



Forestry Department

Food and Agriculture Organization of the United Nations

**Mainstreaming Forestry
Workshop on Broadening, Harmonization and
Cross-Sectoral Integration of National Forest Inventories
in Asia Pacific Region**

**Report survey
on the contents of
National Forest Inventory**

**Beijing, China - 26-31 March 2007
MAR, INBAR and SFA**

Strengthening Monitoring, Assessment and Reporting (MAR) on Sustainable Forest Management (SFM) in Asia (GCP/INT/988/JPN)

FAO initiated the project "Strengthening Monitoring, Assessment and Reporting on Sustainable Forest Management in Asia" (GCP/INT/988/JPN) in January 2006. The five-year project is funded by the Government of Japan.

The main objective of this project is to develop a harmonized forest related national monitoring, assessment and reporting (MAR) system to contribute directly to the improvement of sustainable forest management (SFM) regimes in the Asia-Pacific region. An allied objective of the project is to enhance the use of the MAR information in national decision-making, formulation of effective forest policies, and sustainable forest management and planning.

The project accomplishes its objectives in two phases. The first two years, the Development Phase, the project would focus on: (a) international activities like the establishment of linkages with forest-related processes; (b) development of a globally harmonized framework, guidelines and database structure, including pilot testing in some countries; (c) use of MAR information in forest planning and development of forest policies at the national level; (d) establishment of a country-level network of national focal points to various forest-related processes; and (e) initiate a set of national activities that facilitate the implementation of the harmonized MAR.

The Implementation Phase spreads over the remaining three years of the project period and focuses on the implementation of the harmonized MAR, including facilitation in the establishment of database at the national level in selected project countries within the Asia-Pacific region through studies, reviews, training, workshops and expert consultations. The detailed design of this phase will be finalized on the basis of a review of the activities and the outputs of the first phase.

All countries in the Asia-Pacific region can participate in the project, although the actual level and intensity of their involvement may vary among them. Forestry departments in respective countries have been requested to nominate their national focal points for this project.

The project is organized under the Forest Resources Development Service (FOMR) in the Forest Management Division (FOMD) of FAO Forestry Department.

The contact persons are:

Mr Peter Holmgren, Chief FOMR Peter.Holmgren@fao.org

Mr Kailash Govil, Senior Forestry Officer Kailash.Govil@fao.org
Monitoring Assessment and Reporting

Introduction to the questionnaire

This Report survey has been prepared with the main aim of collecting information on the National Forest Inventory (NFI) in the Asia Pacific countries in order to facilitate the fulfilment of the harmonization in the national forest monitoring, assessment and reporting.

The information collected thanks to the collaboration of all the participants will be compiled and analyzed, forming the basis of the background documentation for the forthcoming workshop on Broadening, Harmonization and Cross-Sectoral Integration of National Forest Inventories in Asia Pacific Region. It will help understanding the range of fields (information) and variables collected in the framework of the National Forest Inventories, their main purposes and applications, representing a valuable food for discussion and activities of the forthcoming workshop and therefore highly contributing to the fulfilment of the objectives of the overall project.

The present Report Survey is meant to be completed electronically using the present Excel file and it consists of three sections:

- 1) Contributor(s) information
- 2) Overview on the National Forest Inventory (NFI) in your country
- 3) Detailed survey on the Fields (information) included in the National Forest Inventory (NFI)

Each page will deal with a Section or a Field (information), where you will be asked to kindly reply to few common knowledge questions (generally on a multiple choice basis). Your selection can be expressed by typing a "y" (yes) or "n" (no) in the cell of the "Y/N" column, related to the question and/or by entering your answers and/or your kind comments in the "Comments" column, when needed.

When an asterisk (*) is present near a word, the description/explanation of the term/class/variable is available at the end of the related page.

The completed questionnaire should be sent back to Ms. Serena Fortuna (Serena.Fortuna@fao.org) and Mr. Kailash Govil (Kailash.Govil@fao.org) not later than 15th February 2007.

Additional workshop documents

The following Workshop documents will be sent to you as support to the survey process:

Workshop document No. 2: FAO. 2004. National Forest Inventory Field Manual Template. Forest Resources Assessment Working Paper 94/E. Compiled by A. Branthomme. 4th edition. Last revised 24.08.2004.

Workshop document No. 3: FAO 2004. Global forest resources assessment update 2005. Terms and Definitions (Final version).

SECTION 1. Contributor(s) information

Main contributor

Name: _____
Surname: _____
Institute: _____
Position: _____
Address: _____
Telephone: _____
Fax: _____
E-mail: _____
E-mail 2: _____
Attendance to the workshop (y/n): _____

Additional contributor

Name: _____
Surname: _____
Institute: _____
Position: _____
Address: _____
Telephone: _____
Fax: _____
E-mail: _____
E-mail 2: _____
Attendance to the workshop (y/n): _____

SECTION 2. Overview on the National Forest Inventory (NFI) in your country
Field 1. General Information

	Yes/No	Comments
1. Level of NFI		
1.1 At what level is the NFI conducted in your country?		
a. National level		
b. Sub-national level (Collecting information at Sub-National level)		
b.1 If at sub-national, please indicate the scale/level (state/district/forest division/etc.) in the Comments column		
2. Coverage		
2.1 Which are the classes covered in the NFI in your country?		
a. Forest*		
b. Trees outside forest*		
c. Publicly owned forest*		
d. Privately owned forest*		
e. Forest plantations*		
f. Protected areas***		
g. Others, please specify		
3. Frequency of National Forest Inventory		
3.1 How often is the forest area surveyed in your country?		
a. Please indicate in the Comments column if once every: two, five, ten or more^ years		
3.2 How often is the bio-physical data inventoried in your country?		
a. Please indicate in the Comments column if once every: two, five, ten or more^ years		
4 Frequency of Sub-National Forest Inventory		
4.1 How often is the forest area surveyed in the sub national forest inventories?		
a. Please indicate in the Comments column if once every: two, five, ten or more^ years		
4.2 How often is the bio-physical data inventoried in the sub national forest inventories?		
a. Please indicate in the Comments column if once every: two, five, ten or more^ years		
5 Implementing Institute/Agency		
5.1 Please indicate which among the following options is the correct one for the NFI in your country and write name(s) in the Comments column.		
a. One implementing Institute/Agency		
b. Two or more implementing Institutes/Agencies		
6 Purpose and main uses of the NFI		
6.1 What are the main objective of the NFI in your country?		
a. To provide new qualitative and quantitative information on the state and trends of forest resources.		
b. Others, please specify in the Comments column		
6.2 What are the main uses of the NFI in your country?		
a. To develop forest management/Sustainable forest management plans.		
b. To assist in policy formulation, planning and design of forest sector strategies.		
c. To contribute to the System of National Accounts.		
d. To report at regional/international level (please provide names of the institutions/processes/organizations to whom you are reporting).		
e. Others, please specify in the Comments column		
7 Dissemination of results		
7.1 Please indicate which of the following distribution tools are used to disseminate the results of the NFI.		
a. Hardcopy manuals/books		
b. Scientific articles		
c. Websites		
d. CD		
e. Extension (seminars/workshops/publications)		
f. Others, please specify		
8 Users		
8.1 Who are the main users of the NFI?		
a. Forest and land use managers		
c. Private sector		
d. Provincial agencies/institutes		
e. State agencies/institutes		
f. International organizations		
b. NGOs		
g. Others, please specify		

