separate documented storage, and accompanying invoices up to the point of sale (i.e. up to the “forest gate”).

8.3.4) **Applicable to SLIMF FMEs only** (indicators 8.3.1 and 8.3.3. do not apply): Documentation shall be available allowing products to be traced from the forest to the forest gate.

8.3.5) FME shall ensure the validity of its timber tracking system in the forest.

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

Performance Indicators:
8.4.1) FME shall demonstrate that monitoring results are incorporated into revisions of the management plan.

8.4.2) Monitoring reports indicate how management prescriptions should be changed based on new ecological, silvicultural or market information.

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.

Performance Indicators:
8.5.1) For **large** operations, results of monitoring shall be incorporated into summaries and other documents that are publicly available.

8.5.2) **Applicable for medium size and SLIMF FMEs only:** (Note: the above indicator does not apply). Upon request FME shall make available relevant parts of the management plan to stakeholders who are directly affected by the forest management activities of FME (e.g. neighboring landowners).

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.

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

Performance Indicators:
9.1.1) FMEs shall have conducted an assessment to identify HCVs. Such an assessment should include:
• Consultation with conservation databases and maps;
• Consideration of primary or secondary data collected during forest inventories on the designated forest area by FME staff, consultants or advisors;
• Interviews, workshops, and/or consultations with environmental/biological specialists, indigenous/local communities, scientific experts, other stakeholders, etc;
• Documentation of threats to HCVs; and,
• If threats to HCVs or HCVF exist, identification of actions to address the threats.

9.1.2) For **large** operations, FME shall:

• Produce written HCVF assessment(s) that identify (ies) HCVs or HCVF and proposes strategies to ensure their protection;
• Conduct credible, independent, technically qualified review of the HCVF assessment and related recommendations to address HCV threats and protection; and,
• Demonstrate that credible actions are being taken to address HCV/HCVF protection and/or threat reduction.

9.1.3) **Applicable to SLIMF FMEs only:** Consultations shall have occurred with environmental stakeholders, government or scientists to identify HCVs and/or HCVF. If HCVs or HCVF are present, FME shall take all reasonable steps to protect these values and/or reduce threats.

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

Note: This criterion primarily addresses obligations of the certifier, not the forest management operation.

Performance Indicators:
9.2.1) FME consultations with stakeholders shall clearly outline identified conservation attributes as well as proposed strategies for their maintenance or threat reduction.

9.2.2) For **large** operations, the stakeholder consultation for HCVF strategy development, *and actions taken in response to such consultation, shall be documented.*

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.

Performance Indicators:

9.3.1) If HCVF or HCVs are present, planning documents shall provide site-specific information which describes the measures taken to protect or restore such values.

9.3.2) Measures to protect HCVF values shall be available in public documents or in the FME management plan summary.

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

Performance Indicators:
9.4.1) A system for continuous monitoring of HCVF values shall be incorporated into the

FME's planning, monitoring and reporting procedures.

PRINCIPLE # 10: PLANTATIONS

Plantations shall be planned and managed in accordance with Principles and Criteria 1 - 9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.

10.1. The management objectives of the plantation, including natural forest conservation and restoration objectives, shall be explicitly stated in the management plan, and clearly demonstrated in the implementation of the plan.

Performance Indicators:
10.1.1) Objectives of tree planting shall be explicit in the management plan, with clear statements regarding the relationship between tree planting and the silviculture, socioeconomic and environmental (i.e. forest conservation and restoration) realities in the region.

10.1.2) Management objectives for conservation of natural forest and restoration shall be described in the management plan.

10.1.3) Management objectives, specifically those related to natural forest conservation and restoration shall be demonstrated in forest management activities.

10.1.4) FME shall maintain land assurance as planted forest area.

10.1.5) FME shall implement environmentally friendly forest harvesting systems.

10.2. The design and layout of plantations should promote the protection, restoration and conservation of natural forests, and not increase pressures on natural forests. Wildlife corridors, streamside zones and a mosaic of stands of different ages and rotation periods shall be used in the layout of the plantation, consistent with the scale of the operation. The scale and layout of plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape.

Performance Indicators:
10.2.1) FMEs shall demonstrate through action their commitment to protect, restore and conserve key areas of natural forest within the ownership.

10.2.2) Buffer zones along watercourses and around water bodies shall be established according to regional best management practices or local laws and regulations. Buffer zones should be indicated on maps.

10.2.3) FME shall establish wildlife habitat and corridors, suitably located across plantation areas, in consultation with acknowledged experts.

10.2.4) Plantations shall be designed so as to maintain or enhance the visual character of the landscape (i.e. design is based on the scale and intensity of natural patterns of disturbance and planting and harvest regimes within the region).

