What is Forestry?

Note for discussion

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Background

FAO is currently developing a new strategy for Forestry, requested by the Committee on Forestry (COFO) in March 2007 and to be delivered at COFO 2009. The process over these two years includes a range of open discussions and meetings, involving staff across FAO as well as external partners.

One of these discussion concerns the concept “Forestry”, i.e. to establish a clear and shared specification of what “Forestry” entails in the context of the strategy. This is more than an academic question as it addresses the perception of an entire professional field as well as of a significant component of the world’s economy.

The note reviews some past evolutions of the “forestry” concept and suggests some parameters that could be useful for a modern definition of “forestry”.

The purpose of the note is to stimulate an exchange of views that can be considered when preparing the FAO Strategy for Forestry.

This discussion is language sensitive. The current document is focussed on the English explanation of “forestry”. Therefore the examples used are mainly from English-speaking countries. Linguistic considerations may be different in other UN-languages, although the conceptual discussion and conclusions in this paper can be shared across languages..

Part of the history

The Forestry concept has evolved over time, in a pattern that appears to go from traditional pre-industrial multiple uses of forest resources, over industrial wood production, to today’s sustainable, multiple-purpose forestry, which insinuates that the perception that “forestry” focuses mainly on industrial wood production was perhaps a finite era.

Examples:

The Forestry Commission of Great Britain has its origins in the 1st World War and the acute demand for wood during the war. However, the sole focus on wood has since evolved to address “multi-purpose forestry”, i.e. a wider range of forest benefits.

(http://www.forestry.gov.uk/forestry/cmon-4uum6r)

In Canada, four sequential phases of forestry are identified – aboriginal forestry, exploitation forestry, sustained yield forestry and sustainable forestry – describing an evolution over the past 250 years or so. The current phase – sustainable forestry – is described as attempting to
provide for the wants of people, i.e. for a wide range of forest products and services.
(http://www.cif-ifc.org/english/e-practices-history.shtml)

Related concepts

The following builds on generally accepted definitions, but are worded for this paper.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
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<tbody>
<tr>
<td>Forest</td>
<td>A well defined concept that refers to tree covered land that is not predominantly under other land uses than forestry. The FAO/FRA definition is well established as a global standard. Some deviations from this standard exist, particularly at country level, but these are not significant for the current discussion.</td>
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<tr>
<td>Forest resources</td>
<td>This is a broader concept than “forest”, in that it includes woodlands and trees outside forests, and not only the trees in these locations but also associated resources such as plants, animals, soil. Forest resources can thus be present on all categories of land, not just land classified as forests. This definition is well established in the Global FRA led by FAO.</td>
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<tr>
<td>Forest industry</td>
<td>tbd</td>
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<tr>
<td>Forest products</td>
<td>Here: Any physical wood or non-wood product derived from forest resources. Includes processed products such as charcoal, pulp, paper, sawn wood, plywood and veneer. Excludes further processed products such as furniture, ...</td>
</tr>
<tr>
<td>Forest services</td>
<td>tbd</td>
</tr>
<tr>
<td>Forest management</td>
<td>A concept that has narrow interpretations (physical and operational treatments of forest stands) as well as broader (normative, strategic, tactical and operational decisions and their implementation related to forest resources)</td>
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<tr>
<td>Forest sector</td>
<td>The economic sector that accounts for financial transactions (tangible or intangible) related to forest products and services, as a defined and specific subset of the overall economy. Usually, this means that a product or product group is always either within the forest sector or outside it. It does not, however, imply that the forest (or forestry) sector is confined to the forest area. Further, in economic sector accounting, it is normal to include the means of production. This means that paper machines, logging equipment and other necessities from carrying out forestry may be included in the forest/forestry sector concept.</td>
</tr>
<tr>
<td>Forestry sector</td>
<td>tbd</td>
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</table>

Recent changes of “Forestry” to “Forests”

Several organizations have chosen to change “forestry” to “forest” in their names over the past decade or so. The reason seems to be that these organizations want to appear to have a broader approach and that “forestry” is considered to give the wrong associations (namely to the wood-based forest industry). One example is the following excerpt from IUFRO’s annual report for 2000:
At its last meeting of the period, held in conjunction with the Congress in Malaysia, IUFRO's International Council made a number of far-reaching changes to the Union's Statutes. These included the change of one word in the English title – “Forestry” became “Forest” with effect from 1 January 2001 - to reflect the wider appeal of the Union to biophysical and social scientists concerned with forests rather than traditional forestry (management and use) per se.” (Noting that the “forestry” concept is still used in the Spanish, French and German versions of the IUFRO name)

It appears that the need for broadening from traditional “forestry” in IUFRO’s case is the same that has triggered the current discussion. However, the conclusion in this paper is different and suggests that “forestry” as such should be redefined and modernized and that changing to “forest” may be a narrowing rather than a broadening approach.