DESCRIPTIONS/EXPLANATIONS	
Forest*	<i>Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use.</i>
Trees outside forest*	<i>Trees outside forests include all trees found outside forests and outside other wooded lands: - stands smaller than 0.5 ha; - tree cover in agricultural land, e.g. agroforestry systems, homegardens, orchards; - trees in urban environments; - along roads and scattered in the landscape.</i>
Publicly owned forest*	<i>Forest/tree/land owned by the State (national, state and regional governments) or government-owned institutions or corporations or other public bodies including cities, municipalities and villages.</i>
Privately owned forest*	<i>Land owned by individuals, families, private co-operatives, corporations, industries, private religious and educational institutions, pension or investment funds, and other private institutions. Explanatory note 1. Private owners may be engaged in agriculture or other occupations including forestry.</i>
Forest plantation*	<i>Forest stands established by planting or/and seeding in the process of afforestation or reforestation. They are either of introduced species (all planted stands), or intensively managed stands of indigenous species, which meet all the following criteria: one or two species at plantation, even age class, regular spacing.</i>
Forest inventory**	<i>A survey to determine, on a given area, such data as soil conditions, location, access, and topography, together with the condition, composition and constitution of the forests, for such purposes as purchase or management, or as a basis for forest policies and programmes.</i>
Protected areas***	<i>An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means</i>
More^	<i>If so, please specify in the comments column</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

** FAO Language Resources Project, 2005; IUFRO, Vienna, 2005.

*** IUCN (1994). Guidelines for Protected Area Management Categories. IUCN and the World Conservation Monitoring Centre, Gland, Switzerland and Cambridge, UK.

<http://www.iucn.org/bookstore/HTML-books/BP12-forests-and-PAs/section1.html#box1> (access 11/01/2006)

SECTION 2. Overview on the National Forest Inventory in your country

Field 2. Fields (information) included in the NFI

	Yes/No	Comments
1. Fields (information)		
1.1 Please indicate which of the following fields (information) are included in the NFI in your country.		
a. Geo-physical Information on the inventoried area (For example geographical location of the forest, coordinates, altitude, etc.)		
If Yes, please fill in the related table: Section 3. Field 1 (3.1)		
b. Bio-Physical data (For example: Number of trees, diameter, species, etc.)		
If Yes, please fill in the related table: Section 3. Field 2 (3.2)		
c. Forest extent (Total area of forest in the country/administrative division covered by inventory)		
If Yes, please fill in the related table: Section 3. Field 3 (3.3)		
d. Forest characteristics (Naturalness) and forest type (For example: Modified natural forest; primary forest, forest types, etc.)		
If Yes, please fill in the related table: Section 3. Field 4 (3.4)		
e. Use (designated functions) of forests (For example: Conservation of biodiversity, Production, Protection of soil and water, Conservation purposes, Social services, etc.)		
If Yes, please fill in the related table: Section 3. Field 5 (3.5)		
f. Social services (Forest designated for the provision of social services, which may include recreation, tourism, education and/or conservation of cultural/spiritual sites)		
If Yes, please fill in the related table: Section 3. Field 6 (3.6)		
g. Biomass		
If Yes, please fill in the related table: Section 3. Field 7 (3.7)		
h. Carbon stock		
If Yes, please fill in the related table: Section 3. Field 8 (3.8)		
i. Mapping of forest distribution (Distribution of the forests in the country (mapping/GIS/etc)		
If Yes, please fill in the related table: Section 3. Field 9 (3.9)		
l. Status of the forest and disturbances affecting forest health and vitality (For example: forest fires, pests and disease)		
If Yes, please fill in the related table: Section 3. Field 10 (3.10)		
m. Biodiversity (The diversity within species, between species and of ecosystems.)		
If Yes, please fill in the related table: Section 3. Field 11 (3.11)		
n. Beneficiaries of forest goods and services		
If Yes, please fill in the related table: Section 3. Field 12 (3.12)		
o. Economic value (Price value of wood/non wood forest products, employment, etc.)		
If Yes, please fill in the related table: Section 3. Field 13 (3.13)		
p. Policy, legal and institutions (PLI) framework?		
If Yes, please fill in the related table: Section 3. Field 14 (3.14)		
q. Others, please specify		
1.2 Potential additional fields (information)		
a. Should the NFI in your country include any additional field (information)?		
b. If yes, please list your suggestions in the Comments column.		
2 Inter-sectoral information		
a. Is NFI promoting the collection of inter-sectoral information?		
a.1 If not, what actions is your country undertaking to promote inter-sectoral collaboration?		

SECTION 3. Detailed information on the Fields included in the NFI

Field 1. Geo-physical Information on the inventoried area

1. Description of the field

The purpose of this set of question is to understand what kind of geographical information (geographical location, coordinates, topography, soil, geological structure, rainfall, etc.) is collected for each tract during the NFI in your country.

	Yes/No	Comments
2. Range of data		
2.1 Which are the geo-physical variables recorded for each tract?		
a. Geo-Coordinates*		
b. Altitude*		
c. Topography		
c.1 Orientation (or Aspect)*		
c.2 Slope*		
d. Soil		
d.1 Soil type		
d.2 Soil texture*		
d.3 Soil organic matter*		
e. Geological structure		
f. Rainfall (from the nearest meteorological station)		
g. Others, please specify		
3. Methodology		
3.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is/are used to collect the information on each of the following variables:		
a. Geo-Coordinates (Survey/Map/Others, please specify)		
b. Altitude (Survey/Map/Others, please specify)		
c. Topography (Survey/Map/Others, please specify)		
d. Soil (Records/Soil sample analysis/Others, please specify)		
e. Geological structure (Survey/Map/Others, please specify)		
f. Rainfall (Survey/Map/Others, please specify)		
g. Others, please indicate methodology		
4 Data storage		
4.1 How is the geo-physical data stored?		
a. Hardcopies		
b. Electronic format (computer software, if so please specify)		
h. Other, please specify		
5 Responsible Institute/Agency		
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.		
a. One responsible Institute/Agency		
b. Two or more responsible Institutes/Agencies		
6 Additional variables for the Geo-physical field		
6.1 Do you think the NFI should include any additional variable for this field?		
a. If yes, please enter your suggestions in the Comments column		
8. Comments		
Please enter any potential comment you might have on this field.		

