

Socio-economic functions

Background paper to the Kotka V Expert Consultation

1 Introduction

Forests provide a wide range of economic and social benefits to humankind. These include contributions to the overall economy, for example through employment, processing and trade of forest products and energy, and investments in the forest sector. They also include the hosting and protection of sites and landscapes that have high cultural, spiritual or recreational value. Maintaining and enhancing these functions is an integral part of sustainable forest management.

Information on the status and trends in socio-economic benefits is thus essential for evaluating progress towards sustainable forest management, alongside the more usual statistics on the predominantly environmental values considered under the other themes.

This background paper contains an analysis of the variables used in FRA 2005 related to this theme, and some specific issues and proposed changes for FRA 2010 to be discussed by the Kotka V expert consultation.

The proposals presented in this document are based on the responses to the FRA 2005 evaluation questionnaire sent to all national correspondents, FAO staff, the FRA Advisory Group and representatives of forest related organisations and reporting processes (members of the Collaborative Partnership on Forests, criteria and indicator processes and environmental NGOs). Feedback received on the release of the Key Findings of FRA 2005 and the Main Report has also been included where relevant. The proposals have not been prioritised and are presented for discussion by working group participants.

1.1 Variables used in FRA 2005

In FRA 2005, countries provided information on the following measures of socio-economic functions as follows:

- **Value of wood and non-wood forest product removals.** FRA 2005 examines the value of primary products at the forest gate, so it excludes the benefits from downstream processing.
- **Employment in forestry.** FRA 2005 figures refer to employment in forestry activities rather than employment in the whole forestry sector (i.e. the FRA 2005 figures exclude employment in processing of wood and non-wood forest products) and only includes formal employment. Countries were only asked to provide information for 1990 and for 2000. No forecasting to 2005 was done.
- **Ownership of forest and other wooded land.** Three classes of ownership were used: public, private and other. Countries were only asked to provide information for 1990

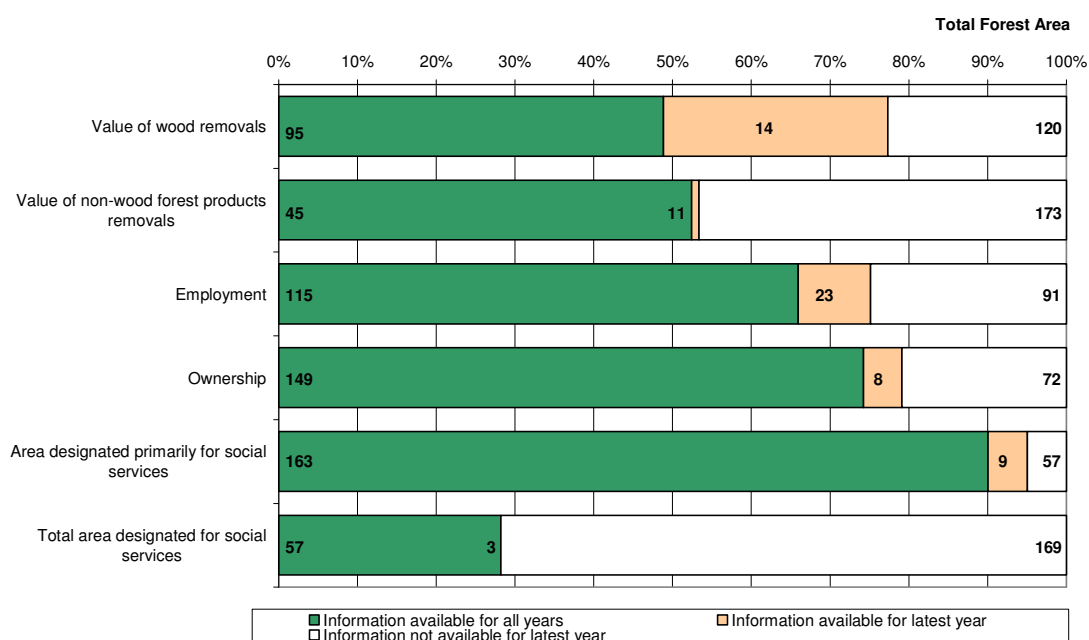
and for 2000. No forecasting to 2005 was done. The issue of ownership is complex and therefore dealt with in a separate background paper.

