

# Still sustainability after all these years: an overview of international and development forestry

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## Introduction

In 1713, Hans Carl Von Carlowitz published *Sylvicultura Oeconomica* laying out principles for sustainable yield in forestry. Three hundred years later sustainable forest management underpins most objectives in international forestry, although this is not always immediately evident. In fact, a casual observer of international forestry may well find themselves floundering in an almost impenetrable jungle of acronyms that often disguises the evolution of dialogue, as well as key processes and players.

Perhaps the most significant feature in international forestry over the past 30 years has been an enormous proliferation of institutions and interest groups seeking to influence forest management. This has served to fragment the forestry agenda with the emergence of a

wide variety of specialist, but nonetheless inter-related and overlapping, processes and dialogues addressing both specific aspects of forestry, and forestry in the context of wider multi-sectoral frameworks. This paper seeks to unravel and explain some of this complex fabric to help make comprehensible – especially to those on the outside looking in – the main processes, themes and objectives of international forestry.

## Umbrella of sustainable development

In general, international forestry dialogues are carried out under a broader umbrella of sustainable development. A resurgence of sustainability in global dialogues in the 1970s was initially driven by the Club of Rome's report, *The Limits to Growth*. This highlighted 'the contradiction of unlimited and



Degraded forest and Imperata grasslands, Tarlac reforestation project, Philippines

unrestrained growth in material consumption in a world of clearly finite resources' (Meadows et al., 1972). Sustainable development firmly assumed centre stage with the report of the World Commission on Environment and Development (the Brundtland Report) in 1987. This gave an enduring definition of sustainability as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs', and laid the groundwork for the 1992 United Nations Conference on Environment and Development (UNCED). A significant outcome for forestry from this 'Rio Earth Summit' was the consensus statement of 'Forest Principles' on the management, conservation and sustainable development of forests.

In a significant development in 2000, the United Nations Millennium Summit issued eight broad Millennium Development Goals (MDGs) for achievement by 2015 as a means of galvanising concerted global action on development. Development in forestry is largely encompassed in the sphere of the seventh goal, 'To ensure environmental sustainability' (UN, 2014). More recently, in 2012, one of the principal outcomes of the United Nations Conference on Sustainable Development (Rio+20) was agreement to develop a set of Sustainable Development Goals (SDGs) to supersede the Millennium Development Goals.

A process to develop these new goals is currently underway. There is strong impetus by government and international forestry agencies to ensure that forestry is more comprehensively represented in the Sustainable Development Goals, with a set of dedicated forest targets and indicators being developed for inclusion and even a substantive push for a forestry-specific goal.

Much of these dialogues may seem esoteric, but they have translated into a fundamental sea change in natural resource management at national levels. Principles of sustainability now underlie natural resource management legislation and policies in almost all countries, even if these are not necessarily translated to on-the-ground action. In New Zealand, for example, the Resource Management Act 1991 very simply states, 'The purpose of this Act is to promote the sustainable management of natural and physical resources.'

## International conventions and arrangements influencing forestry

Underneath this general umbrella of sustainable development are a range of more specific agreements, arrangements and processes that both directly and indirectly influence forestry. Several of these were developed in conjunction with the 1992 Rio Earth Summit, for example, the Convention on Biological Diversity (CBD), which is aimed at '... conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources' (UN, 1992a), including forest-based biodiversity.

The United Nations Convention to Combat Desertification (UNCCD) also emerged from the Rio Earth Summit as a legally binding international agreement aimed at mitigating the effects of drought and desertification and it significantly references forests in this regard. An older, but similar, Convention on Wetlands (the Ramsar Convention) dates back to 1971 and includes forest wetlands. For example, New Zealand presently has six Ramsar sites, listed as internationally significant wetlands, with Okarito Lagoon being considered as a seventh. Various other international conventions help to govern various aspects of forestry such as:

- The Convention on International Trade in Endangered Species (CITES), which restricts trade in endangered species including tree species such as big leaf mahogany (*Swietenia macrophylla*)
- The World Heritage Convention, which identifies sites of globally outstanding cultural and natural heritage such as Te Wahipounamu – Southwest New Zealand, which encompasses significant areas of natural forest
- Trade negotiations carried out under the World Trade Organization (WTO), which include industrial forest products.