DESCRIPTIONS/EXPLANATIONS	
Geo-physical coordinates*	<i>The latitude and longitude in decimal degrees of the south-western corner of the tract</i>
Altitude*	<i>Altitude in meters above the mean sea level of the central point of the forest/tract</i>
Orientation (or Aspect)*	<i>Slope orientation at measurement point</i>
Slope*	<i>Average inclination at the measurement point</i>
Soil texture*	<i>Texture class (grain or basic particles of the soil dimensions) of a soil sample collected at the measurement point level</i>
Soil organic matter*	<i>The total organic matter in the soil. It can be divided into three general pools: living biomass of micro organisms, fresh and partially decomposed residues, and the well-decomposed and highly stable organic material. ** It is defined by the thickness of the organic matter stratum, excluding litter*</i>
Survey[^]	<i>Obtaining the data through an ad-hoc ground survey</i>
Map[^]	<i>Obtaining the data through an already existing map</i>
Records[^]	<i>Obtaining the data through already existing records</i>
Soil sample analysis[^]	<i>Obtaining the data through an ad-hoc soil sample analysis</i>

* Based on FAO. 2004. National Forest Inventory Field Manual Template. Forest Resources Assessment Working Paper 94/E. Compiled by A. Branthomme. 4th edition. Last revised 24.08.2004.

** FAO Language Resources Project, 2005; IUFRO, Vienna, 2005.

SECTION 3. Detailed information on the Fields included in the NFI

Field 2: Bio-Physical Data

1. Description of the field

The purpose of this set of question is to understand the type of bio-physical information collected for each tract during the NFI, for example the number of the trees, their diameters, height, etc. as well as information on stump, branches, and other trees' attributes.

	Yes/No	Comments
2. Range of data		
2.1 Which are the bio-physical variables recorded for each tract?		
2.2.1 Main measurement for biomass estimation		
a. Number of trees*		
b. Diameter of trees*		
c. Height of trees		
d. Length of stem		
e. Stump height		
f. Age class (for plantation and/or natural regeneration)		
2.2.2 Measurement on selected parts of the trees for biomass estimation		
a. Branches		
b. Twigs		
c. Bark		
d. Leaves		
2.2.3 Others		
a. Please specify (if any)		
3. Methodology		
3.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is/are used to collect the information on each of the following variables:		
3.1.1 Main measurement for biomass estimation		
a. No. of trees (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
b. Diameter of trees (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
c. Height of trees (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
d. Length of stem (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
e. Stump height (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
f. Age class (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
3.1.2 Measurement on selected parts of the trees for biomass estimation		
a. Length (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
b. Mean diameter (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
c. Thickness (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
d. Weight (Sampling (measurement in selected plot)/census (100% enumeration)/others)		
e. Others, please specify methodology in the Comments column		
3.1.3 Others (if any)		
a. Please specify methodology in the Comments column		
4 Data storage		
4.1 How is the data stored?		
a. Hardcopies		
b. Electronic format (computer software, if so please specify)		
h. Other, please specify		
5 Responsible Institute/Agency		
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.		
a. One responsible Institute/Agency		
b. Two or more responsible Institutes/Agencies		
6 Additional variables for the Bio-physical field		
6.1 Do you think the NFI should include any additional variable for this field?		
a. If yes, please enter your suggestions in the Comments column		
8. Comments		
Please enter any potential comment you might have on this field.		

DESCRIPTIONS/EXPLANATIONS*	
Number of trees*	<i>Number of trees in the tract/forest</i>
Diameter of trees*	<i>Diameter at breast height (Dbh) over bark</i>
Mean diameter	<i>Mean of the diameters at both ends of measured part</i>

* Based on FAO. 2004. National Forest Inventory Field Manual Template. Forest Resources Assessment Working Paper 94/E. Compiled by A. Branthomme. 4th edition. Last revised 24.08.2004.

SECTION 3. Detailed information on the Fields included in the NFI

Field 3: Forest extent

1. Description of the field

The purpose of this set of questions is to understand the range of variables collected during NFI in your country to assess forest extent. The periodic information on the extent of Forest is necessary for assessing state and change in forest resources for policy, planning, management, use and reporting of forest.* It is a key indicator in various international reporting processes, conventions and other instruments, such as the MDG, C&I processes, CBD, CCD, UNFCCC, UNFF, ITTO, MCPFE, UNECE, CSD, etc.**

	Yes/No	Comments
2. Range of data		
2.1 Which are the variables recorded in the Forest extent field?		
a. Forest land area*		
b. Area of forest canopy/crown cover* (please indicate the minimum cover % in the Comments column)		
c. Area under forest management*		
d. Area under formal forest management plan		
e. Area under sustainable forest management*		
f. Forest area with certification^		
g. Area under public owned forest*		
h. Area under private owned forest*		
i. Others, please specify		
3. Methodology		
3.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is/are used to collect the information on each of the following variables:		
a. Forest land area (survey/map^/remote sensing^/others, please specify)		
b. Area of forest canopy/crown cover (survey/map/remote sensing/others, please specify)		
c. Area under forest management (survey/map/records/others, please specify)		
d. Area under formal forest management plan (survey/map/records/others, please specify)		
e. Area under sustainable forest management (survey/map/records/others, please specify)		
f. Forest area with certification (survey/map/records/others, please specify)		
g. Area under public owned forest (survey/map/records/others, please specify)		
h. Area under private owned forest (survey/map/records/others, please specify)		
i. Others, please specify		
4 Data storage		
4.1 How is the data stored?		
a. Hardcopies		
b. Electronic format (computer software, if so please specify)		
h. Other, please specify		
5 Responsible Institute/Agency		
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.		
a. One responsible Institute/Agency		
b. Two or more responsible Institutes/Agencies		
6 Additional variables for the Forest extent field		
6.1 Do you think the NFI should include any additional variable for this field?		
a. If yes, please enter your suggestions in the Comments column		
8. Comments		
Please enter any potential comment you might have on this field.		

DESCRIPTIONS/EXPLANATIONS	
Forest*	<i>Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use.</i>
Forest land area*	<i>Total land area under forests</i>
Area of canopy/crown cover*	<i>The percentage of the forest land covered by a vertical projection of the outermost perimeter of the natural spread of the foliage of plants. Cannot exceed 100 percent. (Also called crown closure).</i>
Forest management*	<i>The processes of planning and implementing practices for the stewardship and use of forests and other wooded land aimed at achieving specific environmental, economic, social and /or cultural objectives.</i>
Area under sustainable forest management***	<i>The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems.</i>
Ownership**	<i>Forest ownership is usually regarded to include the rights to use, control, transfer, or otherwise benefit from a forest provided those activities are allowed by law. Unlike lease rights, ownership rights do not terminate after a specific period of time but could run for perpetuity. Ownership can be acquired through transfers such as sales and inheritance.</i>
Area of private owned forest*	<i>Land owned by individuals, families, private co-operatives, corporations, industries, private religious and educational institutions, pension or investment funds, and other private institutions. Explanatory note 1. Private owners may be engaged in agriculture or other occupations including forestry.</i>
Area of public owned forest*	<i>Forest/tree/land owned by the State (national, state and regional governments) or government-owned institutions or corporations or other public bodies including cities, municipalities and villages.</i>
Certified forest[^]	<i>Through forest certification the final consumers of wood products are aware that the products they are purchasing are derived from a sustainable managed forest.</i>
Survey[^]	<i>Obtaining the data through an ad-hoc ground survey</i>
Map[^]	<i>Obtaining the data through an already existing map</i>
Remote sensing[^]	<i>Obtaining the data through the interpretation of remote sensing imagery/ies</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

