
CROSSWALK 1:

LINKAGES BETWEEN THE IPF/IFF PROPOSALS FOR ACTION AND THE MONTREAL PROCESS CRITERIA AND INDICATORS

Version 1.0
January, 2002



PINCHOT INSTITUTE
FOR CONSERVATION

Washington, DC
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In cooperation with:
USDA Forest Service International Programs
DOI Bureau of Land Management
USDA Natural Resource Conservation Service

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INTRODUCTION

This crosswalk builds upon recent international efforts to promote implementation and reporting on progress toward sustainable forest management (SFM). These efforts are the **Proposals for Action**, identified by the United Nations (UN's) Intergovernmental Panel on Forests (IPF) and Intergovernmental Forum on Forests (IFF), and the **Montreal Process Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests**, also known as the **Montreal Process C&I**. The crosswalk is intended for both domestic and international audiences and for use by governments, the international community, and other stakeholders.

The UN Forum on Forests (UNFF) has invited countries to report on progress in implementing the 270+ national and international Proposals for Action to promote SFM. It has been recommended that countries begin by assessing the Proposals against current domestic forest-related policies and programs and then determining the national relevance of each proposal. It is anticipated that the gaps in domestic and international institutions and/or programs may be identified, leading to actions to address those gaps. Although the participating countries are not legally bound by the Proposals for Action, there is a substantial political obligation to fully implement the Proposals. Given the complexity of the negotiated Proposals, many countries have found it difficult to understand and develop a national commitment to their implementation.

Concurrently, the twelve Montreal Process countries have been working since 1995 to voluntarily implement a set of criteria and indicators to measure national progress in SFM. The seven criteria and 67 indicators of the Montreal Process C&I were developed to provide a framework for assessing, monitoring, and reporting on the national status and trends in the biological, social and economic conditions relevant to temperate and boreal forest management. Other similar processes exist around the world and involve more than 150 countries. A great deal of work has already been invested in C&I reporting by various countries.

In discussing the Proposals for Action, many countries have expressed an interest in utilizing existing assessment and reporting tools to avoid duplicative actions toward implementation and reporting. Analysis of the Proposals for Action and the Montreal Process C&I suggests that many of the sustainability topics are common to both processes. Given the compatibility among existing international C&I processes, a correlation among the Proposals for Action and other C&I processes exists. Thus, documenting the linkages between the Montreal Process C&I and the Proposals for Action has been undertaken to enable and facilitate concurrent implementation.

BACKGROUND

Proposals for Action

In its final meeting in 1997, the UN Ad Hoc **Intergovernmental Panel on Forests** recommended more than 150 Proposals for Action to the international community to address a range of forest problems that countries should address at the domestic level. In developing the Proposals, the IPF was mandated to "pursue a consensus and formulate... actions in order to combat deforestation and forest degradation, and to promote the management, conservation, and sustainable development of all types of forests."¹ The IPF Proposals cover five themes:

- 1) Implementation of the United Nations Conference on Environment and Development (UNCED) decisions related to forests at the national and international levels;
- 2) International cooperation in financial assistance and technology transfer;
- 3) Scientific research, forest assessment, and development of criteria and indicators for sustainable forest management;
- 4) Trade and environment in relation to forest products and services;
- 5) International organizations and multilateral institutions, and instruments, including appropriate legal mechanisms.

The **Intergovernmental Forum on Forests** was created in 1997 to facilitate implementation of the IPF Proposals for Action and to further the policy dialogue on a number of issues that were unresolved during the IPF process. The IFF's final report², produced in 2000, recommended more than 120 additional Proposals for Action covering three categories and eight elements:

Category I

- (a) Promoting and facilitating the implementation of the IPF's Proposals for Action;
- (b) Reviewing, monitoring, and reporting on progress in the management, conservation, and sustainable development of all types of forests.

Category II

- (a) The need for financial resources;
- (b) Trade and environment;
- (c) Transfer of environmentally sustainable technology;
- (d) Issues needing further clarification, including: underlying causes of deforestation; traditional forest-related knowledge; forest conservation and protected areas; forest research; valuation of forest goods and services; economic instruments; tax policies and land tenure; future supply and demand of wood and non-wood products; and assessment, monitoring, and rehabilitation of forest cover in environmentally critical areas;
- (e) Forest-related work of international and regional organizations.

Category III

- (a) Future international arrangements and mechanisms for forests.

The **United Nations Forum on Forests (UNFF)** was created in 2000 as the permanent intergovernmental body responsible for overseeing the implementation of the Proposals for Action and enhancing cooperation and international forest policy dialogue.

Montreal Process Criteria and Indicators (Montreal Process C&I)

In 1994, ten countries (Australia, Canada, Chile, China, Japan, the Republic of Korea, Mexico, New Zealand, the Russian Federation, and the United States of America) formed the Working Group on Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests, which became known as the Montreal Process. The goal was to advance the development of internationally agreed-upon criteria and indicators for the conservation and sustainable management of temperate and boreal forests at the national level.³ In February of 1995, these ten countries agreed to implement a comprehensive set of Criteria and Indicators through the Santiago Declaration. Subsequently, two additional countries (Uruguay and Argentina) joined the Montreal Process and endorsed the use of the C&I, bringing membership in the Montreal Process to 12 countries.