- **Areas of forest designated for social services.** Two measures were included: The area of forest where the provision of social services was designated as the primary function of the forest and the total area of forest where recreation, education and other social services were designated as one of the functions.

1.2 Data availability and quality

Figure 1 shows the information availability for the five variables

Figure: 5 Information availability-area of forest designated primarily for social services



The quality of the information reported about the value of wood and non-wood forest product removals was quite weak in several respects (e.g. incompatible definitions and measurement units, only partial responses from some countries that provided information and statistics that contradict other sources or seem otherwise implausible).

2 Value of wood removals

The value of wood removals, together with that of non-wood forest product removals, is an indicator of the contribution of forests and woodlands to the national economy. This information can be used to develop and monitor national policies, set priorities and allocate resources.

The value requested correspond to the market value of the wood at the border of the forest when it is at a roadside landing, loaded on a truck for road transport, or otherwise ready to be transported away from the forest. However many countries used a market value established further down the production chain (at industry gate, at consumer centres, etc.).

The availability of information about the value of wood removals is quite good, as the countries providing this information account for a significant proportion of total global production. However, it should be noted that some significant countries only reported the value of part of their total production (e.g. the figures for woodfuel removals in India and Indonesia were very low).

2.1 Issues related to the value of wood removal

- Currently, the value statistics contain a mixture of stumpage prices, roadside prices, export prices and “prices” based on licence fees.
- The unit values of removals (total value divided by total volume) varied significantly from country to country. This was, for example, because some countries calculated wood removal values on the basis of royalty or stumpage rates, while others based their calculations on felled or roadside sale values. The way to use latest base year data should be clarified.
- By requesting the value in US Dollar, fluctuating exchange rates may generate strange trends.

2.2 Proposals for FRA 2010

Deletions: None

Changes: No split on forest and OWL

Additions: None

Other comments and suggestions

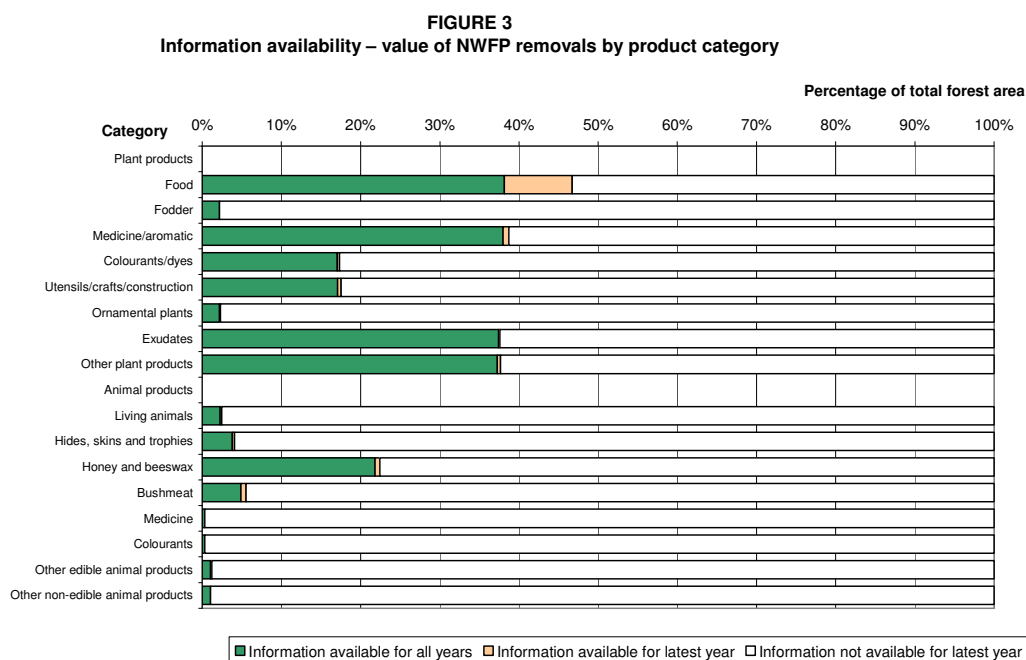
There have been proposals that it would be more useful to report value including the value-added from further processing (particularly in the case of industrial roundwood removals). This, however, would change the current scope of FRA which only covers the production to the forest gate.