** FAO. 2006 Revised tables for Forest Resources Assessment 2010 (*in progress*)

SECTION 3. Detailed information on the Fields included in the NFI

Field 4: Forest Characteristics (naturalness) and forest type

1. Description of the field

The purpose of this set of question is to identify which variable, if any, are collected to describe Forest characteristics (naturalness) and type, for example modified natural forests, primary forests, plantations, semi-natural forests, etc. Information on forest characteristics is essential to understand the extent and degree of human impact on the forest ecosystems.*

	Yes/No	Comments
2. Range of data		
2.1 Which are the variables recorded for the forest characteristics (naturalness)?		
a. Primary forest*		
b. Modified natural forest*		
c. Semi-natural forest*		
d. Productive plantation*		
e. Protective plantation*		
2.2 Which are the variables recorded for the type of forest?		
a. Coniferous		
b. Broadleaved		
c. Mixed forest		
d. Forest area by dominant forest species (bamboo, mangroves, rubber)		
e. Forest area by ecological zone (tropical, subtropical, temperate, boreal, polar)		
f. Others, please specify		
3. Methodology		
3.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is/are used to collect the information on each of the following variables:		
3.1.1 Forest Characteristics (Naturalness)		
b. Primary forest (Survey/Map/Other, please specify)		
a. Modified natural forest (Survey/Map/Other, please specify)		
e. Semi-natural forest (Survey/Map/Other, please specify)		
c. Productive plantation (Survey/Map/Records/Other, please specify)		
d. Protective plantation (Survey/Map/Records/Other, please specify)		
3.1.2 Forest Type		
a. Coniferous (Survey/Map/Remote sensing/Other, please specify)		
b. Broadleaved (Survey/Map/Remote sensing/Other, please specify)		
c. Mixed (Survey/Map/Remote sensing/Other, please specify)		
d. By dominant forest species (Survey/Map/Remote sensing/Other, please specify)		
e. Forest area by ecological zone (Survey/Map/Remote sensing/Other, please specify)		
i. Others, please specify methodology		
4 Data storage		
4.1 How is the data stored?		
a. Hardcopies		
b. Electronic format (computer software, if so please specify)		
h. Other, please specify		
5 Responsible Institute/Agency		
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.		
a. One responsible Institute/Agency		
b. Two or more responsible Institutes/Agencies		
6 Additional variables for the Forest characteristics (naturalness) and forest type field		
6.1 Do you think the NFI should include any additional variable for this field?		
a. If yes, please enter your suggestions in the Comments column		
8. Comments		
Please enter any potential comment you might have on this field.		

DESCRIPTIONS/EXPLANATIONS	
Primary Forest*	<i>Forest/other wooded land of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed. Includes: areas where collection of NWFPs occurs, provided the human impact is small. Some trees may have been removed.</i>
Modified Natural Forest*	<i>Forest/other wooded land of naturally regenerated native species where there are clearly visible indications of human activities. Includes, but is not limited to: selectively logged-over areas, naturally regenerating areas following agricultural land use, areas recovering from human induced fires, etc.; areas where it is not possible to distinguish whether the regeneration has been natural or assisted.</i>
Semi-Natural forest*	<i>Forest/other wooded land of native species, established through planting, seeding or assisted natural regeneration. Includes: areas under intensive management where native species are used and deliberate efforts are made to increase/optimize the proportion of desirable species, thus leading to changes in the structure and composition of the forest. Naturally regenerated trees from other species than those planted/seeded may be present. May include: areas with naturally regenerated trees of introduced species. Includes: areas under intensive management where deliberate efforts, such as thinning or fertilizing, are made to improve or optimize desirable functions of the forest. These efforts may lead to changes in the structure and composition of the forest.</i>
Productive plantation*	<i>Forest/other wooded land of introduced species and in some cases native species, established through planting or seeding, mainly for production of wood or nonwood goods. Includes: all stands of introduced species established for production of wood or non-wood goods. May include: areas of native species characterized by few species, straight tree lines and/or even-aged stands.</i>
Protective plantation*	<i>Forest/other wooded land of native or introduced species, established through planting or seeding mainly for provision of services. Includes: all stands of introduced species established for provision of environmental services, such as soil and water protection, pest control and conservation of habitats of biological diversity; areas of native species characterized by few species, straight tree lines and even-aged stands.</i>
Survey[^]	<i>Obtaining the data through an ad-hoc ground survey</i>
Map[^]	<i>Obtaining the data through an already existing map</i>
Records[^]	<i>Obtaining the data through already existing records.</i>
Remote sensing[^]	<i>Obtaining the data through the interpretation of remote sensing imagery/ies</i>

* Based on FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

SECTION 3. Detailed information on the Fields included in the NFI

Field 5: Use (designated functions) of forests

1. Description of the field

The purpose of this set of questions is to understand which classes of forest use are recorded in the NFI, if any. The use of forests refers to the use or purpose assigned to a piece of land either by legal prescriptions or by decision of the landowner/manager. The information on the use of forest is essential for efficient planning, design and implementation of forest policy and for assessment of cross-sectoral impacts.*

	Yes/No	Comments
2. Range of data		
2.1 Which are the classes/categories recorded for the use (designated functions) of forests?		
a. Area of forest under production*		
b. Area of forest for protection of soil and water*		
c. Area of forest for conservation of biodiversity*		
d. Area of forest for social services*		
e. Area of forest for multiple purpose*		
f. Forest area available for wood supply*		
g. Forest area within protected areas*		
h. Other, please specify		
3. Methodology		
3.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is/are used to collect the information on each of the following variables:		
a. Production (survey^/reports^/plans^/others, please specify)		
b. Protection of soil and water (survey/reports/plans/others, please specify)		
c. Conservation of biodiversity (survey/reports/plans/others, please specify)		
d. Social services (survey/reports/plans/others, please specify)		
e. Multiple purpose (survey/reports/plans/others, please specify)		
f. Forest area available for wood supply (survey/reports/plans/others, please specify)		
g. Forest area within protected areas (survey/reports/plans/others, please specify)		
h. Other, please specify methodology		
4 Data storage		
4.1 How is the data stored?		
a. Hardcopies		
b. Electronic format (computer software, if so please specify)		
h. Other, please specify		
5 Responsible Institute/Agency		
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.		
a. One responsible Institute/Agency		
b. Two or more responsible Institutes/Agencies		
6 Additional variables for the Use (designated functions) of forests field		
6.1 Do you think the NFI should include any additional variable for this field?		
a. If yes, please enter your suggestions in the Comments column		
8. Comments		
Please enter any potential comment you might have on this field.		