The Montreal Process Criteria are:

- Criterion 1** Conservation of Biological Diversity
 - 1.1 Ecosystem diversity (5 indicators)
 - 1.2 Species diversity (2 indicators)
 - 1.3 Genetic diversity (2 indicators)
- Criterion 2** Maintenance of Productive Capacity of Forest Ecosystems (5 indicators)
- Criterion 3** Maintenance of Forest Ecosystem Health and Vitality (3 indicators)
- Criterion 4** Conservation and Maintenance of Soil and Water Resources (8 indicators)
- Criterion 5** Maintenance of Forest Contribution to Global Carbon Cycles (3 indicators)
- Criterion 6** Maintenance and Enhancement of Long-term Multiple Socio-Economic Benefits to Meet the Needs of Societies
 - 6.1 Production and consumption (6 indicators)
 - 6.2 Recreation and tourism (3 indicators)
 - 6.3 Investment in the forest sector (4 indicators)
 - 6.4 Cultural, social, and spiritual needs and values (2 indicators)
 - 6.5 Employment and community needs (4 indicators)

- Criterion 7** Legal, Institutional, and Economic Framework for Forest Conservation and Sustainable Management
- 7.1 Legal framework (5 indicators)
 - 7.2 Institutional framework (5 indicators)
 - 7.3 Economic framework (2 indicators)
 - 7.4 Measure and monitor changes (3 indicators)
 - 7.5 Conduct and apply research and development (5 indicators)

The Montreal Process countries are now implementing the Montreal Process C&I. Activity is taking place at the international, national, and local levels. In the United States, a Washington, DC-based multi-institutional Roundtable on Sustainable Forests formed in 1998 to support U.S. implementation of the Montreal Process C&I. The Roundtable is a forum for dialogue regarding how the Montreal Process C&I can contribute to improving forest management.

METHODOLOGY

The following explains how previous work was used to construct this crosswalk, the differences between the Proposals for Action and the Montreal Process C&I, and how the crosswalk can be used for implementation of the Proposals for Action.

Two crosswalks have been created to show the linkages between the Proposals for Action and the Montreal Process C&I. Crosswalk 1 starts with the Proposals and illustrates the corresponding Montreal Process C&I. Crosswalk 2 starts with the Montreal Process C&I and illustrates the corresponding Proposals. The purpose of illustrating the linkage both ways is to facilitate the examination of the correlation from either perspective.

Two publications are available to improve understanding of the Proposals for Action. *The Practitioner's Guide to the Implementation of the IPF Proposals for Action*, a six-country initiative developed in 1999, simplified the language of the original IPF Proposals for Action.⁴ However, it should be noted that the text of the Guide is not a substitute for the agreed-upon text of the Proposals for Action. Building on the Practitioner's Guide, Australia developed a second tool in 2000 to provide an integrated summary of the more than 270 IPF and IFF Proposals for Action. Similar to the Practitioner's Guide, the goal of the Australian Summary was to *"improve the understanding of the IPF/IFF Proposals for Action by simplifying the wording and (by) grouping related Proposals for Action. The summary could be used by countries to assist with national assessments of the implementation of the IPF/IFF Proposals for Action."*⁵

The following crosswalk builds upon the Practitioner's Guide and the Australian Summary. The numbering of the Proposals in the crosswalk has been altered from Australia's version to allow for clearer reference to the Montreal Process indicators. Each summarized Proposal is cross-referenced with the full text of the negotiated Proposals for Action, which can be found at:

<http://www.un.org/documents/ecosoc/cn17/ipf/1997/ecn17ipf1997-12.htm> (for the IPF Proposals) and at <http://www.un.org/documents/ecosoc/cn17/2000/ecn172000-14.htm> (for the IFF Proposals).

The Proposals for Action are oriented towards institutional frameworks, such as programs and policies that address forest management. As such, there is sufficient overlap with Criterion 7 of the Montreal Process C&I, which examines the extent to which countries have a *legal, institutional, and economic framework for forest conservation and sustainable management*. Thus, unless specifically stated, the Montreal Process indicator listed is within Criterion 7. There were a few instances, however, where indicators from other criteria are listed accordingly.

The Proposals for Action and the Montreal Process C&I are phrased differently. The Proposals are *action statements*, while the Montreal Process indicators ask for the *trend or extent* to which something exists. It

should be understood that the Montreal Process indicators are relevant to the Proposals in that they reveal the ability of national institutions or programs to address a Proposal. Therefore, availability of data for an indicator informs policy makers whether additional actions might be needed. Even so, reporting on the Montreal Process indicators is not equivalent to implementing the Proposals.