Some other observations

The United States Forest Service has a name that emphasizes its responsibility for managing public forest lands. However, the branch of the US Forest Service that is responsible for working with state forestry agencies and private forest owners is called “State and Private Forestry.” Similarly, within the US, essentially all of the sub-national forestry organizations are called “State Department of Forestry.”. The “forest” word refers to a geographic area and not a (broader or narrower) “forestry” concept that is used when practices across the landscape and various ownerships are considered.

The Canadian Forest Service “promotes the sustainable development of Canada's forests and the competitiveness of the Canadian forest sector” (http://cfs.nrcan.gc.ca) The work areas and activities described are focussed on the forest estate, although with a broad and sustainable development oriented agenda. In comparison, the Canadian Forestry Association, a conservation organization founded in the early 1900’s (www.canadianforestry.com), seem to have a broader approach and also has as one of its five original goals to promote tree planting in treeless areas, along streets and in parks of villages, towns and cities, which implies that forestry is done also outside forests.

United Nations Forum on Forests: This is an interesting case as there appears to be a geographic specification in this name, and also in the “Global Objectives on Forests” agreed in this forum. However, it is likely that the perception of persons involved is that the Forum addresses forestry in the broad sense, similar to the meaning suggested in this paper.

Collaborative Partnership on Forests: The roots of CPF are close to UNFF so the choice of term may have the same source. However, members of the CPF, especially ICRAF and UNCCD, may not necessarily agree if “forests” would mean that there is a geographic boundary around what is classified as forest applied to the partnership agenda.

The FAO Forestry Department was proposed to change name to “Forest Management and Conservation Department” during the 2005-2006 reform process. Interventions that argued that this would be a too narrow formulation led to keeping the name of the department unchanged.

Changing “forestry” to “forests” in the title of the FAO Committee on Forestry (COFO) has been discussed, but the idea has not gained wide support. In mid-1990’s the FAO North American Forestry Commission changed to North American Forest Commission. However, the other four Regional Forestry Commissions retain “forestry” in their names.
Dimensions to consider when (re-)defining “forestry”

The following section opens a range of key questions to consider when defining “forestry”. These fall into two main categories: *in situ*, referring to the activities directly related to the resources and their use (questions 1-4), and *ex situ*, referring to related issues and support functions (questions 5-8).

1. Land

Key question: *Is forestry only dealing with the forest, or with all land?*

Suggested answer: Forestry is an activity that can be carried out on any piece of land. It is not confined by any forest boundary. Forestry can be applied to all forest resources, i.e. forests, woodlands and trees outside forests as per above specification.

2. Range of Products and Services (benefits)

Key question: *Is forestry about some or all products and services generated by forest resources?*

Suggested answer: Given that forest resources include forests, woodlands and trees outside forests (ie potentially spans all land, see previous question and concepts explanation above), forestry would generally be about all products and services generated by these resources, however some (local) deviations may be motivated, eg whether items like palm oil, forest grazing, freshwater fishing, crops grown under trees, etc. are to be listed as forest products/services. There may be products that appear both as a forest product (or service) and as an agricultural product (or service) such as berries, mushrooms, other edibles depending on where and how they are grown/harvested/used. Further, services include environmental (or ecosystem) services, which extends forestry to encompass, e.g., conservation and restoration.

3. Chain of custody

Key question: *For forest products, how far down the chain of custody do we still label the associated activities (processing, trading) as forestry? For forest services, which associated activities do we include in forestry?*

Suggested answer: On-site harvesting of forest products and provision of services is always included in “forestry” (assuming response on question 2. is accepted). Further, for the various products and services, the general idea would be that primary processing and marketing/trade of primary products are included, but there are a number of details to consider.

Follow-on question: Which of the following activities (examples) would be included in “forestry”?

**Wood products**
- harvesting of roundwood?
- transportation of roundwood?
- sawmilling
- furniture construction?
Tourism
- hiking
- guiding
- resort to host forest tourists?

Non-wood products
- collection of medicinal plants?
- refining and packaging?
- selling at local market?

- bushmeat

Bioenergy
- woodfuel harvesting?
- charcoal production?
- transporting products?

4. Interdisciplinarity / Inter-sectoral aspects

Key question: Can forestry overlap (geographically and/or conceptually) with agriculture, biodiversity conservation, urban park management?

Suggested answer: Given replies to questions 1-3, Yes. For example, agroforestry, urban forestry and national parks.

5. Forestry stakeholders

Key question: Who does forestry?

Suggested answer: Everyone that is involved in generating forestry benefits (as discussed above). These are primarily the small-scale to large-scale ventures (in the private or public sectors) that engage in resources management, harvesting, processing and trade (the chain of custody). It also includes those working with support functions such as forestry policy, legislation and institutions (including education and research).

This question could be extended to cover stakeholders that are not directly involved in forestry, but still depend on its benefits. This is not needed to define “forestry”, however.

6. Legal, policy and institutional framework (including science)

Key question: Are these work areas included in forestry?

Suggested answer: Yes, and not only when they are specifically a forestry legislation, forestry policy or forestry institution. There can be “forestry” sections and aspects in otherwise non-forestry legislation, policy or institutions. It is important to acknowledge these interdisciplinary or inter-sectoral aspects and refer to such sections or aspects as “forestry”.

(Similarly, there may be sections or aspects in forestry legislation, policy or institutions that are referred to as something non-forestry, e.g agriculture or energy)
7. The Forestry profession

Key question: **Is there a forestry profession and if so how is it defined?**

Suggested answer: Yes, there is a forestry profession, defined by the degree or diploma issued (If “forestry” (or “forest”) is in the name of the degree/diploma, eg MSc Forestry, then the holder is also a representative of the forestry profession.

There has been a general decline in forestry education worldwide – possibly because of too traditional and sector oriented approaches. Combined with a diversifying forestry subject (as discussed in this paper) forestry-related positions are therefore, increasingly held by non-forestry professionals.

8. The inter-governmental processes

Key question: **Which inter-governmental processes handle forestry issues?**

Suggested answer: Many. Unasylva XXX reviews ten international treaties that relate to forest resources, including CBD, UNFCCC and UNFF.

**Conclusion and Proposition**

Forestry is today perceived as a broader, more inclusive concept compared to, say, 50 years ago when industrial wood production dominated the policies, science and communications in many countries. However, the older, narrower perception of “forestry” appears to prevail as a mindset with many stakeholders. There is a need to clarify that “forestry” has moved on, especially for a leading international forestry organization such as FAO.

In some respects, the forestry concept has, however, moved “on” to again reflect the broader views associated with forestry in pre-industrial times.

There are a number of different dimensions to consider when establishing what “forestry” is – eight are suggested in this paper. Broadly these fall into two categories, in situ (Land, Products/Services, Chain of custody, Interdisciplinarity) and ex situ (Stakeholders, Policy, legal and institutional framework, The Forestry profession, Intergovernmental aspects).

An inclusive in situ definition of forestry could be:

**Managing and using trees, forests and their associated resources for human benefit**

with the explanatory note that:
- forestry can occur on all land and is not confined to a legal or designated forest area;
- all products (wood and non-wood) and services (socio-economic and environmental (local and global)) generated by the forest, tree and associated resources are included, although local deviations and specifications may occur;
- primary processing and marketing of products (and services) are included;
- forestry activities can be carried out simultaneously and integrated with other land uses on the same site;
- forestry is integrated with and contributes to livelihoods and sustainable development.

As for \textit{ex-situ} dimensions, the following is suggested:

- Forestry stakeholders are everyone that is involved in generating forestry benefits in the private and public sectors, plus those involved in institutional support functions;
- Forestry aspects can be included in all types of policy, legislation, institutional arrangements or inter-governmental processes;
- Some instances of policies, legislation, institutions or international processes are dominated by forestry issues and would be referred to as “forestry policies”, “forestry legislation”, “forestry institutions” and “forestry processes”. Note however that aspects of non-forestry sectors/subjects may also be included in these.
- The forestry profession is defined by the label on training or education, e.g M.Sc. Forestry. However and increasingly, forestry-related positions are held by non-forestry professionals due to the diversification of the subject.
- Many intergovernmental processes consider forestry issues, not just UNFF and COFO.

Illustration of the scope of “Old” forestry and the widened “New” forestry as suggested above