DESCRIPTIONS/EXPLANATIONS	
Production*	<i>Forest/other wooded land designated for production and extraction of forest goods, including both wood and non-wood forest products (NWFPs).</i>
Protection of soil and water*	<i>Forest/other wooded land designated for protection of soil and water.</i>
Conservation of biodiversity*	<i>Forest/other wooded land designated for conservation of biological diversity. Includes, but is not limited to, protected areas.</i>
Social services*	<i>Forest/other wooded land designated for the provision of social services. May include: recreation, tourism, education and/or conservation of cultural/spiritual sites.</i>
Multiple purpose*	<i>Forest/other wooded land designated for any combination of: production of goods, protection of soil and water, conservation of biodiversity and provision of socio-cultural services, and where none of these alone can be considered as being significantly more important than the others.</i>
Forest area available for wood supply**	<i>Forest area where any legal, economic, or specific environmental restrictions do not have a significant impact on the supply of wood. Includes: Areas where, although there are no such restrictions, harvesting is not currently taking place, for example areas included in long-term utilization plans or intentions.</i>
Forest area within protected areas**	<i>Forest area within formally established protected areas independently of the purpose for which the protected areas were established.</i>
Protected areas***	<i>An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means</i>
Survey[^]	<i>Obtaining the data through an ad-hoc ground survey</i>
Reports[^]	<i>Obtaining the data through existing records</i>
Plans[^]	<i>Obtaining the data through existing plans</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

** FAO. 2006 Revised tables for Forest Resources Assessment 2010 (*in progress*)

*** IUCN (1994). Guidelines for Protected Area Management Categories. IUCN and the World Conservation Monitoring Centre, Gland, Switzerland and Cambridge, UK.

<http://www.iucn.org/bookstore/HTML-books/BP12-forests-and-PAs/section1.html#box1> (access 11/01/2006)

SECTION 3. Detailed information on the Fields included in the NFI

Field 6: Social services

1. Description of the field	
The purpose of this set of questions is to identify the variables NFI collects on the social services of forests, and therefore how much they contribute to the wellbeing of the people, through recreation, tourism, education, and conservation of cultural/spiritual site.	
2. Range of data	
2.1 Which are the classes/categories recorded for the Social services?	
a. Area of forest managed for recreation	
b. Area of forest managed for tourism	
c. Area of forest used for education	
d. Area of forest managed for conservation of cultural/spiritual site	
e. Others, please specify	
3. Methodology	
3.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is/are used to collect the information on each of the following variables:	
a. Recreation (survey^/records^/maps^/others, please specify)	
b. Tourism (survey/records/maps/others, please specify)	
c. Education (survey/records/maps/others, please specify)	
d. Conservation of cultural/spiritual site (survey/records/maps/others, please specify)	
e. Others, please specify methodology	
4 Data storage	
4.1 How is the data stored?	
a. Hardcopies	
b. Electronic format (computer software, if so please specify)	
h. Other, please specify	
5 Responsible Institute/Agency	
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.	
a. One responsible Institute/Agency	
b. Two or more responsible Institutes/Agencies	
6 Additional variables for the Social services field	
6.1 Do you think the NFI should include any additional variable for this field?	
a. If yes, please enter your suggestions in the Comments column	
8. Comments	
Please enter any potential comment you might have on this field.	

DESCRIPTIONS/EXPLANATIONS	
Survey^	Obtaining the data through an ad-hoc ground survey
Reports^	Obtaining the data through existing records
Plans^	Obtaining the data through existing plans

SECTION 3. Detailed information on the Fields included in the NFI

Field 7: Biomass

1. Description of the field		
The purpose of this set of questions is to identify the type of information collected on biomass* during the NFI in your country.		
	Yes/No	Comments
2. Range of data		
2.1 Which are the variables recorded for the Biomass field?		
a. Above-ground biomass*		
b. Below-ground biomass*		
c. Dead wood biomass*		
d. Litter*		
e. Others, please specify		
3. Methodology		
3.1 Please indicate which methodology/ies, among the options mentioned below, is/are used to collect the information on each of the following variables:		
a. Above-ground biomass		
a.1 Using NFI measurements with existing global/regional conversion factors		
a.2 Using NFI measurements with national conversion factors		
a.3 Other, please specify		
b. Below-ground biomass		
b.1 Using NFI measurements with existing global/regional conversion factors		
b.2 Using NFI measurements with national conversion factors		
b.3 Other, please specify		
c. Dead-wood biomass		
c.1 Using NFI measurements with existing global/regional conversion factors		
c.2 Using NFI measurements with national conversion factors		
c.3 Other, please specify		
d. Litter		
d.1 Using NFI measurements with existing global/regional conversion factors		
d.2 Using NFI measurements with national conversion factors		
d.3 Other, please specify		
4 Data storage		
4.1 How is the data stored?		
a. Hardcopies		
b. Electronic format (computer softwares, if so please specify)		
h. Other, please specify		
5 Responsible Institute/Agency		
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.		
a. One responsible Institute/Agency		
b. Two or more responsible Institutes/Agencies		
6 Additional variables for the Biomass field		
6.1 Do you think the NFI should include any additional variable for this field?		
a. If yes, please enter your suggestions in the Comments column		
8. Comments		
Please enter any potential comment you might have on this field.		

DESCRIPTIONS/EXPLANATIONS*	
Biomass	<i>Organic material both above ground, below ground, litter and dead biomass</i>
Above-ground biomass	<i>All living biomass above the soil, including stem, stump, branches, bark, seeds and foliage. Where the forest understorey is a relatively small component of the aboveground biomass, it is acceptable to exclude it, provided this is done in a consistent manner throughout the inventory time series.</i>
Below-ground biomass	<i>All living biomass of live roots. Fine roots of less than (suggested) 2 mm diameter are sometimes excluded because these often cannot be distinguished empirically from soil organic matter or litter.</i>
Dead wood biomass	<i>All non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil. Dead wood includes wood lying on the surface, dead roots, and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country.</i>
Litter	<i>Includes all non-living biomass with a diameter less than a minimum diameter chosen by the country for lying dead (for example 10 cm), in various states of decomposition above the mineral or organic soil. This includes the litter, fomic, and humic layers. Live fine roots (of less than the suggested diameter limit for below-ground biomass) are included in litter where they cannot be distinguished from it empirically.</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