10.2.5) If plantations are established in early successional forest areas or natural grasslands (both are discouraged), forest managers shall take measures to restore, conserve or manage natural forest or grasslands in surrounding or adjoining areas equal to or exceeding the area disturbed.

10.2.6) Plantations do not replace ecologically classified wetlands.

10.2.7) Land utilization pattern/system implementation in planting activities and plant forest stumpage maintenance shall positively influence land quality and water course function.

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

Performance Indicators:
10.3.1) Plantation management shall maintain and/or enhance landscape diversity by varying block size and configuration, species, genetic diversity, age class and structure.

10.3.2) Emphasis shall be placed on planting and/or applied research on forest species native to the region.

10.4. The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives. In order to enhance the conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts.

Performance Indicators:
10.4.1) Plantation species shall be selected based on suitability to site conditions (soils, topography and climate) and management objectives.

10.4.2) Where exotic species have been selected, the FME shall explicitly justify this choice and demonstrating that their performance is greater than that of native species

10.4.3) No species shall be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site and that, invasive characteristics, if any, can be controlled.

10.4.4) When exotic species are used the specific measures to prevent spontaneous regeneration outside plantation areas, unusual mortality, disease, insect outbreaks or other adverse environmental impacts shall be documented.

10.5. A proportion of the overall forest management area, appropriate to the scale of the plantation, shall be managed so as to restore the site to a natural forest cover.

Performance Indicators:
10.5.1) Representative samples of existing natural ecosystems shall be protected or restored to their natural state, based on the identification of key biological areas, consultation with stakeholders, local government and scientific authorities. (Note: Also see Criterion 6.4.)

10.5.2) Conservation zone should be a contiguous block, though it may be a series of smaller blocks linked by corridors as wide as the average height of forest canopy in a mature forest in the region.

10.5.3) Conservation zones shall be demarcated on maps and in the field.

10.5.4) Forest operations shall be carefully controlled in conservation zones to protect conservation values.

10.5.5) The area structuring of management unit shall be based on the importance of flora/fauna conservation, plant forest stumpage protection, and forest resources that are very useful for the local community.

10.5.6) **Applicable to SLIMF FMEs only** (note: above indicator does not apply): Plantation design and management practices shall enhance protect ecological values, especially around conservation features or protected areas.

10.6. Measures shall be taken to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns.

Performance Indicators:
10.6.1) Explicit measures shall be taken to maintain or enhance the soil in terms of structure, fertility and biological activity.

10.6.2) Plantation design and management shall not result in soil degradation.

10.6.3) Forest operations shall not degrade water quality or negatively impact local hydrology.

10.6.4) Where negative impacts on soil or water resources is identified, FME shall take steps to reduce or eliminate such impacts.

10.6.5) FME shall implement a waste handling system to preserve land quality and watercourse function sustainability.

10.6.6) Soil erosion control is implemented, including: no tractor plowing on areas > 5% slope, planting or site preparation measures are done on contour, and specifications on buffer zones are strictly followed.

10.6.7) No road or related waste material (i.e., rocks, brush, etc) from site preparation or other activities is placed in stream courses.

10.7. Measures shall be taken to prevent and minimize outbreaks of pests, diseases, fire and invasive plant introductions. Integrated pest management shall form an essential part of the management plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilizers. Plantation management should make every effort to move away from chemical pesticides and fertilizers, including their use in nurseries. The use of chemicals is also covered in Criteria 6.6 and 6.7.

Performance Indicators:
10.7.1) Measures shall be taken in the forest to prevent outbreaks of pests, disease, fire and invasive plant introductions.

10.7.2) A plan should exist for forest fire prevention and control.

10.7.3) An integrated pest management plan shall exist that identifies pests, determines acceptable injury or action thresholds, and alternative methods of addressing threats.

10.7.4) FME shall have a policy and strategy to minimize use of chemical pesticides and fertilizers.

10.7.5) Pest, disease and parasite control activities use environmentally friendly technology so that the natural ecosystem in the management unit will not be disrupted.

10.8 Appropriate to the scale and diversity of the operation, monitoring of plantations shall include regular assessment of potential on-site and off-site ecological and social impacts, (e.g. natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social well-being), in addition to those

elements addressed in Principles 8, 6 and 4. No species should be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection of local rights of ownership, use or access.

Performance Indicators:

10.8.1) Monitoring shall include evaluation of potential onsite and off-site ecological and social impacts of plantation activities. (also see criterion 8.2)

10.8.2) **Applicable to SLIMF FMEs only** (note: above indicator does not apply): FME shall document negative environmental or social impacts and design and implement measures to address the impacts.

10.8.3) The purchase of lands or land leases for plantation establishment shall not adversely impact the community and/or resource use by local people.