Of particular significance for forestry are ongoing negotiations carried out under a third Rio Earth Summit convention – the United Nations Framework Convention on Climate Change (UNFCCC). The ultimate aim of this convention is to stabilise greenhouse gas concentrations 'at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system' (UN, 1992b). A key early step for the United Nations Framework Convention on Climate Change was the adoption, and eventual entry into force, of its Kyoto Protocol, which among other things set binding emission reduction targets for industrialised countries and allowed for tradable emissions permits. New Zealand agreed to maintain its emissions at 100 per cent of 1990 base year emissions, a goal that provides the fundamental logic behind the structure of forestry provisions of this country's emissions trading scheme (ETS). In 2012, the Doha Amendment to the Kyoto Protocol established a new set of emission reduction targets for the second commitment period of the protocol. New Zealand, along with Canada, Japan, the Russian Federation and the United States, did not sign up to the second commitment period.

A variety of subsidiary bodies and committees have been established under the United Nations Framework Convention on Climate Change, with the overarching negotiations conducted in sessions of the Conference of the Parties (CoP). The 19th session (CoP 19) was held in Warsaw in November 2013. For the forestry sector, many of the most significant negotiations have related to dialogue in the Subsidiary Body for Scientific and Technological Advice (SBSTA), which undertakes work



on methodological and scientific matters, particularly those relating to 'Land-use, land-use change and forestry (LULUCF)' and 'Reducing emissions from deforestation and forest degradation in developing countries' (REDD).

In recent times work in these areas has focused on establishing methodologies for assessing reference levels of carbon stocks and emissions from forests and for measuring, reporting and verifying (MRV) changes in carbon stocks. A significant advance emerging from CoP 19 was a Warsaw Framework for REDD+, a series of seven key decisions relating to financing, monitoring reporting and verification systems, safeguards, reference emission levels, and drivers of deforestation and forest degradation.

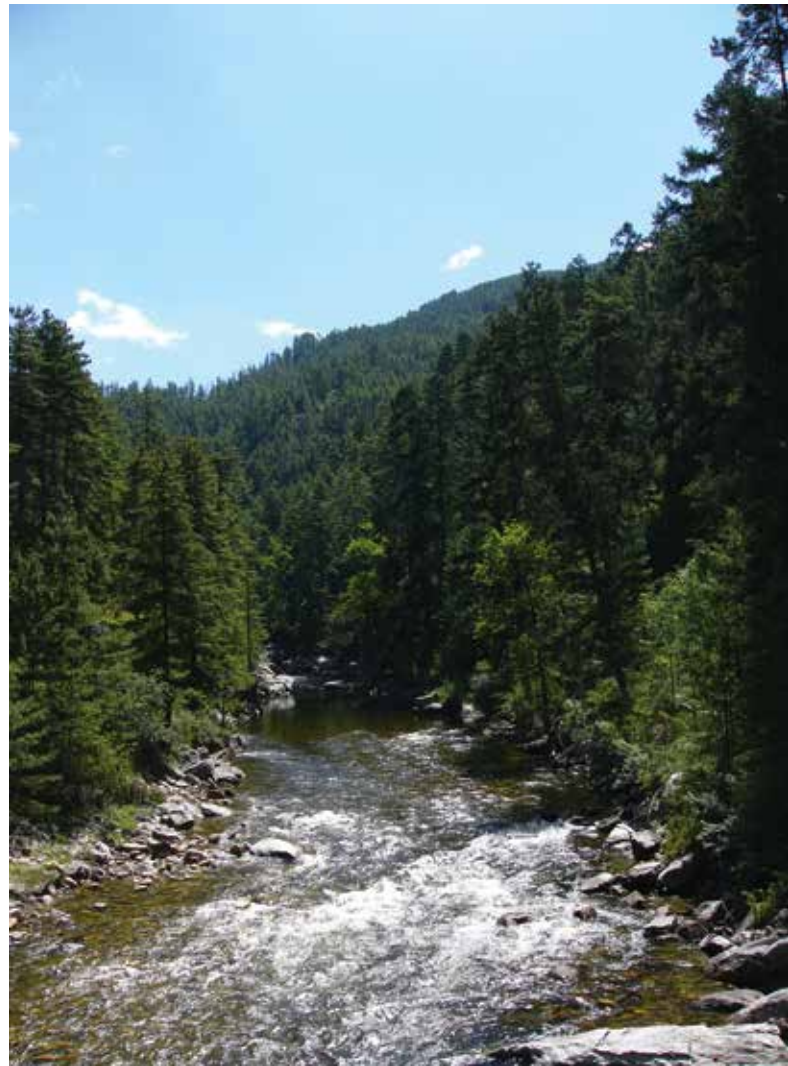
In relation to wider negotiations, emerging from CoP 17 was a Durban Platform for Enhanced Action. Under this platform, countries have agreed to negotiate a new protocol, legal instrument or an agreed outcome with legal force under the convention in 2015. It is expected that the new agreement will prominently include aspects of REDD+, land use and land-use change and forestry, which may further change the dimensions and focus of forest management in the years to follow.

Climate change negotiations have largely progressed very slowly, but they have nonetheless resulted in significant new and additional funding for forestry. Various systems of tradable carbon permits have been established providing revenues to forest owners, especially in developed countries. Also significant funding for forestry in developing countries has been generated through mechanisms such as:

- The Global Environment Facility (GEF)
- The Forest Carbon Partnership Facility (FCPF)
- The Strategic Climate Fund's Forest Investment Programme (FIP)
- The UN-REDD programme
- Various north-south bilateral and multilateral agreements such as a Norway-Indonesia REDD partnership
- Various others including the emerging Green Carbon Fund.

### Forestry-specific arrangements

Forestry also has a number of its own sector-specific agreements, dialogues and processes. The largest and most enduring global forum on forestry is the World Forestry Congress (WFC), the first of which was held in 1926. Congresses are organised by the Food and Agriculture Organization of the United Nations (FAO) and host governments, and in recent times have been held every six years. The 14th World Forestry Congress will be held in Durban, South Africa in September 2015.



Mature mixed coniferous forest, Bumthang Valley, Bhutan

FAO's Committee on Forestry (COFO) is a similarly durable intergovernmental body, providing a forum for periodic review and appraisal of internationally significant forestry challenges and helping to shape the FAO's programme of work. Six subsidiary regional forestry commissions also operate as statutory bodies of the FAO, providing opportunity to discuss and develop regional perspectives on key issues, including the Asia-Pacific Forestry Commission (APFC), which was inaugurated in 1950. The 25th silver anniversary session of APFC was hosted in Rotorua in November 2013.

In 1985, the ratification of the International Tropical Timber Agreement (ITTA) established a framework for cooperation between tropical timber producers and consumers aimed at encouraging the sustainable utilisation and conservation of tropical forests. A particular focus was to reconcile demands for conservation of tropical forests, especially those to reduce tropical deforestation, with ongoing requirements of the timber trade. The International Tropical Timber Organization (ITTO) was established under this agreement. A particular pioneering effort by

the International Tropical Timber Organization was the establishment of a set of criteria and indicators (C&I) for the sustainable management of natural tropical forests, providing tools to define, assess and monitor progress towards sustainable forest management.

A similar effort to establish criteria and indicators for European temperate and boreal forests was conducted under a Helsinki Process, while criteria and indicators for temperate and boreal forests in 12 'other' countries including New Zealand were developed under the Montreal Process, which was launched in 1994. Several other criteria and indicators development processes have been implemented for specific forest types and regions including, for example, the Tarapoto Process for Amazonian forests and a process for dry forests in Asia.

A further institutional strand was added, subsequent to the Rio Earth Summit, with the establishment initially of an Intergovernmental Panel on Forests (IPF), which was succeeded by an Intergovernmental Forum on Forests (IFF), and in 2000 the United Nations Forum on Forests (UNFF), with a mandate to promote '... the management, conservation and sustainable development of all types of forests' (ECOSOC, 2000).

A key initiative of the United Nations Forum on Forests has been the establishment of a Non Legally Binding Instrument on All Types of Forests (the Forest Instrument), which was adopted by the United Nations General Assembly in 2007. It identifies key principles for the sustainable management of forests, outlines four global objectives on forests, and identifies national policies and measures to help achieve these objectives. The Forest Instrument also references seven common thematic elements of sustainable forest management that have emerged from the various criteria and indicators processes and has been endorsed by several of the above processes.

International forestry discussions are about to enter into a new series of negotiations to determine the post-2015 international arrangements on forests. Proposed options include maintaining the status quo, strengthening the role of the United Nations Forum on Forests or the Collaborative Partnership on Forests (or both), and negotiating a legally binding international agreement on forests. Country positions are widely divided on the options and negotiations are anticipated to be challenging and protracted.

Two other recent initiatives designed to promote recognition of the importance of forests were the designation of 2011 as the International Year of Forests, and more recently a United Nations declaration that an International Day of Forests will be celebrated annually on 21 March.

## Proliferation and consolidation

The above discussion outlines many of the core strands of international forestry processes, but it is far from comprehensive. A vast range of more specific

international partnerships, forums, networks, dialogues and processes deal with a wide variety of thematic areas of forestry including: community forestry, wildfires, invasive species, forests in mountainous areas, biodiversity, protected areas, wildlife and wildlife trade, forestry research, forestry education, ecosystem services, non-wood forest products, forest law enforcement and governance, bioenergy, wood harvesting, certification, sanitary and phytosanitary measures, agroforestry, gender, food security, natural disasters and many more.

Cutting across these thematic elements are a large number of bilateral and smaller multilateral groupings focusing on forestry or specific thematic or geographic areas. Representative examples of these include:

- Pacific Heads of Forestry meetings organised by the Secretariat of the Pacific Community
- The Asia-Pacific Association of Forestry Research Institutions (APAFRI), which operates as a chapter of the International Union of Forestry Research Organisations (IUFRO)
- An Asia-Pacific Forest Invasive Species Network (APFISN), which operates as one of a series of regional networks addressing forest invasive species.

This proliferation of international dialogues has also been accompanied, and to a large extent driven, by an explosion of interest groups seeking to influence forestry agendas. At the highest levels these may include groups of countries with perceived common interests such as the G77, the producer and consumer groups formalised in International Tropical Timber Organization structures, and more informal contact groups formed at specific negotiations.

More significant however is the enormous escalation in the numbers of national and international non-governmental organisations representing particularly environmental and social interests, but also industry organisations and alliances of other special interest groups. For example, more than 7,000 participants from international organisations, governments, academia, private sector and civil society, representing 160 nations, attended the 13th World Forestry Congress in Buenos Aires, Argentina. More than 10,000 participants attended the CoP 19 climate change negotiations.

Recognition that such large events may be hugely unwieldy in achieving negotiated outcomes has been a key driver in the establishment of the multitude of smaller forums that aim to more efficiently address specific themes and issues. However this proliferation also creates enormous potential for duplication and fragmentation. A key effort at consolidating the international forestry agenda has been the formation of the Collaborative Partnership on Forests (CPF). This is a partnership of 14 major international agencies with substantial programmes on forests aimed at streamlining and aligning their work and to enhance cooperation and coordination and common messages on forest issues.

The agencies are: the Center for International Forestry Research (CIFOR), Convention on Biological Diversity Secretariat, FAO, Global Environment Facility Secretariat, International Tropical Timber Organization, International Union for Conservation of Nature (IUCN), International Union of Forestry Research Organizations, United Nations Convention to Combat Desertification Secretariat, United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Forum on Forests Secretariat, United Nations Framework Convention on Climate Change Secretariat, World Agroforestry Centre (ICRAF) and the World Bank. Stated working modalities include ‘... to work towards a better coherence between countries, in conjunction with major events; to keep travel costs low and make efficient use of staff time’ (CPF, 2014).

## Objectives and trends

Most of this paper has been devoted to describing the development of international forestry processes. However to add a bit of meat to these bones, this concluding section briefly describes the thematic evolution of international forestry and identifies four key planks that might form the foundation for international and development forestry over the next decade.

Table 1 provides a simple schematic of the evolution of international forestry priorities during the past 50 years. Priorities and development philosophies have shifted from the idea that forestry should primarily

be an engine of growth in developing economies, leading to vast tropical deforestation in the absence of adequate safeguards, to ideas of social forestry. This is encapsulated in the famous quote by Jack Westoby that, ‘Forestry is not about trees, it is about people. And it is about trees only insofar as trees can serve the needs of people’ (Westoby, 1987). This transition was driven both by emerging environmental threats and particularly by ‘the newly emerged “fuelwood crisis” and the miserable living conditions of the rural poor’ (Persson, 2003).

Rising public concern over tropical deforestation, especially in Southeast Asia and the Amazon, led to increased focus on environmental and conservation aspects of forestry in the late 1970s and early 1980s, paralleled in New Zealand by events such as the Maruia Declaration. The strong conservation focus gradually morphed into more people-centered approaches, based around principles of sustainable forest management, particularly in the years subsequent to the Rio Earth Summit.

Over the past 25 years, increased experiences and knowledge have enabled significant refinement of the principles of sustainable forest management. For example, substantial agreement has emerged on seven common thematic elements of sustainable forest management mentioned above. These are:

1. Extent of forest resources
2. Biological diversity

Table 1: Evolution of international forestry/development assistance

Development phase	Main focus
Colonial forestry Pre-1945	Timber extraction
Industrial forestry 1960s	Forestry for economic development Wood processing development
Social forestry 1970s	Fuelwood crisis Community forestry Indigenous forest dwellers Farm forestry
Environmental forestry 1980s	Halting deforestation Biodiversity conservation Soil and watershed protection
Sustainable management of renewable resources 1990s	Sustainable forest management Climate change mitigation Forest Law Enforcement, Governance and Trade (FLEGT)
Post-sustainability? 2000s	Climate change adaptation Green economy Resilience Forest landscape restoration



3. Forest health and vitality
4. Productive functions of forest resources
5. Protective functions of forest resources
6. Socio-economic functions
7. Legal, policy and institutional framework (FAO, 2014).

These broad elements provide a foundation for, and seem likely to continue to underpin, most aspects of forestry development. Despite this, at present it is climate change negotiations that have effectively returned forestry to a centre stage in international dialogues and it is regularly observed that where climate change goes, forestry will follow. For the foreseeable future, climate change will surely form a central plank of international forestry efforts. Nonetheless, a substantive shift in climate change discussions is towards recognition that climate change mitigation efforts will at best be only partially successful, and that substantial efforts need to focus on climate change adaptation, that is, living with the consequences.

Four other emerging areas that are likely to strongly influence international forestry include:

- Transition to principles of the green economy
- Building resilience in forests and forest-dependent communities
- Forests and food security
- Forest landscape restoration, particularly driven by the Global Partnership on Forest Landscape Restoration (GPFLR) and the Bonn Challenge to restore 150 million hectares of forests and degraded lands by 2020.

Several other areas may also emerge as important drivers of international forestry direction including potential large-scale forest die-back related to climate change, forest contributions to freshwater supplies, and renewed impetus for forest-based bioenergy.

These emerging areas offer some interesting new concepts, but there nonetheless appears to be a significant splash of 'old wine in new bottles' in the underlying forestry principles. It is, for example, difficult to see how forest management prescriptions would shift significantly from those articulated for sustainable forest management under a green economy regime. Similarly, it seems doubtful that forest management to maximise planted forest carbon sequestration would differ significantly from sustained yield timber production. Building resilience in forests and forest-dependent communities seems largely contingent on principles of sustainable forest management.

What was 'good forestry' (that is, sustainable forest management) in the past would undoubtedly serve well in achieving the new objectives and meeting the new expectations of forests and forestry in the 21st century.

A key then to successful implementation of these new programmes for forestry is to recognise the significant challenges. These include the enormous influence of extra-sectoral factors, the relative profitability of alternative land-uses, a lack of clear tenure arrangements, weak governance, limited financial and technical support, and inadequate political will, as they have stood in the way of successful implementation of sustainable forest management in the past.

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