SECTION 3. Detailed information on the Fields included in the NFI

Field 8: Carbon stock

1. Description of the field	
The purpose of this set of questions is to understand how the carbon stock* is calculated during the NFI in your country, and if/how the NFI collects information for the development of conversion factors to assess it.	
	Yes/No
2. Range of data	
2.1 Is information collected to develop the conversion factors for carbon in the NFI?	
2.2 If not, is the NFI using global/regional conversion factors?	
2.3 If yes, which of the following classes are assessed?	
a. Carbon in above-ground biomass*	
b. Carbon in below-ground biomass*	
c. Carbon in dead wood biomass*	
d. Carbon in litter*	
e. Soil carbon*	
f. Others, please specify	
3. Methodology	
3.1 Please indicate which methodology/ies is being used to develop the carbon conversion factors in your country.	
a. One factor for all types of forests	
b. One factor for each forest type	
c. One factor for dominant species	
d. Others, please specify	
4 Data storage	
4.1 How is the data stored?	
a. Hardcopies	
b. Electronic format (computer software, if so please specify)	
h. Other, please specify	
5 Responsible Institute/Agency	
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.	
a. One responsible Institute/Agency	
b. Two or more responsible Institutes/Agencies	
6 Additional variables for the Carbon stock field	
6.1 Do you think the NFI should include any additional variable for this field?	
a. If yes, please enter your suggestions in the Comments column	
8. Comments	
Please enter any potential comment you might have on this field.	

DESCRIPTIONS/EXPLANATIONS*	
Carbon stock	<i>The quantity of carbon in a 'pool' (meaning a reservoir or system that has the capacity to accumulate or release carbon), for example living biomass (including above- and below-ground biomass); dead organic matter (including dead wood and litter); soils (soil organic matter).</i>
Carbon in above-ground biomass	<i>Carbon in all living biomass above the soil, including stems, stump, branches, bark, seeds and foliage. Where the forest understorey is a relatively small component of the above-ground biomass carbon pool, it is acceptable to exclude it, provided this is done in a consistent manner throughout the inventory time series.</i>
Carbon in below-ground biomass	<i>Carbon in all living biomass of live roots. Includes: the below-ground part of the stump. Excludes: fine roots of less than 2 mm diameter because these often cannot be distinguished empirically from soil organic matter or litter.</i>
Carbon in dead wood biomass	<i>Carbon in all living biomass of live roots. Includes: the below-ground part of the stump. Excludes: fine roots of less than 2 mm diameter because these often cannot be distinguished empirically from soil organic matter or litter.</i>
Carbon in litter	<i>Carbon in all non-living biomass with a diameter less than a minimum diameter chosen by the country, in various states of decomposition above the mineral or organic soil. This includes the litter, fomic and humic layers. Includes: live fine roots of less than 2 mm (or other value chosen by the country as diameter limit for below-ground biomass), where they cannot be empirically distinguished from the litter.</i>
Soil Carbon	<i>Organic carbon in mineral and organic soils (including peat) to a specified depth chosen by the country and applied consistently through the time series. Includes: live fine roots of less than 2 mm (or other value chosen by the country as diameter limit for below-ground biomass) with soil organic matter, where they cannot be distinguished from it empirically.</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

SECTION 3. Detailed information on the Fields included in the NFI

Field 9: Mapping of forest distribution

1. Description of the field		
The aim of this set of questions is to collect information on the maps generated with the help of the information from NFI		
	Yes/No	Comments
2. Range of data		
2.1 Which of the following boundaries/classes are shown in the maps generated during the NFI?		
a. Distribution of forests (forest/non forest)		
b. Forest Characteristics (primary forest, modified natural forest, semi-natural forest, productive plantation, protective plantation)		
c. Land use (forest, agriculture, land, inland water, others)		
d. Administrative/political/legal boundaries (state, district, province, etc.)		
e. Designated functions of forests (production, protection, conservation, social services, etc.)		
f. Other wooded land*		
g. Other land with tree cover*		
h. Other land*		
i. Others, please specify in the Comments column.		
3. Methodology		
3.1 Please indicate which methodology/ies, mentioned in brackets below, is used to collect the information for the preparation of the maps during the NFI in your country		
a. Forests/non forests (survey^/remote sensing^/others, please specify)		
b. Forest Characteristics (naturalness) (survey/reports^/others, please specify)		
c. Land use: (survey/remote sensing/others, please specify)		
d. Administrative/political information: (survey/remote sensing/others, please specify)		
e. Designation functions of forest (survey/local interviews^/records/others, please specify)		
f. Other wooded land (survey/local interviews/records/others, please specify)		
g. Other land with tree cover (survey/local interviews/records/others, please specify)		
h. Other land (survey/local interviews/records/others, please specify)		
i. Others, please specify methodology:		
4 Map format		
4.1 Please indicate in which format does NFI produce the maps		
a. Hardcopies		
b. Electronic format (computer software, if so please specify)		
h. Other, please specify		
5 Responsible Institute/Agency		
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection/map preparation, and write name(s) in the Comments column.		
a. One responsible Institute/Agency		
b. Two or more responsible Institutes/Agencies		
6 Additional variables for the Mapping of forest distribution field		
6.1 Do you think the NFI should include any additional variable for this field?		
a. If yes, please enter your suggestions in the Comments column		
8. Comments		
Please enter any potential comment you might have on this field.		

DESCRIPTIONS/EXPLANATIONS	
Other wooded land*	<i>Land not classified as "Forest", spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds in situ; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.</i>
Other land with tree cover*	<i>Land classified as "Other land", spanning more than 0.5 hectares with a canopy cover of more than 10 percent of trees able to reach a height of 5 meters at maturity.</i>
Other land*	<i>All land that is not classified as "Forest" or "Other Wooded Land".</i>
Survey[^]	<i>Obtaining the data through an ad-hoc ground survey</i>
Remote sensing[^]	<i>Obtaining the data through the interpretation of remote sensing imagery/ies</i>
Local interviews[^]	<i>Obtaining the data through local interviews</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

SECTION 3. Detailed information on the Fields included in the NFI

Field 10: Status of the forest and disturbances affecting forest health and vitality

1. Description of the field			
The purpose of this set of questions is to collect information on the type of data recorded during the NFI on the disturbances affecting health and vitality of forests.			
Information about the type, magnitude and periodicity of such disturbances are essential in order to develop appropriate management regimes to control and mitigate their impact on forest health and vitality.*			
		Yes/No	Comments
2. Range of data			
2.1 Which of the following thematic classes are included in this field?			
a. Disturbance by insects*			
b. Disturbance by diseases*			
c. Disturbance by other biotic agents*			
d. Disturbance by fire*			
e. Disturbance caused by other abiotic factors			
f. Other disturbances, please specify			
3. Methodology			
3.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is used to collect the information on:			
a. Disturbance by insects (survey^/remote sensing^/national expert estimation/international expert estimation/local interviews/records/others, please specify)			
b. Disturbance by diseases (survey^/remote sensing^/national expert estimation/international expert estimation/local interviews/records/others, please specify)			
c. Disturbance by other biotic agents (survey^/remote sensing^/national expert estimation/international expert estimation/local interviews/records/others, please specify)			
d. Disturbance by invasive species (survey^/remote sensing^/national expert estimation/international expert estimation/local interviews/records/others, please specify)			
e. Disturbance by fire (survey^/remote sensing^/national expert estimation/international expert estimation/local interviews/records/others, please specify)			
f. Disturbance caused by other abiotic factors (survey^/remote sensing^/national expert estimation/international expert estimation/local interviews/records/others, please specify)			
g. Other disturbances, please specify			
4 Data storage			
4.1 How is the data stored?			
a. Hardcopies			
b. Electronic format (computer software, if so please specify)			
h. Other, please specify			
5 Responsible Institute/Agency			
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.			
a. One responsible Institute/Agency			
b. Two or more responsible Institutes/Agencies			
6 Additional variables for the status, health and vitality field			
6.1 Do you think the NFI should include any additional variable for this field?			
a. If yes, please enter your suggestions in the Comments column			
8. Comments			
Please enter any potential comment you might have on this field.			