Information on value of wood removals should be collected through the same process as the quantity of wood removals. It could be collected either through the FRA process or through the JFSQ.

3 Value of non-wood forest product removals

The value of non-wood forest product removals, like that of wood removals, is an indicator of the contribution of forests and woodlands to the national economy. In addition, it gives some indication of the contribution of the sector to poverty alleviation, as these products are mostly collected by relatively poor people living in rural areas.

FRA 2005 used a set of 16 product categories (8 plant products and 8 animal products). Only four of these had a reasonable response rate (food, medicine/aromatic, exudates and other plant products) as shown in the figure below:



Two main problems of underreporting were identified in the statistics provided by countries. First, in many cases, countries only reported the value of part of total removals (e.g. only removals for sale, only removals from State land or only removals of one of a number of products within a category). The second problem was that the values reported were sometimes only the value of exports or the income from licence fees collected for permission to remove products.

To take annual variations into account, the figures reported was an average of a five year period (for reference year 1990, an average of the period 1988 to 1992 and for reference year 2000 an average of the period 1998 to 2002). The figure for 2005 was forecasted.

3.1 Issues related to the value of NWFP

- Generally difficult to find / estimate quantities as they are in most cases part of the informal economy;
- Data available only for a few variables.
- Once the NWFP leaves the forest, it is difficult to distinguish between NWFP coming from forest areas and that coming from outside forest areas.

- Where information is available, it is mostly housed by different institution and different units may have been employed making it difficult to compare
- By requesting the value in US Dollar, fluctuating exchange rates may generate strange trends.

3.2 *Proposals for FRA 2010*

Deletions: None

Additions: Christmas trees (cork)

Changes: Reporting in local currency

Information on value of NWFP removals should be collected through the same process as the quantity of NWFP removals. It could be collected either through the FRA process or through the JFSQ.

4 Employment

The level of employment in forestry is an indicator of both the social and economic value of the sector to society. Employment provides income and, as forestry activities occur in rural areas that are often poorer than average, it gives some indication of the contribution of the sector to poverty alleviation. It is important to gather and analyse this information, as it is a significant indicator of how forests affect people. Many, if not all, governments are concerned about the level of employment and this is often a major performance indicator for government policy. As such, this demonstrates the contribution of the sector to broader economic aims and objectives.

FRA 2005 requested information on formal employment in the following three categories:

Category	Definition
Primary production of goods	Employment in activities related to primary production of goods, like industrial round wood, wood fuel and non-wood forest products.
Provision of services	Employment in activities directly related to services from forests and woodlands.
Unspecified forestry activities	Employment in unspecified forestry activities.

4.1 *Issues related to the employment variable*

- Confusion between the foresters employed and the foresters that are in the same time owners of forests, so they are not registered as employed
- Difficult to break down national data into the FRA categories
- Privatization or outsourcing in forestry leading to rapid changes in private sector and very little or no data are available for the private sector