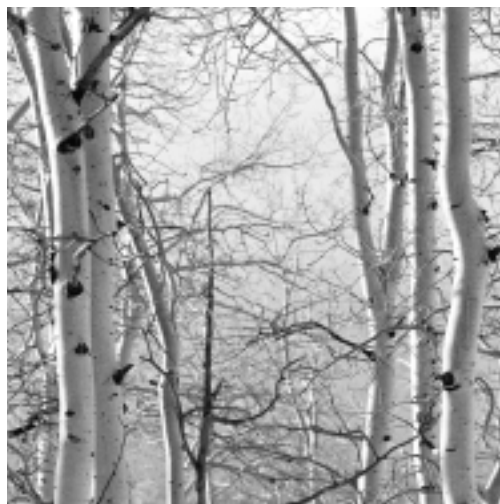
The crosswalks identify the indicators that will help reveal the current data available, programs in place, or research capability that can be useful to assess the existing national situations relative to a Proposal. For example, in order to assess development and implementation of protection and conservation strategies (Proposal I.20), it is useful to examine indicators that reveal whether information is available on protected areas or the extent to which current laws exist to require such strategies. The status of these indicators suggests the degree of action needed by a country to implement the specific Proposal.

To improve the crosswalk's readability, key words or phrases that verify the linkage between the Proposals for Action and the Montreal Process C&I have been bolded. In addition, the degree of linkage is noted in the last column under a "High," "Medium," or "Low" ranking. The ranking is indicated for the full suite of related indicators or related Proposals.

There are several Proposals with no apparent link to any Montreal Process indicators. This is commonly true for Proposals that are oriented towards an international response since the C&I are designed for domestic utilization. Nonetheless, the international Proposals are included because they also need to be assessed.

NOTES:

- 1 Report of the Ad Hoc Intergovernmental Panel on Forests on its fourth session. March, 1997.
- 2 Report of the Intergovernmental Forum on Forests, March, 2000.
- 3 Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests: The Montreal Process. December, 1999. Second Edition.
- 4 Practitioner's Guide to the Implementation of the IPF Proposals for Action. Prepared by the Six-Country Initiative in Support of the UN Ad-Hoc IFF. May, 1999.
- 5 Summary of Proposals for Action. Commonwealth of Australia, 2000.



CROSSWALK 1:

LINKAGES BETWEEN THE IPF/IFF PROPOSALS FOR ACTION AND THE MONTREAL PROCESS CRITERIA AND INDICATORS

I: IMPLEMENTATION OF INTERNATIONAL FOREST-RELATED DECISIONS WITHIN COUNTRIES

National Forest Programs

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.1	Develop and implement a holistic national forest program which integrates the conservation and sustainable use of forest resources and values in a way that is consistent with national, sub-national and local policies and strategies .	17a 58b(i)		7.1.b. (Extent to which the legal framework) Provides for periodic forest-related planning, assessment, and policy review that recognizes the range of forest values, including coordination with relevant sectors.	Medium
				7.2.b. (Extent to which the institutional framework can) Undertake and implement periodic forest-related planning, assessment, and policy review including cross-sectoral planning and coordination.	
I.2	Assess, develop and implement an appropriate combination of legislation, economic instruments and tax policies for promoting sustainable forest management.		115a 115b 115c	7.1 a-e (legal framework), 7.3 a-b (economic framework)	High
I.3	Develop and implement appropriate policies and mechanisms to secure land tenure , recognize access to and use of forest resources by local and/or indigenous communities in order to support sustainable forest management.	29c	64c 64d 115d	6.5.d. Area and percent of forestland used for subsistence purposes.	High
				7.1.a. (Extent to which the legal framework) Clarifies property rights , provides for appropriate land tenure arrangements , recognizes customary and traditional rights of indigenous people , and provides means of resolving property disputes by due process.	
I.4	Develop and implement codes of conduct to encourage private sector activities consistent with sustainable forest management.	69a 128c		7.1.d. (Extent to which the legal framework) Encourages best practice codes for forest management.	High

National Forest Programs (cont.)

I.5	Improve cooperation, coordination and partnerships in support of sustainable forest management within a national forest program, by involving relevant stakeholders including indigenous people, forest owners, women and local communities in forest decision making and utilizing appropriate expertise in international and regional organizations.	17b 17f 17h 17i 40e	19b 64b 66 140a	7.1.b. (Extent to which the legal framework) Provides for periodic forest-related planning, assessment, and policy review that recognizes the range of forest values, including coordination with relevant sectors .	Medium
				7.1.c. (Extent to which the legal framework) Provides opportunities for public participation in public policy and decision making related to forests and public access to information.	
				7.2.b. (Extent to which the institutional framework can) Undertake and implement periodic forest-related planning, assessment, and policy review including cross-sectoral planning and coordination .	
I.6	Monitor, evaluate and report on implementation progress of a national forest program, incorporating the use of criteria and indicators to assess trends in the state of the forests and progress towards sustainable forest management.	17a 17d 89a 115a	17d 19a	7.2.b. (Extent to which the institutional framework can) Undertake and implement periodic forest-related planning, assessment , and policy review including cross-sectoral planning and coordination.	High
				7.4.a. Availability and extent of up-to-date data, statistics, and other information important to measuring or describing indicators associated with criteria 1-7 .	
				7.4.b. Scope, frequency and statistical reliability of forest inventories, assessments, monitoring and other relevant information.	