10.9 Plantations established in areas converted from natural forests after November 1994 normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the certification body that the manager/owner is not responsible directly or indirectly of such conversion. **Note: Non-conformance to this Criterion constitutes a *Major Failure* and precludes award of certification until appropriately corrected.**

Performance Indicators:
10.9.1) The plantation shall not occupy land converted from natural forest since November 1994, unless clear evidence exists that the current manager/owner was not responsible.

10.9.2) Primary, degraded primary and mature secondary forests, and threatened or endangered ecosystems should not be cleared or converted by current forest managers to create tree plantations.

10.9.3) Where conversions after November 1994 have occurred, steps shall be taken that convincingly compensate for such conversions, based on interviews or other evidence gathered from other stakeholders and interested parties.

Annex 1: List of national and local forest and related laws and administrative requirements which apply in Indonesia

Principles Relevant Policies and Regulations

Principle 1
Forestry Act No.41/1999
Minister of Forestry's Decree on HPH License
Peraturan Pemerintah No.35/2002 on reforestation fund
Undang-undang No.12/1985 on Land and Building Taxes (PBB)
Peraturan Pemerintah Nomor 59/1998 on Tariff of non-taxable state's revenues under Ministry of Forestry and Estate Crops
Undang-undang No.21/1983 on Revenue Tax
Government Regulation No.34/2002 on Forest Land Use and Development of Forest Management Plan
Principle 2
Forest Concession License
Principle 3
Act No.39/1999 on human rights
Forest Concession License
Forestry Minister's Regulation No. P.01/Menhut-II/2004 on Empowerment of Local People within and around forest areas as social forestry program
Draft Government Regulation on Indigenous Forest (2002)
Act No.32/2004 on decentralisation
Forestry Act No.41/1999
Principle 4
Act No.1/2000 on ratification of ILO Convention No. 182 on Prohibition and Immediate Action for the elimination of the worst forms of child labor
Act No.13/2003 on Manpower
Other ILO conventions (will develop further)
Principle 5
Government Regulation No.6/1999 on Utilisation of Production Forest and Forest Production Extraction
Principle 6
SK Menhut No. 519/Kpts-II/1997 dated on August 12,1997 on Environmental Impact Assessment, Environmental Management, Environmental Monitoring in Forestry Development
Environmental Act No.23/1997 on Environmental Management
UU No.5/1994 on Biodiversity Conservation (Ratification on Convention on Biodiversity)
Government Regulation No.68/1998 on Sanctuary Reserve and Nature Reserve
Government Regulation No.14/2004 on requirements and methods of transferring protected tree varietes and the use of government-protected varieties
UU No.5/1990 on Conservation of Biodiversity Sources and Its Ecosystems
Government Regulation No.4/2001 Controlling environmental damage caused by forest fires.

Principle 7
Government Regulation No.34/2002 on Forest Land Use, Development of Forest Management Plan
Government Regulation No.44/2004 on Forest Planning
Government Regulation No.45/2004 on Forest Protection
Government Regulation No.7/1999 on Preservation of Flora and Fauna
Government Regulation No.8/1999 on the use of wildlife
Forestry Minister's Decree No.52/Kpts-II/2001 on Guidelines of watershed management
Principle 8 See above
Principle 9 See above
Principle 10 See above

Annex 2: List of the multilateral environmental agreements and ILO Conventions that Indonesia has ratified

Convention No. 87 (1948) on freedom to join and get rights protection for organization, through Indonesia Presidential Decree No.83/1998
Convention No.98 (1949) on freedom to organize and negotiate, through Undang-Undang No.18/1956 Convention No.29 (1930) on Forced Labor, through the Dutch government ratification on March 31, 1933, Ned.Stbl.No. 26, 1933 jo Ned. Stbl. No. 236, 1933. It was then stated as came into effect by the Indonesian government through Ind. Stbl. No. 261, 1933
Convention No. 105 (1957) on Elimination of Forced Labor, through Undang-Undang No.19/1999
Convention No.100 (1951) on Equity of Wage for Women and Men for the equal jobs, through Undang-Undang No.80/1957
Convention No.111 (1958) on Discrimination in jobs and positions, through Undang-Undang No.21/1999
Convention No.138 (1973) on Minimum age for work, through Undang-Undang No.20/1999
Convention No.182 (1999) on Violation and Immediate Actions for eliminating the worst forms of works for child labor through Undang-Undang No.1/2000
Other conventions and international agreements signed by Indonesia:
Convention on Biodiversity (has been ratified through UU No.5/1994)
Convention on Combatting to Desertification
CITES
Tropical Timber 83
Tropical Timber 94
Ramsar

Annex 3 : List of officially endangered species in Indonesia.