- The information on forest employment is included in agriculture statistics and difficult to disaggregate;
- It is not clear on how to report on sawmills located inside the forests areas, and those that are portable; furthermore the sawmills may be integrated in primary forests activities and the same personnel works in the forest resulting double counting;
- The definition of employment used for FRA 2005 was: “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. However, information was only requested on employment related to the primary production of forest goods and related services i.e. excluding the processing of wood and non-wood forest products. This means that the figures cannot be compared with statistics on employment in the forestry sector as a whole.
- Countries took different approaches to the inclusion/exclusion of employment in the public-sector in their reported statistics. Some included all public-sector workers while others (apparently) didn’t include any.
- The FRA definitions asked countries to include “employment in direct supervision activities by private and/or public entities”. However, this could have led to some errors, as it contradicts other standard economic classification systems (e.g. the International Standard Industrial Classification), which classify the government as a separate sector in the economy. It should also be noted that “provision of services” was defined more broadly than in other standard classification systems (e.g. to include ecotourism).
- Some countries may have reported the number of people employed part-time in the sector, without converting these figures to full-time equivalents. Another problem could be that some of the reported statistics may include the numbers of people collecting fuelwood and non-wood forest products for subsistence purposes.

4.2 Proposals for FRA 2010

Deletions: None

Additions: Add information on informal and self employment, including subsistence related labour

Changes: Use International Standard Industrial Classification categories when applicable

Other comments and suggestions

A greater effort should be made to harmonise the classifications, definitions and measurement units with those used the International Standard Industrial Classification). This would increase comparability with the statistics already produced by national statistical agencies and would allow these statistics to be used (where they exist) for reporting in FRA.

The structure of new version of International Standard Industrial Classification (ISIC Rev.4), generally used by national statistical agencies, has recently been approved and will be released in 2007. Activities related to forestry (excluding industry) are presented in detail in Appendix 1. The category “Forestry and logging” contains 4 classes (*Silviculture and other*

forestry activities, Logging, Gathering of non-wood forest products, and Support services to forestry) that could be used as new categories of reporting to FRA 2010.

There have even been suggestions that FRA should not bother to collect information on Employment as other institutions (e.g. UNIDO) are collecting such information.

5 Area of forests designated for social services

The information on the designated functions is essential for efficient planning, design and implementation of forest policy and for assessment of cross-sectoral impacts. The area of forests designated for social services indicates to what extent countries and forest managers are actively considering these services as part of the benefits from forests. Countries were asked to report two measures of forest designation: the area with a specific designated function that is considered significantly more important than other functions (*Primary function*), and the total area that has a designated function, regardless of its relative importance (*Total area with function*).

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Relatively few countries and territories reported areas designated for social services, and those that have reported are not necessarily representative for the entire region. This makes it difficult to draw any far-reaching conclusions on status and trends.

5.1 Issues related to area designated for social services

The definition leaves space for interpretation by the countries of what to include under areas designated for social services. Future assessments should define the term “social services” more clearly, with more examples of what should be included and excluded, leaving less space for individual interpretation by countries.

5.2 Proposals for FRA 2010

Deletions: Proposal that the entire table on designated function should be deleted

Additions

- Area of forest, managed to protect cultural social and spiritual needs and values
- Area of forest used for purposes of supporting local population
- Number of visitors to forests for recreational purposes
- Area of forest upon which people are dependent for subsistence uses and tradition and customary lifestyles
- Number of people dependent on the forest for subsistence uses and traditional and customary lifestyle

Proposal for thematic studies

The following could be subject to thematic studies in relation to FRA 2010:

- **Value of wood and NWFP removals:** _The contribution of forests to poverty alleviation and achievement of the Millennium Development Goals in developing countries
- **Employment:** _Contribution of forest to national income and employment

6 Summary of proposals for 2010

Variable	Deletion	Changes	Additions
Value of wood removals	None	<ul style="list-style-type: none">• No split on forest and OWL• Need to align with existing (ISIC) value-added data	None
Value of NWFP removals	None	use local currency	
Area designated for social services		Definition	<ul style="list-style-type: none">-Area of forest, managed to protect cultural social and spiritual needs and values-Area of forest used for purposes of supporting local population-Number of visitors to forests for recreational purposes-Area of forest upon which people are dependent for subsistence uses and tradition and customary lifestyles-Number of people dependent on the forest for subsistence uses and traditional and customary lifestyle
Employment		Harmonise the classifications, definitions and measurement units with those used the International Standard Industrial Classification). see appendix 1	<ul style="list-style-type: none">-Informal and self employment-Subsistence related labour-The number of employments related with the secondary process of production of forest products (pulp and paper industries, panels, others)

APPENDIX 1

Location of Forestry, logging and related activities in Draft ISIC revision 4 structure (ISIC Rev.4 will be released in 2007)

The United Nations Statistical Commission at its session on 7 March 2006 has considered the draft structure of the International Standard Industrial Classification of All Economic Activities (ISIC), Rev.4, as recommended by the Expert Group on International Economic and Social Classifications. The Commission has approved the revised classification structure, as shown below, as the international standard for activity classifications. The text of the classification will still undergo an editing process, but no structural changes are expected.

Section	Division	Group	Class	Description	Explanatory notes
A	Agriculture, forestry and fishing				
	02	Forestry and logging			This division includes the production of roundwood for the forest-based manufacturing industries (ISIC divisions 16 and 17) as well as the extraction and gathering of wild growing non-wood forest products. Besides the production of timber, forestry activities result in products that undergo little processing, such as firewood, charcoal, wood chips and roundwood used in an unprocessed form (e.g. pit-props, pulpwood etc.). These activities can be carried out in natural or planted forests.
		021	0210	Silviculture and other forestry activities	<p>This class includes:</p> <ul style="list-style-type: none"> - growing of standing timber: planting, replanting, transplanting, thinning and conserving of forests and timber tracts - growing of coppice, pulpwood and fire wood - operation of forest tree nurseries <p>These activities can be carried out in natural or planted forests.</p> <p><i>This class excludes:</i></p> <ul style="list-style-type: none"> - growing of Christmas trees, see 0129 - operation of tree nurseries, see 0130 - gathering of wild growing non-wood forest products, see 0230 - production of wood chips and particles, see 1610
		022	0220	Logging	<p>This class includes:</p> <ul style="list-style-type: none"> - production of roundwood for forest-based manufacturing industries - production of roundwood used in an unprocessed form such as pit-props, fence posts and utility poles - gathering and production of fire wood - production of charcoal in the forest (using traditional methods) <p>The output of this activity can take the form of logs, chips or fire wood.</p> <p><i>This class excludes:</i></p> <ul style="list-style-type: none"> - growing of Christmas trees, see 0129 - growing of standing timber: planting, replanting, transplanting, thinning and conserving of forests and timber tracts, see 0210 - gathering of wild growing non-wood forest products, see 0230 - production of wood chips and particles, see 1610 - production of charcoal through distillation of wood, see 2011

Section	Division	Group	Class	Description	Explanatory notes
		023	0230	Gathering of non-wood forest products	<p>This class includes the gathering of non-wood forest products and other plants growing in the wild.</p> <p>This class includes:</p> <ul style="list-style-type: none"> - gathering of wild growing materials: · mushrooms, truffles · berries · nuts · balata and other rubber-like gums · cork · lac and resins · balsams · vegetable hair · eelgrass · acorns, horse chestnuts · mosses and lichens <p><i>This class excludes:</i></p> <ul style="list-style-type: none"> - <i>managed production of any of these products (except growing of cork trees), see division 01</i> - <i>growing of mushrooms or truffles, see 0113</i> - <i>growing of berries or nuts, see 0125</i> - <i>gathering of fire wood, see 0220</i> - <i>production of wood chips, see 1610</i>
		024	0240	Support services to forestry	<p>This class includes carrying out part of the forestry operation on a fee or contract basis.</p> <p>This class includes:</p> <ul style="list-style-type: none"> - forestry service activities: · forestry inventories · forest management consulting services · timber evaluation · forest fire fighting and protection · forest pest control - logging service activities: · transport of logs within the forest <p><i>This class excludes:</i></p> <ul style="list-style-type: none"> - <i>operation of forest tree nurseries, see 0210</i>