DESCRIPTIONS/EXPLANATIONS	
Disturbance*	<i>An environmental fluctuation and destructive event that disturb forest health, structure, and/or change resources or physical environment at any given spatial or temporal scale (White and Pickett, 1985)*</i>
Disturbance by insects*	<i>Disturbance caused by insect pests that are detrimental to tree health.</i>
Disturbance by diseases*	<i>Disturbance caused by diseases attributable to pathogens, such as bacteria, fungi, phytoplasmas or viruses.</i>
Disturbance caused by other biotic agents**	<i>Disturbance caused by biotic agents other than insects or diseases, such as wildlife browsing, overgrazing, physical damage by animals, etc.</i>
Disturbances by fire*	<i>Disturbance caused by wildfire, regardless of whether it broke out inside or outside the forest/other wooded land. A wildfire is any unplanned and uncontrolled wildland fire that, regardless of ignition source, may require suppression response.</i>
Disturbance caused by other abiotic factors*	<i>Disturbances caused by abiotic factors, such as air pollution, snow, storm, etc.</i>
Other disturbances*	<i>Disturbance caused by factors other than fire, insects or diseases. May include: areas affected by drought, flooding, windfalls, acid rain, etc.</i>
Invasive species**	<i>Species that are non-native to a particular ecosystem and whose introduction and spread causes, or are likely to cause, socio-cultural, economic or environmental harm or harm to human health.</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

** FAO. 2006 Revised tables for Forest Resources Assessment 2010 (*in progress*)

SECTION 3. Detailed information on the Fields included in the NFI

Field 11: Biodiversity

<p>1. Description of the field</p> <p>The purpose of this set of questions is to identify the information collected in the framework of the NFI in your country on biodiversity, which, as defined in the Convention on Biological Diversity, art 2 (http://www.biodiv.org/convention/articles.asp?lg=0&a=cbd-02), is 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 part; this includes diversity within species, between species and of ecosystems.*</p>

	Yes/No	Comments
2. Range of data		
2.1 Which of the following classes are recorded regarding Biodiversity in forest?		
a. Tree species		
b. Shrub species		
c. Herbs species		
d. Other species, please specify		
2.3 Does the NFI record information on the status of the above cited species?		
a. Endangered species*		
b. Critically endangered species*		
c. Vulnerable species *		
d. Native species*		
e. Endemic species*		
f. Introduced species*		
3. Methodology		
3.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is used to collect the information on:		
a. Trees (survey/map/international expert knowledge/local knowledge/others, please specify)		
b. Shrubs (survey/map/international expert knowledge/local knowledge/others, please specify)		
c. Herbs (survey/map/international expert knowledge/local knowledge/others, please specify)		
Species by status		
b. Endangered species (survey/map/international expert knowledge/local knowledge/others)		
c. Critically endangered species (survey/map/int.expert knowledge/local knowledge/others)		
d. Vulnerable species (survey/map/international expert knowledge/local knowledge/others)		
e. Native species (survey/map/international expert knowledge/local knowledge/others)		
f. Endemic species (survey/map/international expert knowledge/local knowledge/others)		
g. Introduced species (survey/map/international expert knowledge/local knowledge/others)		
h. Other, please specify methodology		
4 Data storage		
4.1 How is the data stored?		
a. Hardcopies		
b. Electronic format (computer software, if so please specify)		
h. Other, please specify		
5 Responsible Institute/Agency		
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.		
a. One responsible Institute/Agency		
b. Two or more responsible Institutes/Agencies		
6 Additional variables for the biodiversity field		
6.1 Do you think the NFI should include any additional variable for this field?		
a. If yes, please enter your suggestions in the Comments column		
8. Comments		
Please enter any potential comment you might have on this field.		

DESCRIPTIONS/EXPLANATIONS	
Endangered species*	<i>A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E specified for the Endangered category of the IUCN Red list and it is therefore considered to be facing a very high risk of extinction in the wild. (For details visit the IUCN website: http://www.iucn.org/themes/ssc/RedList2003/English/backgroundEn.htm)</i>
Critically endangered species*	<i>A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for the Critically Endangered category of the IUCN Red list and is therefore considered to be facing an extremely high risk of extinction in the wild. (For details visit the IUCN website: http://www.iucn.org/themes/ssc/RedList2003/English/backgroundEn.htm)</i>
Vulnerable Species*	<i>A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable category of IUCN Red list and is therefore considered to be facing a high risk of extinction in the wild. (For more details visit the IUCN website http://www.iucn.org/themes/ssc/RedList2003/English/backgroundEn.htm)</i>
Native species*	<i>A native species is one which naturally exists at a given location or in a particular ecosystem, i.e. it has not been moved there by humans. (CBD web site: http://www.biodiv.org/programmes/areas/forest/definitions.asp). The term Native species is synonymous with Indigenous species.</i>
Endemic**	<i>Species is endemic when found only in a certain strictly limited geographical region, i.e. restricted to a specified region or locality.</i>
Introduced species*	<i>A species introduced outside of its normal past and current distribution. Its synonyms are "alien species" and "exotic species".</i>
Survey[^]	<i>Obtaining the data through an ad-hoc ground survey</i>
Map[^]	<i>Obtaining the data through an already existing map</i>
International expert knowledge[^]	<i>Obtaining the data through ad hoc assessments of international experts.</i>
National expert knowledge[^]	<i>Obtaining the data through ad hoc assessments of national experts.</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