Implementation of IPF and IFF Proposals for Action

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.7	Conduct a systematic national assessment of the IPF and IFF proposals for action involving all stakeholders and plan for their implementation within a national forest program.		9d	<i>No corresponding indicator</i>	
I.8	Establish a coordinated, integrated and participatory approach to the implementation of the IPF/IFF proposals for action and the forest-related work of other international instruments.	144	9b 9e 9f	<i>No corresponding indicator</i>	
I.9	Report on the assessment and implementation of the IPF/IFF proposals for action.		17c	<i>No corresponding indicator</i>	

Forest Information and Awareness

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.10	Prepare national information on sustainable forest management , including forest resource assessments and forest statistics on wood and non-wood forest products and services.	89b	17a 121a 121b	2.d. Annual removal of wood products compared to the volume determined to be sustainable .	High
				2.e. Annual removal of non-timber forest products (e.g., fur bearers, berries, mushrooms, game), compared to the level determined to be sustainable .	
				7.1.b. (Extent to which the legal framework) Provides for periodic forest-related planning, assessment , and policy review that recognizes the range of forest values , including coordination with relevant sectors.	
				7.4.a. Availability and extent of up-to-date data, statistics and other information important to measuring or describing indicators associated with criteria 1-7.	
				7.4.b. Scope, frequency and statistical reliability of forest inventories, assessments , monitoring and other relevant information.	
I.11	Improve the collection of quantitative data on values of all forest goods and services and environmental and social impacts of changes in forest use to assist policy and investment decisions.	104a	107a 107c	7.4.a. Availability and extent of up-to-date data, statistics, and other information important to measuring or describing indicators associated with criteria 1-7	Medium
				7.5.b. Development of methodologies to measure and integrate environmental and social costs and benefits into markets and public policies, and to reflect forest related resource depletion or replenishment in national accounting systems.	
				7.5.c. New technologies and the capacity to assess the socio-economic consequences associated with the introduction of new technologies.	
				7.5.d. Enhancement of ability to predict impacts of human intervention on forests.	
I.12	Improve data collection and information dissemination on the supply and demand of wood and non-wood products including the prices of these products and their substitutes.	28a 131a	121a 121c 121d	6.1.c. Supply and consumption of wood and wood products , including consumption per capita.	High
				6.1.f. Supply and consumption/use of non-wood products .	
				7.2 a. (Extent to which the institutional framework can) Provide for public involvement activities and public education, awareness and extension programs, and make available forest-related information.	

Forest Information and Awareness (cont.)

				7.4.a. Availability and extent of up-to-date data , statistics and other information important to measuring or describing indicators associated with criteria 1-7.	
				7.4.b. Scope, frequency and statistical reliability of forest inventories , assessments, monitoring and other relevant information.	
I.13	Establish improved mechanisms to consult stakeholders on the identification of the full range of forest goods and services and to make forest-related information and progress reports widely available to policy makers and relevant stakeholders.	30a 78a 78b 58b(ii) 89h	17b 18 122d	7.1.b. (Extent to which the legal framework) Provides for periodic forest-related planning, assessment, and policy review that recognizes the range of forest values , including coordination with relevant sectors .	High
				7.1.c. (Extent to which the legal framework) Provides opportunities for public participation in public policy and decision-making related to forests and public access to information.	
				7.2.a. (Extent to which the institutional framework can) Provide for public involvement activities and public education, awareness and extension programs, and make available forest related information .	
				7.4.b. Scope, frequency and statistical reliability of forest inventories, assessments, monitoring and other relevant information.	
I.14	Create awareness of the importance of issues related to deforestation and forest degradation and the multiple values of forests.	30a	64e 142a	6.3.b. Level of expenditure on research and development, and education .	Medium
				7.2.a. (Extent to which the institutional framework can) Provide for public involvement activities and public education , awareness and extension programs, and make available forest related information .	

Underlying Causes of Deforestation and Forest Degradation

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.15	Study and analyze historical and underlying causes of deforestation and forest degradation , including the impacts of transboundary pollution, poverty, fuelwood collection and processes outside the forest sector.	27a 27b 27c	64a 122c	3.a. Area and percent of forest affected by processes or agents beyond the range of historic variation , e.g. by insects, disease, competition from exotic species, firestorm, land, clearance, permanent flooding, salinization, and domestic animals.	Medium
				7.5.b. Development of methodologies to measure and integrate environmental and social costs and benefits into markets and public policies, and to reflect forest-related resource depletion or in national accounting systems.	
				7.5.d. Enhancement of ability to predict impacts of human intervention on forests.	
I.16	Develop and implement integrated national policies, strategies, economic instruments and mechanisms for supporting sustainable forest management and addressing deforestation and forest degradation.	29a 29b	115c 115g	7.2.b. (Extent to which the institutional framework can) Undertake and implement periodic forest-related planning, assessment, and policy review including cross-sectoral planning and coordination.	Medium
				7.3.a. (Extent to which the economic framework supports) Investment and taxation policies and regulatory environment which recognize the long-term nature of investments and permits the flow of capital in and out of the forest sector in response to market signals, non-market economic valuations, and public policy decisions in order to meet long-term demands for forest products and services.	
I.17	Enhance the role of plantations as a mechanism for reducing deforestation and forest degradation of natural forests.	28b	64g	2.c. The area and growing stock of plantations of native and exotic species.	Medium
				6.3.a. Value of investment , including investment in forest growing , forest health and management, planted forests , wood processing, recreation and tourism.	

Future Supply and Demand of Forest Products

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.18	Implement public and private sector policies and programs to meet increasing demands for wood and non-wood products and services , including fuelwood and wood energy, from sustainably managed forests.	28a	122a 122b 122c 122d	6.3.a. Value of investment , including investment in forest growing, forest health and management, planted forests , wood processing, recreation and tourism.	High
				6.3.b. Level of expenditure on research and development , and education.	
				7.2.d. (Extent to which the institutional framework can) Develop and maintain efficient physical infrastructure to facilitate the supply of forest products and services and support forest management.	
				7.3.a. (Extent to which the economic framework supports) Investment and taxation policies and regulatory environment which recognize the long-term nature of investments and permits the flow of capital in and out of the forest sector in response to market signals, non-market economic valuations, and public policy decisions in order to meet long-term demands for forest products and services .	
I.19	Analyze the full life cycle costs and benefits , including environmental impacts , of forest products and their substitutes as a basis for reviewing policies that affect their relative prices and for developing incentives to support sustainable forest management and combat deforestation and forest degradation.		41c 41d 41e 64h 121e 122f	7.5.b. Development of methodologies to measure and integrate environmental and social costs and benefits into markets and public policies, and to reflect forest related resource depletion or replenishment in national accounting systems.	Medium
				6.1.e. Degree of recycling of forest products	

Protected Areas and Forest Conservation

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.20	Develop and implement appropriate planning and management strategies for the representative protection and conservation of the full range of forest values on an ecosystem basis within and outside protected areas.	46c	85a 85b	1.1.c. Extent of area by forest type in protected area categories as defined by IUCN2 or other classification systems.	High
				1.1.d. Extent of areas by forest type in protected areas defined by age class or successional stage.	
				4.b. Area and percent of forestland managed primarily for protective functions , e.g. watersheds, flood protection, avalanche protection, riparian zones.	
				6.4.a. Area and percent of forestland managed in relation to the total area of forestland to protect the range of cultural, social, and spiritual needs and values .	
				6.4.b. Non-consumptive-use forest values .	
				7.1.e. (Extent to which the legal framework) Provides for the management of forests to conserve special environmental, cultural, social, and/or scientific values .	
I.21	Develop and implement partnership mechanisms to engage forest owners, private sector, indigenous people and local communities in the planning and management of forest conservation areas.		84 85b 85c 85d	7.2 a. (Extent to which the institutional framework can) Provide for public involvement activities and public education, awareness and extension programs , and make available forest-related information.	Low
I.22	Develop and implement innovative mechanisms and improved coordination of donor activity for effectively financing , encouraging and implementing integrated cross-sectoral policies to support forest conservation.		85f 90	7.3.a. (Extent to which the economic framework supports) Investment and taxation policies and regulatory environment which recognize the long-term nature of investments and permits the flow of capital in and out of the forest sector in response to market signals, non-market economic valuations, and public policy decisions in order to meet long-term demands for forest products and services.	Low

Protected Areas and Forest Conservation (cont.)

I.23	Develop and implement methodologies and criteria to assess the adequacy , consistency, condition and effectiveness of protected areas and their management.		85e 88 89	1.1.c. Extent of area by forest type in protected area categories as defined by IUCN or other classification system	Medium
				1.1.d. Extent of areas by forest type in protected areas defined by age class or successional stage.	
				4.b. Area and percent of forestland managed primarily for protective functions (e.g. watersheds, flood protection, avalanche protection, riparian zones.)	
				6.4.a. Area and percent of forest land managed in relation to the total area of forest land to protect the range of cultural, social and spiritual needs and values.	
				7.4.a. Availability and extent of up-to-date data, statistics and other information important to measuring or describing indicators associated with criteria 1-7.	
I.24	Establish joint protected areas and guidelines for collaborative management of ecologically important or unique transboundary forests.		86	<i>No corresponding indicator</i>	

Forests in Environmentally Critical Areas

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.25	Analyze past experiences and monitor trends in dryland forests, including biophysical, social, economic and institutional factors.	46b		7.4.a. Availability and extent of up-to-date data, statistics , and other information important to measuring or describing indicators associated with criteria 1-7	Low
I.26	Undertake integrated and coordinated actions to address dryland forest issues at the international, national and local levels.	46a 46f		7.2.b. (Extent to which the institutional framework can) Undertake and implement periodic forest-related planning, assessment, and policy review including cross-sectoral planning and coordination ;	Low
I.27	Develop and support partnerships which include indigenous and local communities and management approaches, including those that embody traditional lifestyles, to reduce pressures on dryland forests and promote their sustainable management and regeneration.	46d 46e		7.1.b. (Extent to which the legal framework) Provides for periodic forest-related planning , assessment, and policy review that recognizes the range of forest values, including coordination with relevant sectors .	Low
				7.2.b. (Extent to which the institutional framework can) Undertake and implement periodic forest-related planning, assessment, and policy review including cross-sectoral planning and coordination .	

Forests in Environmentally Critical Areas (cont.)

I.28	Encourage cooperation and coordination of activities concerning forests and trees in environmentally critical areas, including systematic data collection and analysis .		129a	7.2.b. (Extent to which the institutional framework can) Undertake and implement periodic forest-related planning, assessment, and policy review including cross-sectoral planning and coordination .	Medium
				7.4.a. Availability and extent of up-to-date data, statistics, and other information important to measuring or describing indicators associated with criteria 1-7	
I.29	Give high priority in national forest programs to the rehabilitation and sustainable management of forests and trees in environmentally critical areas .		129b	3.a. Area and percent of forest affected by processes or agents beyond the range of historic variation, e.g. by insects, disease, competition from exotic species, fire, storm, land clearance, permanent flooding, salinisation, and domestic animals.	Medium
				3.c. Area and percent of forestland with diminished components indicative of changes in fundamental ecological processes (e.g. soil nutrient cycling, seed dispersion, pollination) and/or ecological continuity (monitoring of functionally important species such as fungi, arboreal epiphytes, nematodes, beetles, wasps, etc.).	
				4.b. Area and percent of forest land managed primarily for protective functions , e.g. watersheds, flood protection, avalanche protection, riparian zones.	
				7.1.e. (Extent to which the legal framework) Provides for the management of forests to conserve special environmental, cultural, social, and/or scientific values .	
I.30	Raise awareness and disseminate data on the ecological, social, cultural and economic contributions of planted and natural forests in the rehabilitation and sustainable management of forests in environmentally critical areas.		129a 129d	7.5.a. Development of scientific understanding of forest ecosystem characteristics and functions .	Low

Impacts of Airborne Pollution on Forests

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.31	Develop national assessment and monitoring methods, extend regional programs for monitoring impacts of air pollution and provide factual information about transboundary air pollution.	50c 50d 27c		3.b. Area and percent of forestland subjected to levels of specific air pollutants (e.g., sulfates, nitrate, ozone) or ultra violet B that may cause negative impacts on the forest ecosystem.	Low
				7.4.a. Availability and extent of up-to-date data, statistics and other information important to measuring or describing indicators associated with criteria 1-7.	
I.32	Adopt a preventative approach to the reduction of damaging air pollution.	50a		7.1.d. (Extent to which the legal framework) Encourages best practice codes for forest management	Low

Forest Research and Development

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.33	Identify and prioritize interdisciplinary forest research needs at the national and eco-regional levels.	94a	96a	6.3.b. Level of expenditure on research and development , and education.	Low
				7.5.a-e. Capacity to conduct and apply research and development aimed at improving forest management and delivery of forest goods and services.	
I.34	Strengthen forest research by formulating national policies, programs and strategies and by coordinating the implementation of research programs.		96a	6.3.b. Level of expenditure on research and development , and education.	Low
				7.2.b. (Extent to which the institutional framework can) Undertake and implement periodic forest-related planning, assessment, and policy review including cross-sectoral planning and coordination.	
I.35	Mobilize resources, foster public and private sector joint ventures, build capacity and strengthen research institutions, networks and consortia to extend forest research at the local, national and international levels.	94a 94d	96b 97b 97d	7.2.c. (Extent to which the institutional framework can) Develop and maintain human resource skills across relevant disciplines.	Medium
I.36	Further develop and enhance widespread access to forest research and information systems making best use of existing mechanisms and networks.	94a	97c	7.2.a. (Extent to which the institutional framework can) Provide for public involvement activities and public education, awareness and extension programs , and make available forest related information .	High
I.37	Improve the linkages between forest science and forest policy processes.	58b(vii)	96c	<i>No corresponding indicator</i>	
I.38	Involve relevant interested parties in the extension, planning, implementation, monitoring and evaluation of forest research and ensure appropriate prior consents are obtained for research programs.	17e 94d	96d	7.2.a. (Extent to which the institutional framework can) Provide for public involvement activities and public education, awareness and extension programs , and make available forest related information.	Low
I.39	Further develop, field test and promote the use of criteria and indicators for sustainable forest management, including appropriate criteria and indicators for traditional forest-related knowledge and air pollution, and support efforts to harmonize associated concepts and definitions.	40l 50d 115a 115b 115d	17d	7.4.a. Availability and extent of up-to-date data, statistics and other information important to measuring or describing indicators associated with criteria 1-7 .	High

Forest Research and Development (cont.)

I.40	Extend research into forest inventory and monitoring techniques , as well as the development of efficient methods for the valuation of all forest goods and services , and for the identification of costs and benefits of sustainable forest management.	89c 104c	107b 107c	7.4.b. Scope, frequency and statistical reliability of forest inventories, assessments, monitoring and other relevant information.	High
				7.5.b. Development of methodologies to measure and integrate environmental and social costs and benefits into markets and public policies, and to reflect forest related resource depletion or replenishment in national accounting systems.	
I.41	Explore ways to establish full cost internalization of wood products and non-wood substitutes, as well as externalities , and share information on findings and implementation.	134a 134b		6.1.a: Value and volume of wood and wood products production , including value added through downstream processing.	Medium
				7.5.b. Development of methodologies to measure and integrate environmental and social costs and benefits into markets and public policies, and to reflect forest related resource depletion or replenishment in national accounting systems.	
I.42	Promote research into the rehabilitation and extension of dryland forests as well as into traditional forest-related knowledge with the full involvement of indigenous peoples and local communities.	40k 46g		<i>No corresponding indicator</i>	
I.43	Develop and adapt technologies , including traditional forest-related knowledge, for increasing sustainable utilization of lesser used species.	132c		6.3.c. Extension and use of new and improved technologies .	Low
				7.5.c. New technologies and the capacity to assess the socioeconomic consequences associated with the introduction of new technologies.	

Traditional Forest Related Knowledge

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.4 4	Collaborate with and enhance the capacity of indigenous people to identify, map and promote the understanding and application of traditional forest-related knowledge at the local, national and international levels.	40a 40g 40j 40n	75	7.2.c. (Extent to which the institutional framework can) Develop and maintain human resource skills across relevant disciplines.	Low
I.4 5	Develop and implement national legislation and policies , including the application of intellectual property rights, to respect, maintain, protect and apply traditional forest-related knowledge.	40c 40d 40p 40b	74d	7.1.a. (Extent to which the legal framework) Clarifies property rights, provides for appropriate land tenure arrangements, recognizes customary and traditional rights of indigenous people , and provides means of resolving property disputes by due process.	Low
I.4 6	Develop and implement policies and mechanisms to support traditional resource use systems and ensure equitable sharing of forest-related benefits, including use of forest genetic resources, with local communities and indigenous people and document successful approaches.	40f 40h 40I 40r 40c	56j 64c 66 74b 122d	<i>No corresponding indicator</i>	
I.4 7	Assist networks that promote sharing of traditional forest-related knowledge and include traditional forest-related knowledge in forest management training programs.	40l 40m		<i>No corresponding indicator</i>	

Requirements of Countries with Low Forest Cover

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
I.4 8	Analyze and take into account the related social, economic and environmental implications, costs and benefits of non-wood substitutes and imports of forest products.	58b(iv)	41h	6.1.f. Supply and consumption/use of non-wood products.	Low
I.4 9	Take positive action towards reforestation, afforestation and conservation, using native species where appropriate, including regeneration of degraded forests, management of plantations and trees outside forests and the expansion of protected areas .	58b(ii) 58b(iii) 58b(v) 58c	30b 129c	1.1.d. Extent of areas by forest type in protected areas defined by age class or successional stage.	Low
				2.c. The area and growing stock of plantations of native and exotic species.	
I.5 0	Establish and manage plantations to enhance production of forest goods and services, taking into account relevant social, cultural, economic and environmental considerations in the selection of species, areas and silviculture systems.	58b(ii)		2.c. The area and growing stock of plantations of native and exotic species.	Low

II: INTERNATIONAL COOPERATION IN FINANCIAL ASSISTANCE AND TECHNOLOGY TRANSFER

(No Corresponding Indicators for this Section)

Provision of Financial Resources to Developing Countries and Countries with Economies in Transition

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
II.1	Create or strengthen partnerships and international cooperation to facilitate the provision of increased financial resources to implement sustainable forest management including the IPF/IFF proposals for action.	17c 67a	9a 84 9c 87 9g 97a 30a 129e		
II.2	Identify and prioritize resource needs for sustainable forest management, including the implementation of the IPF/IFF proposals for action.	67b 67c 30b 133b	17e 30b		
II.3	Explore and expand innovative financial mechanisms including concessional lending, debt relief initiatives and an investment promotion entity to support sustainable forest management and national forest programs.	17c 67e 67g 71c	30e 64j		
II.4	Encourage private sector investment and reinvestment of forest revenues into sustainable forest management and environmentally sound technologies, through appropriate policies, legislation, incentives and mechanisms.	69b 69c 69d 69e 70b 77d	30c 56b 115a 115b 122b		
II.5	Enhance government, community and forest owner financing to facilitate local participation in sustainable forest management.	70c 77f	64f		
II.6	Enhance coordination and collaboration between donors, international institutions and instruments related to forests and explore appropriate indicators for monitoring and evaluating donor funded forest programs.	71a 71b			
II.7	Support coordinated deployment of resources for sustainable forest management through national forest programs to improve efficiency and effectiveness of available funds.	70a 70d 17g	30a		

Technology Transfer and Capacity Building

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
II.8	Assess, taking into account gender disaggregated data, the technological requirements necessary to achieve sustainable forest management.	77b	56c 56o		
II.9	Enhance cooperation and financing to promote access to and transfer of environmentally sound technologies.	77a 77c	56a 56i 56e 56l 56g 129e 56h		
II.10	Facilitate capacity building within national forest programs to implement sustainable forest management and the IPF/IFF proposals for action, including strengthening and supporting institutions involved in forest and plantation management and supporting indigenous people, local forest dependent communities and forest owners.	17g 28a 58b(vi) 70e 77e 77f 89b 115c	17a 19b 56d 64e 64i 107d		
II.11	Support developing countries to increase downstream processing and community based processing of wood and non-timber forest products.	131b			
II.12	Promote the dissemination and sharing of environmentally sound technologies to end-users, particularly in local communities, including through efficient use of extension services.	77e	56f 56h		
II.13	Strengthen education and training for women in community development programs including the growth and use of fuelwood and the use of energy efficient cooking technology and ensure women benefit from the transfer of environmentally sound technologies.		56m 56n		

III: TRADE AND ENVIRONMENT IN RELATION TO FOREST PRODUCTS AND SERVICES

Market Access and Transparency

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
III.1	Study the environmental, social and economic impacts of trade-related measures affecting forest products and services.	128a		<i>No corresponding indicator</i>	
III.2	Undertake measures to improve market access for forest goods and services, including the reduction of tariff and non-tariff barriers to trade , in accordance with existing international obligations and to promote a mutually supportive relationship between environment and trade.	128b	64i	7.3.b. (Extent to which the economic framework supports) Non-discriminatory trade policies for forest products.	Medium
III.3	Improve market transparency for trade in forest products and services and consider measures to reduce illegal trade in wood and non-wood forest products.	135a 135b	41e 41f	7.3.b. (Extent to which the economic framework supports) Non-discriminatory trade policies for forest products.	Medium
III.4	Implement policies and actions to facilitate trade in wood and non-wood products from sustainably managed forests and to minimize negative effects of short-term market changes.		41a 41g	<i>No corresponding indicator</i>	
III.5	Undertake further cooperative work on voluntary certification and labeling schemes, including studying their link with criteria and indicators and their effectiveness in promoting sustainable forest management and exchange information and experience on these schemes.	133a 133d 133e 133g	41b	<i>No corresponding indicator</i>	
III.6	Support the application of accessibility, credibility, equivalence, cost-effectiveness, transparency and participatory concepts to certification and labeling schemes and ensure they do not lead to unjustified obstacles to market access.	133c 133f	41b	<i>No corresponding indicator</i>	
III.7	Intensify efforts and implement policies to promote the sustainable use of all economically viable lesser-used species in domestic and international markets.	132a 132b		<i>No corresponding indicator</i>	

IV: FOREST-RELATED WORK OF INTERNATIONAL ORGANIZATIONS AND MULTILATERAL INSTITUTIONS AND INSTRUMENTS

(No Corresponding Indicators for this Section)

Involvement of Countries in International Programs

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
IV.1	Support the forest work undertaken by international and regional organizations and under relevant international instruments and encourage them to contribute to forest policy dialogue and to support inter-agency cooperation on the implementation of the outcomes of UNCED and the IPF/IFF processes.	146a 146d 146e	139a 139b 141a		
IV.2	Clarify the forest-related roles of international institutions and instruments to improve integration and coordination and eliminate duplication of their efforts.	146b 146c	139c		
IV.3	Strengthen national arrangements to provide guidance to multilateral forest-related organizations		140b		
IV.4	Facilitate work under the Convention on Biological Diversity and other relevant organizations (WIPO, UNCTAD) to implement measures to recognize, respect, protect and maintain traditional forest-related knowledge including the application of intellectual property rights, <i>sui generis</i> or other systems for its protection.	40o	56j 74a 74c 75		
IV.5	Contribute national data on timber and non-timber values to the FAO Global Forest Resource Assessments.	89d			
IV.6	Contribute to a global and regional comprehensive assessment of the current status of protected forest areas, to assist in the establishment of bio-geographically balanced protected area networks.		85g		
IV.7	Participate in the international development of global guidelines for consistent national interpretation and implementation of IUCN categories of protected areas.		89		
IV.8	Strengthen international cooperation and action with respect to reducing long-range air pollution.	50b 50e			

Work of International Organizations

	Summarized Proposal	IPF	IFF	Related Indicators	Linkage
IV.9	Continue collaborative work to support the implementation of the IPF/IFF proposals for action and the provision of information to assist the forest sector.	78c 145			
IV.10	Develop institutional synergies with other partners and prepare a comprehensive directory of organizations and instruments engaged in forest-related activities.		141b 141c		
IV.11	Provide general, cross-sectoral and specific advice to countries on forest policies and the design and administration of economic instruments and tax policies to promote sustainable forest management.		115f 142b		
IV.12	Strengthen transparency of decision making in international financial institutions and ensure their policies and structural adjustment programs support sustainable forest management.		65 115g		
IV.13	Develop harmonized, cost-effective, comprehensive national forest reporting formats and data systems incorporating relevant criteria and indicators for sustainable forest management.	89g 115e	19a 142c		
IV.14	Consult with countries about forest assessment definitions as well as the collection and analysis of forest information, including the global forest resource assessment, and provide feedback on the results.	89e 89f	18		
IV.15	Prepare information on methods and data requirements for the valuation of all forest goods and services.	104b			

Work of International Organizations (cont.)

IV.16	Undertake systematic collection and analysis of forest sector financial flows data to assist informed policy decisions.		30d		
IV.17	Undertake reviews of contemporary forest revenue collection systems and the relation of land tenure to deforestation and forest degradation.		67 115e		
IV.18	Increase public awareness of the direct and indirect benefits from forests at the regional and global levels.		142a		
IV.19	Improve support for forest-related research programs, strengthen linkages between forest policy and research and explore the possibility of a global forest information service.	94c	98a 98b 98c		
IV.20	Encourage, within the work of the Convention on Biological Diversity, the development of biodiversity indicators that are complementary to existing forest criteria and indicators as well as the compilation of legal mechanisms related to the protection, use and benefit sharing of traditional forest-related knowledge.	40q 115f			
IV.21	Promote research and analysis by forest-related Conventions to address gaps in existing knowledge.	94b			
IV.22	Consider the needs of developing and low forest cover countries, support forest programs and integrate forest-related aspects into poverty, population, food and environmental programs.		143 144		