Indonesian Government regulation number 7 1999: List of protected flora and fauna in Indonesia

No. Scientific name Indonesian name

Fauna

I. MAMALIA (Mammals)

1 *Anoa depressicornis* Anoa dataran rendah, Kerbau pendek
2 *Anoa quarlesi* Anoa pegunungan
3 *Arctictis binturong* Binturung
4 *Arctonyx collaris* Pulusan
5 *Babyrousa babyrussa* Babirusa
6 *Balaenoptera musculus* Paus biru
7 *Balaenoptera physalus* Paus bersirip
8 *Bos sondaicus* Banteng
9 *Capricornis sumatrensis* Kambing Sumatera
10 *Cervus kuhli; Axis kuhli* Rusa Bawean
11 *Cervus spp.* Menjangan, Rusa sambar (All species of the genusCervus)
12 *Cetacea* Paus (All species of the family Cetacea)
13 *Cuon alpinus* Ajag
14 *Cynocephalus variegatus* Kubung, Tando, Walangkekes
15 *Cynogale bennetti* Musang air
16 *Cynopithecus niger* Monyet hitam Sulawesi
17 *Dendrolagus spp.* Kanguru pohon (All species of the genus Dendrolagus)
18 *Dicerorhinus sumatrensis* Badak Sumatera
19 *Dolphinidae* Lumba-lumba air laut (All species of the family Dolphinidae)
20 *Dugong dugon* Duyung
21 *Elephas indicus* Gajah
22 *Felis badia* Kucing merah
23 *Felis bengalensis* Kucing hutan, Meong congkok
24 *Felis marmorota* Kuwuk
25 *Felis planiceps* Kucing dampak
26 *Felis temmincki* Kucing emas
27 *Felis viverrinus* Kucing bakau
28 *Helarctos malayanus* Beruang madu
29 *Hylobatidae* Owa, Kera tak berbuntut (All species of the family Hylobatidae)
30 *Hystrix brachyura* Landak
31 *Iomys horsfieldi* Bajing terbang ekor merah
32 *Lariscus hosei* Bajing tanah bergaris
33 *Lariscus insignis* Bajing tanah, Tupai tanah
34 *Lutra lutra* Lutra
35 *Lutra sumatrana* Lutra Sumatera
36 *Macaca brunnescens* Monyet Sulawesi

No. Scientific name Indonesian name

37 *Macaca maura* Monyet Sulawesi
38 *Macaca pagensis* Bokoi, Beruk Mentawai
39 *Macaca tonkeana* Monyet jambul
40 *Macrogalidea*

musschenbroeki
Musang Sulawesi
41 *Manis javanica* Trenggiling, Peusing
42 *Megaptera novaeangliae* Paus bongkok
43 *Muntiacus muntjak* Kidang, Muncak
44 *Mydaus javanensis* Sigung
45 *Nasalis larvatus* Kahau, Bekantan
46 *Neofelis nebulusa* Harimau dahan
47 *Nesolagus netscheri* Kelinci Sumatera
48 *Nycticebus coucang* Malu-malu
49 *Orcaella brevirostris* Lumba-lumba air tawar, Pesut
50 *Panthera pardus* Macan kumbang, Macan tutul
51 *Panthera tigris sondaica* Harimau Jawa
52 *Panthera tigris sumatrae* Harimau Sumatera
53 *Petaurista elegans* Cukbo, Bajing terbang
54 *Phalanger spp.* Kuskus (All species of the genus Phalanger)
55 *Pongo pygmaeus* Orang utan, Mawas
56 *Presbitys frontata* Lutung dahi putih
57 *Presbitys rubicunda* Lutung merah, Kelasi
58 *Presbitys aygula* Surili
59 *Presbitys potenziani* Joja, Lutung Mentawai
60 *Presbitys thomasi* Rungka
61 *Prionodon linsang* Musang congkok
62 *Prochidna bruijni* Landak Irian, Landak semut
63 *Ratufa bicolor* Jelarang
64 *Rhinoceros sondaicus* Badak Jawa
65 *Simias concolor* Simpei Mentawai
66 *Tapirus indicus* Tapir, Cipan, Tenuk
67 *Tarsius spp.* Binatang hantu, Singapuar (All species of the genus Tarsius)
68 *Thylogale spp.* Kanguru tanah (All species of the genus Thylogale)
69 *Tragulus spp.* Kancil, Pelanduk, Napu (All species of the genus Tragulus)
70 *Ziphiidae* Lumba-lumba air laut (All species of the family Ziphiidae)

II. AVES (Birds)

71 *Accipitridae* Burung alap-alap, Elang (All species of the family Accipitridae)
72 *Aethopyga exima* Jantingan gunung
73 *Aethopyga duyvenbodei* Burung madu Sangihe
74 *Alcedinidae* Burung udang, Raja udang (All species of the family Alcedinidae)
75 *Alcippe pyrrhoptera* Brencet wergan
76 *Anhinga melanogaster* Pecuk ular

No. Scientific name Indonesian name

77 *Aramidopsis plateni* Mandar Sulawesi
78 *Argusianus argus* Kuau
79 *Bubulcus ibis* Kuntul, Bangau putih
80 *Bucerotidae* Julang, Enggang, Rangkong, Kangkareng (All species of the family Bucerotidae)
81 *Cacatua galerita* Kakatua putih besar jambul kuning

82 *Cacatua goffini* Kakatua gofin
83 *Cacatua moluccensis* Kakatua Seram
84 *Cacatua sulphurea* Kakatua kecil jambul kuning
85 *Cairina scutulata* Itik liar
86 *Caloenas nicobarica* Junai, Burung mas, Minata
87 *Casuarius bennetti* Kasuari kecil
88 *Casuarius casuarius* Kasuari
89 *Casuarius unappenddiculatus* Kasuari gelambir satu, Kasuari leher kuning
90 *Ciconia episcopus* Bangau hitam, Sandanglawe
91 *Colluricincla megarhyncha* Burung sohabe coklat
92 *Crocias albonotatus* Burung matahari
93 *Ducula whartoni* Pergam raja
94 *Egretta sacra* Kuntul karang
95 *Egretta spp.* Kuntul, Bangau putih (All species of the genus Egretta)
96 *Elanus caerulleus* Alap-alap putih, Alap-alap tikus
97 *Elanus hypoleucus* Alap-alap putih, Alap-alap tikus
98 *Eos histrio* Nuri Sangir
99 *Esacus magnirostris* Wili-wili, Uar, Bebek laut
100 *Eutrichomyias rowleyi* Seriwang Sangihe
101 *Falconidae* Burung alap-alap, Elang (All species of the family Falconidae)
102 *Fregeta andrewsi* Burung gunting, Bintayung
103 *Garrulax rufifrons* Burung kuda
104 *Goura spp.* Burung dara mahkota, Burung titi, Mambruk (All species of the genus Goura)
105 *Gracula religiosa mertensi* Beo Flores
106 *Gracula religiosa robusta* Beo Nias
107 *Gracula religiosa venerata* Beo Sumbawa
108 *Grus spp.* Jenjang (All species of the genus Grus)
109 *Himantopus himantopus* Trulek lidi, Lilimo
110 *Ibis cinereus* Bluwok, Walangkadak
111 *Ibis leucocephala* Bluwok berwarna
112 *Lorius roratus* Bayan
113 *Leptoptilos javanicus* Marabu, Bangau tongtong
114 *Leucopsar rothschildi* Jalak Bali
115 *Limnodromus semipalmatus* Blekek Asia
116 *Lophozosterops javanica* Burung kacamata leher abu-abu
117 *Lophura bulweri* Beleang ekor putih
118 *Loriculus catamene* Serindit Sangihe
119 *Loriculus exilis* Serindit Sulawesi
120 *Lorius domicellus* Nori merah kepala hitam
121 *Macrocephalon maleo* Burung maleo

No. Scientific name Indonesian name

122 *Megalaima armillaris* Cangcarang
123 *Megalaima corvina* Haruku, Ketuk-ketuk
124 *Megalaima javensis* Tulung tumpuk, Bultok Jawa
125 *Megapoddidae* Maleo, Burung gosong (All species of the family Megapododae)
126 *Megapodius reintwardtii* Burung gosong
127 *Meliphagidae* Burung sesap, Pengisap madu (All species of the family Meliphagidae)

128 *Musciscapa ruecki* Burung kipas biru
129 *Mycteria cinerea* Bangau putih susu, Bluwok
130 *Nectariniidae* Burung madu, Jantingan, Klaces (All species of the family Nectariniidae)
131 *Numenius spp.* Gagajahan (All species of the genus Numenius)
132 *Nycticorax caledonicus* Kowak merah
133 *Otus migicus beccarii* Burung hantu Biak
134 *Pandionidae* Burung alap-alap, Elang (All species of the family Pandionidae)
135 *Paradiseidae* Burung cendrawasih (All species of the family Paradiseidae)
136 *Pavo muticus* Burung merak
137 *Pelecanidae* Gangsa laut (All species of the family Pelecanidae)
138 *Pittidae* Burung paok, Burung cacing (All species of the family Pittidae)
139 *Plegadis falcinellus* Ibis hitam, Roko-roko
140 *Polyplectron malacense* Merak kerdil
141 *Probosciger aterrimus* Kakatua raja, Kakatua hitam
142 *Psaltria exilis* Glatik kecil, Glatik gunung
143 *Pseudibis davisoni* Ibis hitam punggung putih
144 *Psittrichas fulgidus* Kasturi raja, Betet besar
145 *Ptilonorhynchidae* Burung namdur, Burung dewata
146 *Rhipidura euryura* Burung kipas perut putih, Kipas gunung
147 *Rhipidura javanica* Burung kipas
148 *Rhipidura phoenicura* Burung kipas ekor merah
149 *Satchyris grammiceps* Burung tepus dada putih
150 *Satchyris melanothorax* Burung tepus pipi perak
151 *Sterna zimmermanni* Dara laut berjambul
152 *Sternidae* Burung dara laut (All species of the family Sternidae)
153 *Sturnus melanopterus* Jalak putih, Kaleng putih
154 *Sula abbotti* Gangsa batu aboti
155 *Sula dactylatra* Gangsa batu muka biru
156 *Sula leucogaster* Gangsa batu
157 *Sula sula* Gangsa batu kaki merah
158 *Tanygnathus sumatranus* Nuri Sulawesi
159 *Threskiornis aethiopicus* Ibis putih, Platuk besi
160 *Trichoglossus ornatus* Kasturi Sulawesi
161 *Tringa guttifer* Trinil tutul
162 *Trogonidae* Kasumba, Suruku, Burung luntur
163 *Vanellus macropterus* Trulek ekor putih

No. Scientific name Indonesian name

III. REPTILIA (Reptiles)

164 *Batagur baska* Tuntong
165 *Caretta caretta* Penyu tempayan
166 *Carettochelys insculpta* Kura-kura Irian
167 *Chelodina novaeguineae* Kura Irian leher panjang
168 *Chelonia mydas* Penyu hijau
169 *Chitra indica* Labi-labi besar
170 *Chlamydosaurus kingii* Soa payung
171 *Chondropython viridis* Sanca hijau
172 *Crocodylus novaeguineae* Buaya air tawar Irian

173 *Crocodylus porosus* Buaya muara
174 *Crocodylus siamensis* Buaya siam
175 *Dermochelys coriacea* Penyu belimbing
176 *Elseya novaeguineae* Kura Irian leher pendek
177 *Eretmochelys imbricata* Penyu sisik
178 *Gonychephalus dilophus* Bunglon sisir
179 *Hydrasaurus amboinensis* Soa-soa, Biawak Ambon, Biawak pohon
180 *Lepidochelys olivacea* Penyu ridel
181 *Natator depressa* Penyu pipih
182 *Orlitia borneensis* Kura-kura gading
183 *Python molurus* Sanca bodo
184 *Phyton timorensis* Sanca Timor
185 *Tiliqua gigas* Kadal Panan
186 *Tomistoma schlegelii* Senyulong, Buaya sapit
187 *Varanus borneensis* Biawak Kalimantan
188 *Varanus gouldi* Biawak coklat
189 *Varanus indicus* Biawak Maluku
190 *Varanus komodoensis* Biawak komodo, Ora
191 *Varanus nebulosus* Biawak abu-abu
192 *Varanus prasinus* Biawak hijau
193 *Varanus timorensis* Biawak Timor
194 *Varanus togianus* Biawak Togian

IV. INSECTA (Insects)

195 *Cethosia myrina* Kupu bidadari
196 *Ornithoptera chimaera* Kupu sayap burung peri
197 *Ornithoptera goliath* Kupu sayap burung goliat
198 *Ornithoptera paradisea* Kupu sayap burung surga
199 *Ornithoptera priamus* Kupu sayap priamus
200 *Ornithoptera rotschldi* Kupu burung rotsil
201 *Ornithoptera tithonus* Kupu burung titon
202 *Trogonotera brookiana* Kupu trogon
203 *Troides amphrysus* Kupu raja
204 *Troides andromanche* Kupu raja
205 *Troides criton* Kupu raja
206 *Troides haliphron* Kupu raja
207 *Troides helena* Kupu raja
208 *Troides hypolitus* Kupu raja

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209 *Troides meoris* Kupu raja
210 *Troides miranda* Kupu raja
211 *Troides plato* Kupu raja
212 *Troides rhadamantus* Kupu raja
213 *Troides riedeli* Kupu raja
214 *Troides vandepolli* Kupu raja

V. PISCES (Fish)

215 *Homaloptera gymnogaster* Selusur Maninjau
216 *Latimeria chalumnae* Ikan raja laut
217 *Notopterus spp.* Belida Jawa, Lopis Jawa All species of the genus *Notopterus*)
218 *Pritis spp.* Pari Sentani, Hiu Sentani (All species of the genus *Pritis*)

219 *Puntius microps* Wader goa
220 *Scleropages formasus* Peyang malaya, Tangkelasa
221 *Scleropages jardini* Arowana Irian, Peyang Irian, Kaloso
VI. ANTHOZOA
222 *Anthiphates spp.* Akar bahar, Koral hitam (All species of the genus *Anthiphates*)
VII. BIVALVIA
223 *Birgus latro* Ketam kelapa
224 *Cassis cornuta* Kepala kambing
225 *Charonia tritonis* Triton terompet
226 *Hippopus hippopus* Kima tapak kuda, Kima kuku beruang
227 *Hippopus porcellanus* Kima Cina
228 *Nautilus popillius* Nautilus berongga
229 *Tachipleus gigas* Ketam tapak kuda
230 *Tridacna crocea* Kima kunia, Lubang
231 *Tridacna derasa* Kima selatan
232 *Tridacna gigas* Kima raksasa
233 *Tridacna maxima* Kima kecil
234 *Tridacna squamosa* Kima sisik, Kima seruling
235 *Trochus niloticus* Troka, Susur bundar
236 *Turbo marmoratus* Batu laga, Siput hijau
No. Scientific name Indonesian name
FLORA
I. PALMAE
237 *Amorphophallus decussilvae* Bunga bangkai jangkung
238 *Amorphophallus titanum* Bunga bangkai raksasa
239 *Borrassodendron borneensis* Bindang, Budang
240 *Caryota no* Palem raja/Indonesia
241 *Ceratolobus glaucescens* Palem Jawa
242 *Cystostachys lakka* Pinang merah Kalimantan
243 *Cystostachys ronda* Pinang merah Bangka
244 *Eugeissona utilis* Bertan
245 *Johanneste ijsmaria altifrons* Daun payung
246 *Livistona spp.* Palem kipas Sumatera (All species of the genus Livistona)
247 *Nenga gajah* Palem Sumatera
248 *Phoenix paludosa* Korma rawa
249 *Pigafatta filaris* Manga
250 *Pinanga javana* Pinang Jawa
II. RAFFLESSIACEA
251 *Rafflesia spp.* Rafflesia, Bunga padma (All species of the genus Rafflesia)
III. ORCHIDACEAE
252 *Ascocentrum miniatum* Anggrek kebutan
253 *Coelogyne pandurata* Anggrek hitan
254 *Corybas fornicatus* Anggrek koribas
255 *Cymbidium hartinahianum* Anggrek hartinah
256 *Dendrobium catinecloesum* Anggrek karawai
257 *Dendrobium d'albertisii* Anggrek albert
258 *Dendrobium lasianthera* Anggrek stuberi

259 *Dendrobium macrophyllum* Anggrek jamrud
260 *Dendrobium ostrinoglossum* Anggrek karawai
261 *Dendrobium phalaenopsis* Anggrek larat
262 *Grammatophyllum papuanum* Anggrek raksasa Irian
263 *Grammatophyllum speciosum* Anggrek tebu
264 *Macodes petola* Anggrek ki aksara
265 *Paphiopedilum chamberlainianum* Anggrek kasut kumis
266 *Paphiopedilum glaucophyllum* Anggrek kasut berbulu
267 *Paphiopedilum praestans* Anggrek kasut pita
268 *Paraphalaenopsis denevei* Anggrek bulan bintang
269 *Paraphalaenopsis laycockii* Anggrek bulan Kaliman Tengah
270 *Paraphalaenopsis serpentilingua* Anggrek bulan Kaliman Barat
271 *Phalaenopsis amboinensis* Anggrek bulan Ambon
272 *Phalaenopsis gigantea* Anggrek bulan raksasa
273 *Phalaenopsis sumatrana* Anggrek bulan Sumatera
274 *Phalaenopsis violacose* Anggrek kelip

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275 *Renanthera matutina* Anggrek jingga
276 *Spathoglottis zurea* Anggrek sendok
277 *Vanda celebica* Vanda mungil Minahasa
278 *Vanda hookeriana* Vanda pensil
279 *Vanda pumila* Vanda mini
280 *Vanda sumatrana* Vanda Sumatera

IV. NEPHENTACEAE

281 *Nephentes spp.* Kantong semar (All species of the genus Nephentes)

V. DIPTEROCARPACEAE

282 *Shorea stenopten* Tengkawang
283 *Shorea stenoptera* Tengkawang
284 *Shorea gysberstiana* Tengkawang
285 *Shorea pinanga* Tengkawang
286 *Shorea compressa* Tengkawang
287 *Shorea semiris* Tengkawang
288 *Shorea martiana* Tengkawang
289 *Shorea mexistopteryx* Tengkawang
290 *Shorea beccariana* Tengkawang
291 *Shorea micrantha* Tengkawang
292 *Shorea palembanica* Tengkawang
293 *Shorea lepidota* Tengkawang
294 *Shorea singkawang* Tengkawang

References

IUCN’s red list,CITES, SK Mentan No.54/Kpts/Um/2/1972, PP No.7/1999

Annex 4 : Glossary of terms

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

they are a part; this includes diversity within species, between species and of ecosystems. (see
Convention on Biological Diversity, 1992)
Biological control agents: Living organisms used to eliminate or regulate the population of
other living organisms.
Biological diversity values: The intrinsic, ecological, genetic, social, economic, scientific,
educational, cultural, recreational and aesthetic values of biological diversity and its components. (see Convention on Biological Diversity, 1992)
Chain of custody: The channel through which products are distributed from their origin in the
forest to their end-use.
Chemicals: The range of fertilizers, insecticides, fungicides, and hormones which are used in
forest management.
Criterion (pl. Criteria): A means of judging whether or not a Principle (of forest stewardship)
has been fulfilled.
Customary rights: Rights which result from a long series of habitual or customary actions,
constantly repeated, which have, by such repetition and by uninterrupted acquiescence, acquired the force of a law within a geographical or sociological unit.
Ecosystem: A community of all plants and animals and their physical environment, functioning
together as an interdependent unit.
Endangered species: Any species which is in danger of extinction throughout all or a significant portion of its range.
Exotic species: An introduced species not native or endemic to the area in question.
Forest integrity: The composition, dynamics, functions and structural attributes of a natural
forest.
Forest management/manager: The people responsible for the operational management of the
forest resource and of the enterprise, as well as the management system and structure, and the
planning and field operations.
Forest management unit (FMU): a clearly defined forest area with mapped boundaries,
managed by a single managerial body to a set of explicit objectives which are expressed in a
self-contained multi-year management plan.
Forest stewardship: forest management which, in conformity with the FSC Principles and
Criteria for Forest Stewardship, is environmentally responsible, socially beneficial, and economically viable.
Genetically modified organisms: Biological organisms which have been induced by various
means to consist of genetic structural changes.

Indicator: a quantitative or qualitative variable which can be measured or described, and which provides a means of judging whether a forest management unit complies with the requirements of an FSC Criterion. Indicators and the associated thresholds thereby define the requirements for responsible forest management at the level of the forest management unit and are the primary basis of forest evaluation.

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)

Indigenous peoples: "The existing 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 UN Working Group on Indigenous Peoples).

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, refugia); and/or large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance

b) forest areas 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).

Landscape: A geographical mosaic composed of interacting ecosystems resulting from the influence of geological, topographical, soil, climatic, biotic and human interactions in a given
area.
Local laws: Includes all legal norms given by organisms of government whose jurisdiction is less than the national level, such as departmental, municipal and customary norms.
Long term: The time-scale of the forest owner or manager as manifested by the objectives of the management plan, 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.
Native species: A species that occurs naturally in the region; endemic to the area.
Natural cycles: Nutrient and mineral cycling as a result of interactions between soils, water, plants, and animals in forest environments that affect the ecological productivity of a given site.
Natural Forest: Forest areas where many of the principal characteristics and key elements of native ecosystems such as complexity, structure and diversity are present, as defined by FSC approved national and regional standards of forest management.
Non-timber forest products: All forest products except timber, including other materials obtained from trees such as resins and leaves, as well as any other plant and animal products.
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.
Plantation: Forest areas lacking most of the principal characteristics and key elements of native ecosystems as defined by FSC-approved national and regional standards of forest stewardship, which result from the human activities of either planting, sowing or intensive silvicultural treatments.
Precautionary approach: Tool for the implementation of the precautionary principle.
Principle: An essential rule or element; in FSC's case, of forest stewardship.
Silviculture: The art of producing and tending a forest by manipulating its establishment, composition and growth to best fulfil the objectives of the owner. This may, or may not, include timber production.
SLIMF (small or low intensity managed forest): a forest management unit which meets specific FSC requirements related to size and/or intensity of timber harvesting, and can
therefore be evaluated by certification bodies using streamlined evaluation procedures. The applicable FSC requirements are defined in *FSC-STD-01-003 SLIMF Eligibility Criteria*.
Stakeholder: individuals and organizations with a legitimate interest in the goods and services provided by an FMU; and those with an interest in the environmental and social effects of an FMU's activities, products and services. They include: those individuals and organizations which exercise statutory environmental control over the FMU; local people; employees;
investors and insurers; customers and consumers; environmental interest and consumer groups and the general public [modified from Upton and Bass, 1995].

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).
Threatened species: Any species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
Use rights: Rights for the use of forest resources that can be defined by local custom, mutual agreements, or prescribed by other entities holding access rights. These rights may restrict the use of particular resources to specific levels of consumption or particular harvesting techniques