** FAO. 2001. Forest Resources Assessment 2000. Main Report. FAO Forestry Paper 140. Rome.

SECTION 3. Detailed information on the Fields included in the NFI

Field 12: Beneficiaries of forest goods and services

1. Description of the field			
The purpose of this set of question is to identify if and what kind of data are collected during the NFI on the user (at local and national level) who get benefits from the goods and services of the forests (as a source of income, education, protection and/or recreation).			
		Yes/No	Comments
2. Range of data			
2.1 Is NFI categorizing the users?			
a. If no, please describe how these data are recorded in point 8. Comments.			
2.2 If yes, how is the NFI categorizing the users?			
a. By locality of user (e.g. indigenous/local/national)?			
b. By good/service (e.g. timber, fuelwood, NWFP, bamboo/rattan, water, etc) used by them?			
c. By economic class of the beneficiaries (high, medium, low income)?			
d. By level of dependency on forest (as percentage of total employment)			
e. By physical accessibility to the forest (distance from forest)			
f. Others, please specify			
3. Methodology			
3.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is used to collect the information on the above cited variables:			
a. By locality of user (records/expert knowledge/maps/local interviews/others, please specify)			
b. By good/service (records/expert knowledge/maps/local interviews/others, please specify)			
c. By economic class (records/expert knowledge/maps/local interviews/others, please specify)			
d. By level of dependency on forest (records/expert knowledge/maps/local interviews/others)			
e. By physical accessibility to the forest (records/expert knowledge/maps/local interviews/others)			
h. Others, please specify methodology			
4 Data storage			
4.1 How is the data stored?			
a. Hardcopies			
b. Electronic format (computer software, if so please specify)			
h. Other, please specify			
5 Responsible Institute/Agency			
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.			
a. One responsible Institute/Agency			
b. Two or more responsible Institutes/Agencies			
6 Additional variables for the beneficiaries of forest goods and services field			
6.1 Do you think the NFI should include any additional variable for this field?			
a. If yes, please enter your suggestions in the Comments column			
8. Comments			
Please enter any potential comment you might have on this field.			

DESCRIPTIONS/EXPLANATIONS*	
Categorization by economic classes	<i>This category has been entered in order to understand the contribution of the forest sector to poverty alleviation to local communities</i>
Employment	<i>Any type of work performed or services rendered under a contract of hire, written or oral, in exchange for wage or salary, in cash or in kind.</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

SECTION 3. Detailed information on the Fields included in the NFI

Field 13: Economic Value

1. Description of the field			
The purpose of this set of questions is to identify what kind of variables are collected during the NFI to represent the economic value of goods and services provided by the forest.			
		Yes/No	Comments
2. Range of data			
2.1 Does the NFI collect quantitative information on the following type/categories of goods?			
a. Removal of timber			
b. Removal of fuelwood			
c. Removal of other wood products (please specify which in the Comments column)			
d. Removal of wood products derived from forest under sustainable management			
e. Removal of wood products derived from forest plantations			
f. Removal of non wood forest products			
g. Annual allowable cuts/yields			
h. Others, please specify			
2.2 Does the NFI collect secondary information on the following type/categories of services?			
a. Social services*			
b. Environmental services*			
c. Employment*			
d. Support to livelihood of communities			
e. Others, please specify			
2.3 Which of the following variables are collected in the NFI to value the above cited goods and services?			
a. Market price/cost of wood in forest			
b. Market price/cost of non wood forest products			
c. Estimate of value of social services			
e. Estimate of value of environmental services			
d. Estimate of value of employment			
f. Estimate of the contribution of forest sector to national economy			
l. Other, please specify in the Comments column.			
4. Methodology			
4.1 Please indicate in the Comments column which methodology/ies, mentioned in brackets below, is used to collect the information on each of the following variables:			
GOODS	Removal of timber (economic survey/expert estimation/statistical analysis/others, please specify)		
	Removal of fuelwood (economic survey/expert estimation/statistical analysis/others, please specify)		
	Removal of other wood products (economic survey/expert estimation/statistical analysis/others, please specify)		
	Removal of non wood forest products (economic survey/expert estimation/statistical analysis/others, please specify)		
	Annual allowable cuts/yields (economic survey/expert estimation/statistical analysis/others, please specify)		
	Others, please specify methodology in Comments column.		
SERVICES	Social services (economic survey/expert estimation/statistical analysis/others, please specify)		
	Environmental services (economic survey/expert estimation/statistical analysis/others, please specify)		
	Employment (economic survey/expert estimation/statistical analysis/others, please specify)		
	Support to livelihood of communities (economic survey/expert estimation/statistical analysis/others, please specify)		
	Others, please specify methodology in Comments column.		
4 Data storage			
4.1 How is the data stored?			
a. Hardcopies			
b. Electronic format (computer software, if so please specify)			
h. Other, please specify			
5 Responsible Institute/Agency			
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.			
a. One responsible Institute/Agency			
b. Two or more responsible Institutes/Agencies			
6 Additional variables for the Economic value field			
6.1 Do you think the NFI should include any additional variable for this field?			
a. If yes, please enter your suggestions in the Comments column			
8. Comments			
Please enter any potential comment you might have on this field.			

DESCRIPTIONS/EXPLANATIONS*	
Social services	<i>Please refer to Section 3. Field 6 (social services)</i>
Environmental services	<i>Soil and water protection, pest control and conservation of habitats to biological diversity.</i>
Employment	<i>Any type of work performed or services rendered under a contract of hire, written or oral, in exchange for wage or salary, in cash or in kind (based on definitions by ILO and the Employment Security Commission).</i>

* Based on FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.

SECTION 3. Detailed information on the Fields included in the NFI

Field 14: Policy, legal and institutions (PLI) framework

1. Description of the field

The purpose of this set of questions is to identify what kind of variables are collected during the NFI for the policy, legal and institutions (PLI) related to forest sector.

	Yes/No	Comments
2. Range of data		
2.1 Is information collected on the following classes during the NFI?		
a. Forest policy*		
b. Forest legislation*		
c. Forest administration*		
d. Forest education and research		
e. Annual outlay, expenditure, investment in forestry/forest sector		
g. Others, please specify		
3. Methodology		
3.1 Please indicate in the Comments column which methodology/ies is/are used to collect the information on each of the following variables:		
a. Forest policy (survey/reports/documents/others, please specify)		
b. Forest legislation (survey/reports/documents/others, please specify)		
c. Forest administration (survey/reports/documents/others, please specify)		
d. Forest education and research (survey/reports/documents/others, please specify)		
e. Annual outlay, expenditure, investment in forestry/forest sector (survey/reports/documents/others, please specify)		
f. Others, please specify methodology in Comments column		
4 Data storage		
4.1 How is the data stored?		
a. Hardcopies		
b. Electronic format (computer software, if so please specify)		
h. Other, please specify		
5 Responsible Institute/Agency		
5.1 Please indicate the number of Institute(s)/Agency(ies) responsible for the data collection on this field, and write name(s) in the Comments column.		
a. One responsible Institute/Agency		
b. Two or more responsible Institutes/Agencies		
6 Additional variables for the Economic value field		
6.1 Do you think the NFI should include any additional variable for this field?		
a. If yes, please enter your suggestions in the Comments column		
8. Comments		
Please enter any potential comment you might have on this field.		

DESCRIPTIONS/EXPLANATIONS*	
Forest policy	<i>Existence of forest policy statement/document</i>
Forest legislation	<i>Existence of forest Law or Act</i>
Forest administration	<i>Existence of a public administration responsible for forestry (including forest policy formulation)</i>

* FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions.