Part III

Special Theme: Forests

Forest Issues in Africa[1]

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Introduction

While forests in Africa are often overshadowed by those in South America and Asia, they constitute a significant proportion of global forests both in size and importance. Africa's forests and their biodiversity, however, are under threat. This paper considers the importance of and threats to Africa's forests and evaluates various international and regional initiatives that have been established specifically to address forest issues in Africa or that can be used to address threats to forests in Africa. It is clear that on paper there are significant legal and policy responses to such threats, but the implementation of these instruments is critical. Unfortunately, there are important obstacles to effective implementation that need to be overcome.

Africa's Forests

In 1990, total world forest cover, including both closed forest and other woodland, amounted to 4,499 million hectares, comprising 2,792 million hectares of closed forest and 1,707 million hectares of other woodland.[3] In 2000, the Food and Agriculture Organization's Forest Resource Assessment Programme estimated that the total global forest cover was 3.9 billion hectares, 95 percent natural and the remainder in plantations.[4] Africa contains about 650 million hectares of forests, cor-

1 This paper is based on a lecture given by the author on 25 August 2005.

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3 Michael Williams *Deforesting the Earth: From Prehistory to Global Crisis* (The University of Chicago Press, 2003) at 451.

4 Food and Agriculture Organization, *Global Forest Resources Assessment 2000* (FAO: Rome, 2001).

responding to 17 percent of the world total.[5] Almost all African forests are located in the tropical ecological domain, and Africa has about one-quarter of all tropical rain forests. Only one percent of the forest area is classified as forest plantations. Africa has 75,885,000 hectares of protected forests, which amounts to 12 percent of total forest area.[6]

Africa contains the second largest contiguous area of tropical moist forest in the world: an area of about 1.8 million kilometres squared,[7] encompassing the entire countries of Gabon and Equatorial Guinea, much of Congo (Brazaville), Cameroon and the Democratic Republic of Congo (DRC) as well as the southwestern corner of the Central African Republic.[8] This forest contains what has been described as the most diverse assemblage of plants and animals in Africa, including over 400 mammal species, more than 1,000 bird species, and likely over 10,000 plant species of which some 3,000 are endemic. Only in Central Africa do forest elephant, gorilla, forest buffalo, bongo, and okapi occur in large numbers across large areas of forest.[9] Hendrick describes the forest types in Africa as follows:

> Rain forests in the western and central portions of Africa range from Sierra Leone to Kenya and the high plateau of Uganda. The remaining rain forests in Africa are in the far eastern border, confined to wet areas along the coast and high elevations. They are much smaller in extent and typically drier than West African rain forests. Dry, closed canopy forests historically occurred in both western (e.g. Guinea) and eastern (Kenya to Mozambique) Africa, often bordering the rain forests. However, most have been lost to agricultural conversion or deliberate burning. Dry open forests are more abundant than closed forests, and occur, or occurred, widely in southern Africa from Angola to Mozambique and in portions of west central Africa. What remains in the forests of eastern Madagascar is rain forests, whereas the forests of western Madagascar are dry, closed canopy forests.[10]

5 *Ibid.* See also Williams, *Deforesting the Earth*, *supra* note 3, who indicated that in 1990, closed forest in Africa amounted to 217 million hectares and other woodland 652 million hectares. According to these figures, Africa contained in 1990 about 19 percent of total forest and woodland cover and about 18 percent of total tropical closed forest.

6 Jacek P. Siry, Frederick W. Cubbage and Miyan Rukunuddin Ahmed, 'Sustainable Forest Management: Global trends and opportunities', 7 *Forest Policy and Economics* (2005) 551 at 552.

7 David S. Wilkie and Nadine Laporte, 'Forest Area and Deforestation in Central Africa', in William Webber et al. (eds.), *African Rain Forest Ecology and Conservation* (Yale University Press: New Haven/ London, 2001) 119 at 119.

8 *Ibid.*

9 CARPE, *The Forests of the Congo Basin: A Preliminary Assessment* (2005) at 4, carpe.umd.edu/ products/PDF_Files/FOCB_APrelimAssess_EN.pdf.

10 Ronald L. Hendrick 'Forest types and classification', in Julian Evans (ed.) *The Forest Handbook* (Blackwell: Oxford, 2001) vol. 1, 23 at 29-30.

The Importance of Forests

Forests are important for numerous reasons. They are the source of much of the world's biodiversity, providing habitat for numerous species. Tropical forests probably contain at least half of the world's species.[11] In Madagascar, for example, over 8,000 endemic species of flowering plants have been identified, most of these concentrated in the rain forest along the east coast.[12] This biodiversity is not only important for its own sake, but can have benefits for humans as well, such as potential medicinal value (over 1,300 plant species in the Amazon alone have medicinal value)[13] and germplasm (with effects on the world's food supply).[14] Forests serve as protection against 'natural hazards such as snow avalanches, rock falls, shallow landslides, debris flows, surface erosion (by precipitation or by wind) and floods.'[15] They also function as carbon sinks and hence are positive agents against climate change; forests 'absorb carbon through respiration from the atmosphere and store relatively large amounts both in plants and in soils.'[16] Forests protect against soil erosion – Madagascar being a good example of deforestation leading to severe soil erosion[17] – and they moderate climatic conditions.[18]

Forests are also an important source of water. So-called cloud forests have the ability to 'strip and retain moisture from cloud and fogs', which is often 'key to abundant, clean and predictable water supplies in many areas.'[19] In the African context

11 Patrick L. Osborne, *Tropical Ecosystems and Ecological Concepts* (Cambridge University Press: New York, 2000) 271.

12 *Ibid*., 270.

13 Leslie E. Sponsel, Robert C. Bailey and Thomas N. Headland, 'Anthropological Perspectives on the Causes, Consequences and Solutions for Deforestation', in Sponsel, Headland and Bailey (eds.), *Tropical Deforestation: The Human Dimension* (Columbia University Press: New York, 1996) 3 at 16.

14 *Ibid.*

15 Peter Bang et al., 'Forests as protection from natural hazards', in Julian Evans (ed.) *The Forests Handbook* (Blackwell: Oxford, 2001) vol 2, 53 at 53-4. See also Duncan Brack, 'Controlling Illegal Logging and the Trade in Illegally Harvested Timber: The EU's Forest Law enforcement, governance and trade initiative', 14 *Review of European Community and International Law* (2005) 28 at 29-30.

16 Sources include Philippe Cullet and Annie Patricia Kameri-Mbote, 'Activities Implemented Jointly in the Forestry Sector: Conceptual and operational fallacies', *Georgetown International Environmental Law Review* (1997) 97 at 107; Jack K. Winjum and Paul E. Schroeder, 'Forest Plantations of the World: Their Extent, ecological attributes, and carbon storage' 84 *Agricultural and Forest Meteorology* (1997) 153; William F. Laurence, 'Reflections on the Tropical Deforestation Crisis', 91 *Biological Conservation* (1999) 109 at 110; Pedro A. Sanchez, 'Linking Climate Change Research with Food Security and Poverty Reduction in the Tropics', 82 *Agriculture, Ecosystems and Environment* (2000) 371; Joyotee Smith and Grahame Applegate, 'Could Payments for Forest Carbon Contribute to Improved Tropical Forest Management?' 6 *Forest Policy and Economics* (2004) 153; Thomas K. Rudel et al., 'Forest transitions: Towards a global understanding of land use change' 15 *Global Environmental Change* (2005) 23 at 24.

17 Sponsel, Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 14.

18 *Ibid.*

19 Anonymous, 'Study on cloud forests' 34 *Environmental Policy and Law* (2004) 124.

> All the water used by the Tanzanian capital [Dar es Salaam] during the dry season for drinking and powering hydro-electricity originates in the cloud forests of the Ulugur Mountains. The forests of Mount Kenya guarantee the dry-season river flows to the semi-arid lowlands, with the headwaters of the River Tana supplying water to over 5 million people'.[20]

From an anthropocentric viewpoint, forests are the source of several useful and often profitable resources to humans: wood as well as other products such as meat from forest animals, fruit, nuts, rubber and plants used as medicines. The United Nations Forum on Forests (UNFF) estimates that forests provide subsistence and income to about 350 million people worldwide.[21] Moreover, about 1.6 billion people depend to some extent on forests for their livelihood, with forest industries providing employment for nearly 100 million people.[22] Forests also play important roles in people's cultural and spiritual well-being. They are increasingly becoming important ecotourism destinations, often due to the nature of the species they contain.

Due to the complexity of tropical forests, they have an extremely high information content.

> Most of this information resides in the genomes of individual species, the interactions among them, and the resulting ecosystem patterns and processes. Most of this information is not yet accessible to us because we have described only a modest fraction of the species living in tropical forests; we know almost nothing about ecological relationships among the species we have described, and we have only crude measures at just a few tropical sites of the rates and magnitudes of ecological processes.[23]

The knowledge we can benefit from includes understanding the dynamics of complex physical, biological and social systems; this knowledge can also be fed back into forest restoration projects. Future options to find and use new products – especially medicinal – are sacrificed as forests are lost and biodiversity minimized.[24] 'Tropical forests are among the world's least well known environments yet they are central to an understanding of fundamental problems of evolution and ecology'.[25] Forests may also be important from a biocultural perspective. Loh and Harmon suggest that biocultural diversity

20 *Ibid.*

21 UNFF, Display Panel, www.un.org/esa/forests/images/panel3.jpg. See also Neil Byron and Michael Arnold, 'What futures for the people of the tropical forests?', (1999) 27 *World Development* 789.

22 UNFF, Display Panel, *ibid.*

23 Gordon H. Orians, Rodolfo Dirzo and J. Hall Cushman, 'Impact of Biodiversity on Tropical Forest Ecosystem Process', in Harold A. Mooney et al., (eds,) *Functional Roles of Biodiversity: A Global Perspective* (Wiley: London, 1996) 213 at 234-5.

24 *Ibid.*

25 M.E. Duncan Poore, 'The Values of Tropical Moist Forest Ecosystems', 28 *Unasylva* 127 (1976), quoted by Williams, *Deforesting the Earth*, *supra* note 3, at 420.

> may be thought of as the sum total of the world's differences, no matter what their origin. It includes biological diversity at all its levels, from genes to populations to species to ecosystems; cultural diversity in all its manifestations (including linguistic diversity), ranging from individual ideas to entire cultures; and, importantly, the interactions among all of these.[26]

Their research indicates that Central Africa[27] is one of three areas worldwide of exceptional biocultural diversity.

Deforestation

There is contention about exactly what deforestation means, ranging from complete clearance of tree formations to lesser forms of modification.[28] Myers provides one respected definition, and states that deforestation refers

> generally to the complete destruction of forest cover through clearing for agriculture [so] that not a tree remains, and the land is given over to non-forest purposes [and where] very heavy and unduly negligent logging [results in] a decline of biomass and depletion of ecosystem services […] so severe that the residual forest can no longer qualify as forest in any practical sense of the word.[29]

Worldwide, since 1945, approximately 555 million hectares of forest have been cleared. According to Williams, 'in the whole history of deforestation there has been nothing comparable to this rate.'[30] FAO's *Global Forest Resources Assement 2000* estimates a net tropical natural forest area loss of 14.2 million hectares per year, meaning that almost one percent of tropical forest was lost every year during the 1990s. In spite of an apparent improvement from the 1980s to the 1990s, owing mainly to a natural expansion of forests in industrialized countries, natural forests in the tropics are still being lost at an alarmingly high rate. At the global level, the loss of natural forest has continued at roughly the same high levels over the last 20 years.[31] According to FAO data, total forest area in Africa was 702,475,000 hectares in 1990 and 649,866,000 hectares in 2000. This amounts to an annual decrease of 0.8 percent over the decade in question. All the regions in Africa, other than North Africa and insular Africa, reflected a decrease in forest area, with the most

26 Jonathan Loh and David Harmon, 'A Global Index of Biocultural Diversity', 5 *Ecological Indicators* (2005) 231 at 231-2.

27 Which they define as consisting of Nigeria, Cameroon and the Democratic Republic of Congo (DRC), Tanzania and Gabon and Congo (Brazaville). *Ibid.* at 236.

28 Williams, *Deforesting the Earth*, *supra* note 3, at 452.

29 N. Myers, *Deforestation Rates in Tropical Forests* (Friends of the Earth: London, 1989) at 5, definition edited by Williams, *Deforesting the Earth*, *supra* note 3.

30 Williams, *Deforesting the Earth*, *supra* note 3, at 421.

31 FAO, *FRA 2000*, *supra* note, at 46. At the time of writing *FRA 2000* was the most recent FAO Assessment. For the *Global Forest Resources Assessment 2005*, see www.fao.org/forestry/site/fra2005/en.

significant decline being in West Africa (1.6 percent per annum) and East Africa (one percent per annum).

The Effects of deforestation

Deforestation generally has a negative impact on all the benefits that forest provide, as discussed above. More specifically, impacts include habitat loss and fragmentation, species (and hence biodiversity) loss, climate change, desertification and impact on human forest inhabitants. Loss of forest obviously leads to loss of habitat area, but it also has the effect of habitat fragmentation, 'by which forest patches become isolated, forming small islands in a grassland sea.'[32] According to Osborne

> Forest fragmentation not only leaves the organisms that remain with a smaller habitat, but also exposes them to stressful environmental conditions, especially at the forest edges, that differ from those deeper within the forest. Edge effects include: (1) abiotic effects (changes in environmental conditions); (2) direct biological effects (changes in the abundance and distribution of species); and (3) indirect biological effects (changes in species interactions such as predation, brood parasitism, competition, herbivory, pollination and seed dispersal).[33]

Habitat loss impacts on species, which are also under threat from increased access to forests by humans. Endemic species are at great risk from the loss of habitat as this may mean the extinction of such species. For example, the Tana River crested mangabey and the red colobus are found nowhere else but in a small strip of forest lying along this river.[34] Moreover, due to the complexity of tropical forest ecosystems, many species have coevolved, so that the loss of a single species may lead to linked extinctions. In addition, many species in these forests exist at very low densities, thus being extremely vulnerable to sudden extinction.[35] It is estimated that as a result of habitat destruction, as many as 10,000 species may become extinct each year, unprecedented in all of geological history.[36]

Deforestation also has important ramifications for climate change. It has been estimated that the burning of tropical rainforests is responsible for about 25 percent of global warming.[37] In 1987, it was estimated that 23 percent of greenhouse gas emissions from deforestation were from Africa, although with increased logging

32 Osborne, *Tropical Ecosystems*, *supra* note 11, at 271.

33 *Ibid*., at 277 (this quote from 279).

34 Mudanthra Balakrishnan, 'Conservation of Threatened African Wildlife: Problems and prospects', in M. Balkrishnan, Reidar Borgström and Stein W. Bie (eds.), *Tropical Ecosystems: A Synthesis of Tropical Ecology and Conservation* (Oxford and IBH Publishing: New Delhi, 1994) 193 at 207.

35 *Ibid*., at 209; Sponsel, Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 16.

36 Sponsel, Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 3.

37 United States Environmental Protection Agency, *Greenhouse Gas Emissions from Agricultural Systems* (United States EPA: Washington D.C., 1990) vols. 1-2.

on that continent, this was likely to increase.[38] Current patterns of deforestation in Central Africa, if allowed to continue, will have significant impacts on carbon stocks in these forests. According to Zhang et al.

> The central African forest region contained 85, 74, and 65% of the potential aboveground biomass carbon […] in 1950, 1990, and 2000, respectively. With current shifting cultivation practice and projected population growth, only 40% of the carbon will remain in 2050.[39]

Deforestation is an important contributing factor in desertification.[40] According to the Secretariat of the United Nations Convention to Combat Desertification

> Desertification is the degradation of drylands. It involves the loss of biological or economic productivity and complexity in croplands, pastures, and woodlands. It is due mainly to climate variability and unsustainable human activities. The most commonly cited forms of unsustainable land use are overcultivation, overgrazing, deforestation, and poor irrigation practices.[41]

For people who live in or near forests and rely on forests for resources, deforestation reduces access to such resources. In addition, deforestation leads to disease in a number of different ways: new migrants bring alien diseases to the local inhabitants, and in turn contract local diseases. Cutting trees brings mosquitoes down from the canopies with resultant malaria transmission.[42] This impact on indigenous people can be extreme:

> Virtually all the world's tropical forests are populated, usually by indigenous peoples. In order for local, state or international interests to exploit forest resources, the rights of indigenous groups must be denied and the groups themselves displaced. It is no accident, therefore, that indigenous peoples are disappearing at an even faster rate than the tropical forests upon which they depend. Their own survival is intricately linked with that of their forests. They also represent our best first line of defense against the destruction of the forests.[43]

The Causes of deforestation

Population pressure, coupled with technological advances, has 'since time immemorial [placed people in competition with] all other life forms for the remaining

38 R.A. Houghton, 'The Role of Forests in Affecting the Greenhouse Gas Composition of the Atmosphere' in R.L. Wyman (ed.), *Global Climate Change and Life on Earth* (Routledge, Chapman and Hall: New York. 1991).

39 Quanfa Zhang, Christopher O. Justice and Paul V. Desanker, 'Impacts of Simulated Shifting Cultivation on Deforestation and the Carbon Stocks of the Forests of Central Africa' 90 *Agriculture, Ecosystems and Environment* (2002) 203 at 208.

40 Sponsel , Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 15.

41 UNCCD, Fact Sheet 2, at www.unccd.int/publicinfo/factsheets/showFS.php?number=2.

42 Sponsel Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 18.

43 Jason W. Clay, 'Brazil: Who pays for development', 13 *Cultural Survival Quarterly* (1989) 1 at 1.

niches in the world.'[44] Studies have shown 'population density and income per capita to be significant underlying factors of deforestation.'[45] However, population pressure itself is probably not alone the cause of deforestation, but its relationship with factors such as 'lack of employment opportunities, inequality of distribution of assets (particularly land), exploitative private enterprise and weak government control, misdirected past policies of aid agencies, national indebtedness, poverty, and corruption as the elite groups having economic and political control in society accumulate profits through the extension of commercial logging'[46] has often been shown to be influential.[47] A continuing population increase will lead to further demand for wood products and land, placing yet more pressure on the world's forests, especially in the developing world. Specific causes of deforestation in Africa that are frequently mentioned in literature dealing with deforestation are logging, agricultural expansion, and wood fuel depletion. These are discussed in turn, not necessarily in any order of importance.

Logging

Logging may be an important contributor to national economies of developing countries – officially registered forestry revenues, primarily from timber, make up about 3 percent of developing country exports and about 2 percent of national income – and it may also contribute positively to the incomes of forest-dwelling communities.[48] Internationally, it is estimated that about 44,000 square kilometres of tropical forest is logged annually and largely destroyed or degraded.[49] In Africa, much logging takes place in the Congo Basin, for which total timber production is approximately 10 billion cubic metres.[50] Logging in this region is generally highly selective and only a small number of trees (0.7-2) are extracted per hectare.[51] However, even selective logging, i.e. choosing the trees that are most commercially attractive, where less than 10 percent of the trees in a forest are cut, may damage 60 percent or more of the trees in a forest.[52] This is exacerbated by high levels of waste: statistics from Ghana have shown that up to 25 percent of cut timber is left on the forest floor, while as much as 40 to 60 percent of timber reaching the factory may

44 Williams, *Deforesting the Earth*, *supra* note 3, at 425.

45 Jussi Uusivuori, Erkki Lehto and Matti Palo, 'Population, Income and Ecological Conditions as Determinants of Forest Area Variation in the Tropics', 12 *Global Environmental Change* (2002) 313 at 322; W.F Laurance, 'Tropical Deforestation Crisis', 91 *supra* note 18, at 111.

46 Williams *Deforesting the Earth*, *supra* note 3, at 425.

47 See James R. Kahn and Judith A. McDonald, 'Third-world Debt and Tropical Deforestation', 12 *Ecological Economics* (1995) 107 at 122, whose analysis indicates that 'debt is an important factor in the deforestation of tropical countries.'

48 Sven Wunder, 'Macroeconomic Change, Competitiveness and Timber Production: A Five-country comparison', 33 *World Development* (2005) 65 at 65.

49 Williams *Deforesting the Earth*, *supra* note 3, at 493.

50 Manuel Ruiz Pérez et al., 'Logging in the Congo Basin: A Multi-country characterization of timber companies', 214 *Forest Ecology and Management* (2005) 221 at 223.

51 *Ibid*.,at 222.

52 Sponsel, Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 11.

also be wasted.[53] Logging does not only lead to loss of trees: selective logging leads to genetic erosion over time, leading to loss in the quality as well as the quantity of trees in forests.[54] Moreover, logging has other impacts:

> [Loggers] create the conditions for depletion of wildlife, through hunting, and they kill fish by using streambeds as their roads. […] Other consequences of logging are indirect, such as the roads that are conduits for migrants and colonists like shifted cultivators because they open up previously isolated sections of forest. Thus logging is just the first step in a chain reaction of deforestation.[55]

This is not to say that logging is always bad. Logging may be well managed and hence its financial benefits can be achieved without unacceptable impacts on the environment. The impact of logging, however, may be aggravated by simultaneous pressure to convert forest into agricultural land. While logging has the potential to be sustainable, it therefore often falls well short of this.[56] Bearing in mind that illegal logging is a globally identified problem, sustainable management requirements are often, of course, ignored by illegal loggers.

Agricultural expansion

Agricultural expansion is often associated with population increase. Shifting agriculture, better called swidden,[57] is a major cause of deforestation.[58] It has been estimated that if present trends continue, more than 90 percent of land currently under forest will become cropland, fallow or secondary forest.[59] Swidden is also known as slash and burn agriculture, whereby a farmer clears forest area for crops and uses it for a short period of up to three years, whereupon the land lays fallow, allowing for reforestation, and the farmer moves on to another area.[60] Although often a sustainable use traditionally, due to population pressure amongst other causes, shifting swiddeners often become and are joined by other shifted displaced swiddeners, who now account for about half of tropical deforestation.[61] It was es-

53 Phillipa England, 'Ghanaian Forestry: Problems and prospects for sustainable exploitation', 2 *South African Journal of Environmental Law and Policy* (1995) 196 at 201. See also Kofi Oteng Kufuor 'New Institutional Economics and the Failure of Sustainable Forestry in Ghana', 44 *Natural Resources Journal* (2004) 743 at 750.

54 Sponsel, Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 11.

55 *Ibid.*, at 11, references omitted. See also Laurance, 'Tropical Deforestation Crisis', *supra* note 16, at 114.

56 Laurance, *ibid.*, at 114.

57 Sponsel, Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 9.

58 Osborne, *Tropical Ecosystems*, *supra* note 11, at 272. See Tom Rudel and Jill Roper, 'The Paths to Rain Forest Destruction: Crossnational patterns of tropical deforestation, 1975-90', 25 *World Development* (1997) 53, who suggest that shifting agriculture is a major cause of deforestation in places with small forests, whereas the opening up of regions for development (as in Brazil) is a bigger cause of deforestation in places with big forests.

59 Zhang, Justice and Desanker, 'Impacts of Simulated Shifting Cultivation', *supra* note 39, at 203.

60 Nyle C. Brady, 'Alternatives to slash and burn: A global imperative', 58 *Agriculture, Ecosystems and Environment* (1996) 3 at 3.

61 Sponsel, Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 10.

timated that in 1996 there were about 200 to 500 million swiddeners, about 1 in 10 humans.[62] It has been further estimated that about 150 million square kilometres of forest is being cleared for agriculture annually in the tropics. In Africa, however, it would appear that only 10 percent of this cleared forest appears in increased agricultural area, the remainder either becoming degraded or becoming open woodland or grassland, the latter being the more likely scenario.[63]

Rainforest areas have low agricultural potential due to the poor nutrient status of rainforest soils, and slash and burn agriculture leads to rapid nutrient loss from the soil. This is not a particular impediment to the regeneration of forests, but this process may take 100 years or more.[64] Due to the nutrient problem, lands are often abandoned and the result is that migrants settle elsewhere and carry out further deforestation there.[65] Converting forest to grow commercial monocrops is another example of agricultural expansion that has a negative impact on natural forests. This has happened, for example, with the creation of coffee plantations in Côte D'Ivoire.[66] It has also been shown that agricultural incentives may play a role in deforestation.[67]

Wood fuel depletion

Approximately 2.5 to 3 billion people (40 to 50 percent of the world's total) rely on wood for fuel, both for warmth and food preparation.[68] In Africa, wood is depended upon for up to 58 percent of all energy requirements, and in many savannah areas, depletion for wood supplies far exceeds the rate of growth.[69] Fuelled by population growth, this is a major cause of deforestation.[70] The impacts of wood fuel gathering depend on the location: in rural areas with low population densities, the impacts are low, but in densely populated urban areas one finds "halos" of deforestation, as in Kinshasa, DRC, where there is a halo of over 100 km from the city centre.[71] Wood fuel demand may decrease if incomes grow, due to the consequent demand for substitutes,[72] which again indicates the link between poverty and deforestation.

62 *Ibid.*

63 *Ibid.*

64 Osborne, *Tropical Ecosystems*, *supra* note 11, at 278.

65 Balakrishnan, 'Conservation of Threatened African Wildlife', *supra* note 34, at 208.

66 Sponsel, Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 12.

67 J.T. Chipika and G. Kowero, 'Deforestation in Communal Woodlands of Zimbabwe: Is it due to agricultural policies?', 79 *Agriculture, Ecosystems and Environment* (2000) 175.

68 Williams, *Deforesting the Earth*, *supra* note 3, at 488.

69 *Ibid.*

70 *Ibid.*; see also Sponsel, Bailey and Headland, 'Anthropological Perspectives', *supra* note 13, at 11.

71 Wilkie and Laporte, 'Forest Area and Deforestation', *supra* note 7, at 126.

72 Chipika and Kowero, 'Deforestation in Communal Woodlands', *supra* note 67, at 178.

Environmental Impacts Related to Deforestation: Bushmeat Hunting

In many regions in Africa, particularly moist forest areas, meat from wild animals, known commonly as bushmeat, is a valued product.[73] It is estimated that the annual wild meat harvest in Africa is between 1 and 5 metric tons of meat, equivalent to 5 to 20 million cattle per year.[74] The practice of hunting bushmeat is sufficiently prevalent to be seen as a major cause of biodiversity loss within tropical forest regions,[75] and has been recorded as being carried out at unsustainable levels in certain areas.[76] Species hunted include antelope, such as duiker and bushbuck, bush pig, many species of primate and even civet.[77] Bushmeat hunting not only impacts on the target species themselves – such targets in any event being somewhat indiscriminate due to snaring[78] – but on the ecosystem as a whole. Fa et al. observe that

> Large forest mammals [those mammals most vulnerable to over-exploitation] are important 'habitat landscapers' playing a key role in the structuring and functioning of the forest ecosystem. Given that the majority of large mammals in tropical forests are frugivores […], these species are important in seed dispersal and predation.[79]

73 John E. Fa, Sarah F. Ryan and Diana J. Bell, 'Hunting Vulnerability, Ecological Characteristics and Harvest Rates of Bushmeat Species in Afrotropical Forests', 121 *Biological Conservation* (2005) 167 at 167.

74 Steven Sanderson, 'Poverty and Conservation: The New century's "Peasant Question?"', 33 *World Development* (2005) 323 at 325. See also E.J. Milner-Gulland, Elizabeth L. Bennett and the SCB 2002 Annual Meeting Wild Meat Group, 'Wild Meat: The bigger picture', 18 *Trends in Ecology and Evolution* (2003) 351 at 351, who estimate the annual harvest for Central Africa to be between 1 million and 3.4 million tonnes.

75 J.E. Fa, C.A. Peres and J. Meeuwig, 'Bushmeat Exploitation in Tropical Forests: An Intercontinental comparison', 16 *Conservation Biology* (2002) 232. See, generally, John F. Oates *Myth and Reality in the Rain Forest: How Conservation Strategies Are Failing in West Africa* (University of California Press: Berkeley, 1999).

76 Milner-Gulland, Bennett and SCB Wild Meat Group, 'Wild Meat', *supra* note 74, at 351, who state that hunting rates in central Africa are 6 times the maximum sustainable rate; Fa et al., 'Hunting Vulnerability', *supra* note 73, at 174-5, whose study area was 36 sites in seven West and Central African countries (Cameroon, Central African Republic, Congo (Brazaville), DRC, Equatorial Guinea, Gabon and Ghana); John G. Robinson and Elizabeth L. Bennett, *Hunting for Sustainability in Tropical Forests* (Columbia University Press: New York, 2000). See also Emmanuel de Merode, Katherine Homewood and Guy Cowlishaw, 'The Value of Bushmeat and other Wild Foods to Rural Households Living in Extreme Poverty in Democratic Republic of Congo', 18 *Biological Conservation* (2004) 573 at 578, who tentatively suggested that harvesting in their study area in northern DRC was sustainable.

77 De Merode, Homewood and Cowlishaw, 'The Value of Bushmeat', *supra* note 76, at 580.

78 Fa et al., 'Hunting Vulnerability', *supra* note 73.

79 *Ibid*., at 175. See also S. Joseph Wright, 'The Myriad Consequences of Hunting for Vertebrates and Plants in Tropical Forests', 6 *Perspectives in Plant Ecology, Evolution and Systematics* (2003) 73.

Of further concern, although not a direct threat to forests, is the link between contact with bushmeat, including eating, and zoonotic transmission of human viruses and other pathogens.[80]

The exploitation of bushmeat largely has its roots in poverty. Those people unable to buy food are often likely to source food from wild sources, particularly in lean subsistence crop or fishing seasons.[81] Studies have shown, however, that people subject to poverty are more likely to sell bushmeat than eat it, as for many households this is the only source of income.[82] Political instability and war are likely to exacerbate poverty levels and hence increase pressure on fauna in the forests. Ironically, were poverty levels to be reduced and livestock farming to be established in order to provide meat, the result in many areas would be negative pressure on forests in order to provide land for such agriculture.[83] This is evident in the Amazon, for example, where ranching is a major cause of deforestation.[84]

Responses to Threats to Africa's Forests

There are several regional and international initiatives, including binding international and regional conventions, international soft law, international policy initiatives and other instruments that are relevant, to different degrees, to African forest conservation.

Binding international and regional instruments

Central African Forest Treaty and COMIFAC

On 5 February 2005 the heads of state of ten West and Central African countries[85] signed the Central African Forest Treaty. This treaty is a legally binding instrument that provides for Congo Basin forest conservation activities to be overseen by the Central African Forests Commission (COMIFAC).[86] At the same summit, the governments of Cameroon, Congo (Brazaville) and Gabon signed the TRIDOM agreement, allowing for transborder management of 37 million acres of forest including

80 Martine Peeters, 'Cross-species Transmissions of Simian Retroviruses in Africa and Risk for Human Health', 363 *The Lancet* (2004) 911; Rob Brierley, 'Novel Human Retroviruses Discovered in Africa', *The Lancet* (2005) 402.

81 J. Marcus Rowcliffe, E.J. Milner-Gulland and Guy Cowlishaw, 'Do Bushmeat Consumers Have other Fish to Fry?', 20 *Trends in Ecology and Evolution* (2005) 274.

82 De Merode, Homewood and Cowlishaw, 'The Value of Bushmeat', *supra* note 76, at 577 and 578.

83 Rowcliffe, Milner-Gulland and Cowlishaw, 'Bushmeat Consumers', *supra* note 81, at 275.

84 Food and Agriculture Organization, 'Tropical Deforestation Literature: Geographical and Historical Patterns in the Availability of Information and the Analysis of Causes', Forest Resources Assessment Programme Working Paper 27 (FAO: Rome, 2000) at 10.

85 Burundi, Cameroon, Central African Republic, Chad, Congo (Brazaville), DRC, Equatorial Guinea, Gabon, Rwanda and Sao Tome and Principe.

86 Anonymous, 'Forest Treaty Signed', 35 *Environmental Policy and Law* (2005) 95.

Dja, Odzalka and Minekebe National Parks. This amounts to about 7.5 percent of the entire Congo Basin.[87] The agreement is supported by a United Nations Development Programme – Global Environment Facility grant of USD 10 million.

Central African Regional Program for the Environment (CARPE) and Congo Basin Forest Partnership

The USAID Central African Regional Program for the Environment (CARPE) is a 20- year regional initiative that began in 1995. The programme was created to increase knowledge of Central African forests and biodiversity and build institutional and human resources capacity in the region.[88] In 1999, the Yaoundé Declaration was signed in Cameroon by the heads of state of six countries.[89] The historic Declaration, together with the subsequent associated action plan (*Plan de Convergence*), created a framework to achieve shared forest conservation goals and endorsed the development of new transboundary and regional conservation efforts.[90] On 4 September 2002, the United States and South Africa joined 27 public and private partners to launch the Congo Basin Forest Partnership (CBFP) at the Johannesburg World Summit on Sustainable Development. This new partnership was established to lend international support for achieving the Yaoundé Declaration goals.[91] It is anticipated that the CBFP will help conserve 29 protected areas and promote responsible forestry in 11 priority landscapes in the Congo Basin.[92]

Convention on Biological Diversity

The Convention on Biological Diversity (CBD)[93] has a far wider scope than merely conservation of forests and forest biodiversity, but the provisions of the CBD are clearly very relevant to African forests.[94] These will not be discussed in detail here as they have already been capably identified by Khalastchi and Mackenzie.[95] Under the CBD, there is also a Forest Biodiversity Programme. According to the CBD Secretariat

87 *Ibid.*

88 CARPE, *The Forests of the Congo Basin*, *supra* note 9.

89 Cameroon, Central African Republic, Congo (Brazaville), DRC, Equatorial Guinea and Gabon. For the French text of the Declaration see www.riddac.org/document/pdf/declarationyaounde.pdf . The Yaoundé Declaration spoken of here should not be confused with the Yaoundé Declaration, adopted in 1996, which deals with the promotion and protection of human rights.

90 CARPE, *The Forests of the Congo Basin*, *supra* note 9.

91 *Ibid.*

92 Anonymous, 'Forest Treaty signed', *supra* note 86, at 96.

93 Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, www.biodiv.org/doc/legal/cbd-en.pdf

94 See, generally, Ruth Khalastchi and Ruth Mackenzie, 'The Conservation and Sustainable Use of Forest Biological Diversity: The Role of the Convention on Biological Diversity', in Richard G. Tarasofsky, *Assessing the International Forest Regime*, IUCN Environmental Policy and Law Paper No. 37 (IUCN: Gland, 1999) 39.

95 *Ibid.*, at 40-1.

> The CBD addresses forests directly through the expanded programme of work on forest biological diversity […] adopted in 2002 by the Conference of the Parties at its sixth meeting. The forest work programme constitutes a broad set of goals, objectives and activities aimed at the conservation of forest biodiversity, the sustainable use of its components and the fair and equitable use of the benefits arising from the utilization of forest genetic resources. The programme consists of three elements. The first covers largely biophysical aspects, such as the reduction of threats to forest biological diversity through restoration, agroforestry, watershed management, and the establishment of protected areas. The second element deals with the institutional and socio-economic environment that in turn enables the conservation and sustainable use of forest biological diversity. The third element covers assessment and monitoring.[96]

Work in this respect is ongoing, and the CBD in this programme co-operates with many partners, in particular the Collaborative Partnership on Forests (CPF) that has been established under the United Nations Forum on Forests.[97]

Kyoto Protocol

Forests play an important role in carbon sequestration.[98] The parties to the Kyoto Protocol[99] have recognized this[100] raising the question whether the Protocol offers an opportunity for African countries to retard deforestation by taking advantage of the Kyoto rules in this regard. Unfortunately, this does not appear to be a significant prospect. In 2001 the parties decided[101] that

> sinks projects in non-Annex I countries that may generate credits under the Clean Development Mechanism (CDM) […] were limited to afforestation and reforestation project activities. Thus, projects designed to *avoid deforestation* will not be able to generate CDM credits.[102]

Afforestation or reforestation would, at first glance, appear to be worthwhile products of the Kyoto regime, but this would not necessarily result in new tropical

96 Convention on Biological Diversity, Forest Biodiversity Programme, www.biodiv.org/programmes/areas/forest/default.asp.

97 The CPF members include the Food and Agriculture Organization, the United Nations Environment Programme, the Global Environment Facility, the United Nations Framework Convention on Climate Change, the Center for International Forestry Research, the International Tropical Timber Organization, the International Union of Forest Research Organizations, the United Nations Development Programme, the International Centre for Research in Agroforestry, the World Bank and the World Conservation Union (IUCN).

98 See above.

99 Kyoto Protocol to the United Nations Framework Convention on Climate Change, Kyoto, 11 December 1997, in force 16 February 2005, 37 *International Legal Materials* (1998) 22, unfccc.int/resource/docs/convkp/kpeng.pdf.

100 See Patrick Graichen 'Can Forestry Gain from Emissions Trading? Rules governing sinks projects under the UNFCCC and EU Emissions Trading System' 14 *Review of European Community and International Law* (2005) 11.

101 Para 1(d), Draft Decision -/CMP.1, Land use, land-use change and forestry, as attached to Decision 11/CP.7 Land use, land-use change and forestry, 10 November 2001, FCCC/CP/2001/13/Add.1, unfccc.int/resource/docs/cop7/13a01.pdf#page=54.

102 Graichen, 'Can Forestry Gain from Emissions Trading', *supra* note 98, at 12-13, emphasis added.

forests full of biodiversity. The temptation might arise for planting forests of fast-growing exotics with adverse environmental and socio-economic consequences.[103] This might be an overly pessimistic view, however, and viewing forests as more than merely carbon sinks, which they are, may well result in afforestation and reforestation projects that are sensitive to environmental and socio-economic imperatives.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Many species of plants and forest-dwelling animals have been identified as endangered and consequently listed on appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.[104] It should be noted that even if CITES were implemented perfectly, which is clearly not the case, particularly in many African countries, the Convention applies only to international trade in endangered species and parts thereof, such as ivory. Domestic use, or misuse, of endangered species, ranging from consumption to wastage – in the case of destruction of endangered plant or tree species to clear forest – is not addressed by the Convention. A further point is that its focus, as the name of the Convention suggests, is very much on species identified individually, rather than on ecosystems or habitats. Nevertheless, CITES is potentially important in respect of endangered forest species and products that do end up on international markets. Of particular note is the Bushmeat Working Group, established by decision of COP-11,[105] in order to promote awareness and achieve improved and sustainable management of the bushmeat trade. The working group reported to COP-12 and had its mandate extended at COP-13. Moreover, it should be noted that Congo (Brazaville) has developed a national strategy and action plan on bushmeat.[106]

UN Convention to Combat Desertification (CCD)

Forests perform important ecological functions that prevent desertification and arid conditions, by helping to stabilize the soil. Consequently, deforestation fosters both desertification and land degradation, which means that the United Nations

103 *Ibid*., at 15.

104 Convention on International Trade in Endangered Species of Wild Flora and Fauna, Washington D.C., 3 March 1973, in force 1 July 1975, 993 *United Nations Treaty Series* 243, www.cites.org/eng/disc/text.shtml.

105 CITES, Decision 11.166, Regarding establishment of a working group to examine bushmeat as a trade and wildlife management issue, 14 April 2000, www.cites.org/eng/dec/11/166.shtml.

106 For the text of the action plan, only available in French, see www.cites.org/eng/prog/bushmeat.shtml.

Convention to Combat Desertification (UNCCD)[107] is directly relevant to forests.[108] Article 4(2)(a) of the UNCCD requires the parties to adopt an integrated approach to planning, taking into consideration all physical, biological and socio-economic aspects of the process of desertification and drought. As Skala-Kuhmann indicates, this would undoubtedly include national forest and land use programmes.[109]

African Convention on the Conservation of Nature and Natural Resources 2003
The revised African Convention, adopted in Maputo in 2003, although not yet in force is not only generally relevant to forest conservation, but contains several provisions which directly address forest issues.[110] Article VI, Land and Soil, requires parties to take effective measures to prevent land degradation, and to that effect to develop long-term integrated strategies for the conservation and sustainable management of land resources, including soil, vegetation and related hydrological processes. To this end, when implementing agricultural practices and agrarian reforms parties shall, inter alia, introduce sustainable farming and forestry practices, which ensure long-term productivity of the land.[111] Article VII, dealing with water, requires conservation of forested and other catchment areas.[112] Article VIII, Vegetation Cover, is directly relevant to forested areas and reads:

> The Parties shall take all necessary measures for the protection, conservation, sustainable use and rehabilitation of vegetation cover. To this end they shall:
> a) adopt scientifically-based and sound traditional conservation, utilization and management plans for forests, woodlands, rangelands, wetlands and other areas with vegetation cover, taking into account the social and economic needs of the peoples concerned, the importance of the vegetation cover for the maintenance of the water balance of an area, the productivity of soils and the habitat requirements of species;
> b) take concrete steps or measures to control fires, forest exploitation, land clearing for cultivation, grazing by domestic and wild animals, and invasive species;
> c) establish forest reserves and carry out afforestation programmes where necessary;
> d) limit forest grazing to season and intensities that will not prevent forest regeneration.

107 United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, Paris, 17 June 1994, in force 26 December 1996, 33 *International Legal Materials* (1994) 1309, www.unccd.int/convention/menu.php.

108 Astrid Skala-Kuhmann, 'Implementation of the IPF Proposals for Action in Light of Relevant International Legally-binding Instruments', in Tarasofsky, *Assessing the International Forest Regime*, *supra* note 94, at 21.

109 *Ibid.*

110 African Convention on the Conservation of Nature and Natural Resources (Revised Version), Maputo, 11 July 2003, not yet in force, www.africa-union.org/root/au/Documents/Treaties/Text/nature%20and%20natural%20recesource.pdf.

111 Article VI(3)(b)(i), *ibid.*

112 Article VII(2)(c), *ibid.*

World Heritage Convention

The World Heritage Convention[113] is a further international convention with relevance to forest conservation.[114] Under the convention, sites of important cultural or natural heritage are conserved, effectively becoming protected areas. Currently, there are 160 natural sites recognized under the Convention. In Africa, there are 31 natural sites and two of mixed natural and cultural significance. At least sixteen of the sites are forest sites or contain forest. Unfortunately, several of these sites are on the List of World Heritage in Danger. For example, all of the sites from the DRC, which are all rainforest areas, are on this list.

Ramsar Convention

The Ramsar Convention[115] is aimed at conserving wetlands, many of which are in forests or are closely related to forests, such as mangroves. Several of the Ramsar sites are also World Heritage Convention sites. Although the Ramsar Convention is thus not directly concerned with forest conservation, this may be achieved if designated Ramsar wetlands are within or linked with forests.

International soft law: The Forest Principles

One of the outcomes of the 1992 Rio Earth Summit were the Forest Principles, officially called the Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all types of Forests.[116] *Agenda 21*,[117] another well-known instrument adopted at Rio, included Chapter 11, Combating Deforestation.[118] The guiding objective of the forest principles is to 'contribute to the management, conservation and sustainable development of forests and to provide for their multiple and complementary functions and uses.'[119]

113 Convention for the Protection of the World Cultural and Natural Heritage, Paris, 16 November 1972, in force 17 December 1975, 11 *International Legal Materials* (1972) 1358, whc.unesco.org/en/175/.

114 See John L. Innes and Kenneth B.H. Er, 'Global forest regulation in ten years after Rio', 17 *Trends in Ecology and Evolution* (2002) 445.

115 Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar, 2 January 1971, in force 21 December 1975 , 996 *United Nations Treaty Series* 245, www.ramsar.org/key_conv_e.htm.

116 Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests, Rio de Janeiro, 3-14 June 1992, UN Doc. A/CONF.151/26 (Vol. III), www.un.org/documents/ga/conf151/aconf15126-3annex3.htm.

117 *Agenda 21: Environment and Development Agenda*, UN Doc. A/CONF.151/26, www.un.org/esa/sustdev/documents/agenda21/index.htm.

118 For a thorough discussion of the Forest Principles and *Agenda 21*, see Emmanuel Kasimbazi, 'An International Legal Framework for Forest Management and Sustainable Development', 2 *Annual Survey of International and Comparative Law* (1995) 67.

119 United Nations Forum on Forests, Fact Sheet 1, www.un.org/esa/forests/pdf/factsheet.pdf.

The United Nations established the Intergovernmental Panel on Forests (IPF), which was succeeded by the Intergovernmental Forum on Forests (IFF), to implement the Forest Principles and Chapter 11 of *Agenda 21*. From 1995 to 2000, the IPF/IFF processes dealt with such issues as the 'underlying causes of deforestation, traditional forest-related knowledge, international co-operation in financial assistance and technology transfer, the development of criteria and indicators for sustainable forest management, and trade and environment.'[120] The IPF/IFF processes resulted in a comprehensive set of 270 proposals for action[121] for the promotion of the management, conservation and sustainable development of all types of forests.[122]

In 2000, the United Nations Economic and Social Council (ECOSOC) established the United Nations Forum on Forests (UNFF), which had as its main objective to promote 'the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end.'[123] In order to achieve its main objective, the following principal functions have been identified for the UNFF: to facilitate implementation of forest-related agreements and foster a common understanding on sustainable forest management; to provide for continued policy development and dialogue among governments, international organizations, including major groups, as identified in *Agenda 21*, as well as to address forest issues and emerging areas of concern in a holistic, comprehensive and integrated manner; to enhance co-operation as well as policy and programme coordination on forest-related issues; to foster international co-operation; to monitor, assess and report on progress of the above functions and objectives; and to strengthen political commitment to the management, conservation and sustainable development of all types of forests.

When UNFF was established, the Collaborative Partnership on Forests (CPF) was also formed to co-operate on forest issues and support the work of UNFF. The Partnership is currently composed of 14 international organizations.[124] The collaboration between the UNFF and CPF is known as the international arrangement

120 *Ibid.*

121 For the proposals, see www.un.org/esa/forests/pdf/ipf-iff-proposalsforaction.pdf.

122 *Ibid.*

123 Report of the Fourth Session of the Intergovernmental Forum on Forests, ECOSOC Res. E/2000/L.32, 18 October 2000, www.un.org/documents/ecosoc/docs/2000/e2000-l32.pdf.

124 These organizations are: Centre for International Forestry Research (CIFOR); Food and Agriculture Organization (FAO); International Tropical Timber Organization (ITTO); International Union of Forestry Research Organizations (IUFRO); Secretariat of the Convention on Biological Diversity (CBD); Secretariat of the Global Environmental Facility (GEF); Secretariat of the United Nations Convention to Combat Desertification (UNCCD); Secretariat of the United Nations Forum on Forests (UNFF); Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC); United Nations Development Programme (UNDP); United Nations Environment Programme (UNEP); World Agroforestry Centre (ICRAF); World Bank; World Conservation Union (IUCN).

on forests (IAF). In 2004, at UNFF-4, policy issues relating to forest monitoring, assessment and reporting and criteria and indicators for sustainable forest management were discussed. Specific topics considered included forest-related scientific knowledge, traditional forest-related knowledge and social and cultural aspects of forests.[125] At its session in May 2005 the UNFF reviewed its progress and the effectiveness of the international arrangement on forests. According to observers of the session, 'UNFF-5 was unable to reach agreement on strengthening the IAF and could not produce either a ministerial statement or a negotiated outcome' although they 'agreed in principle to negotiate, at some future date, the terms of reference for a voluntary code or international understanding as well as means of implementation.'[126] The International Institute for Sustainable Development's assessment of the session was that

> In the end, UNFF-5 did produce a message, but not the one intended: it signalled to the world that international discussions on forests remain discussions, not particularly productive ones, and that the collective desire to turn dialogue into action remains just that – a desire.[127]

The significance of these arrangements for the present paper is that forest issues are very much on the international agenda, but that meaningful action rather than rhetoric is somewhat thin.

It would appear that one of the goals of the international arrangement on forests is the eventual establishment of a binding international forests convention. Is this realistic? According to Humphreys, this is possible only if three prerequisites are met: commitment by developed states to provide additional overseas development assistance to tropical forests; support of the United States, 'home to the world's most powerful forest industry corporations'; [128] and support of Brazil and its neighbours.[129] This does not appear likely in the near future, because 'there is absolutely no evidence to suggest that the key actors that currently oppose a convention and/or aid increases to tropical forest states are prepared to change position.'[130]

125 Don Kirk, 'International Co-operation Strengthened', 34 *Environmental Policy and Law* (2004) 153.

126 International Institute for Sustainable Development, *Earth Negotiations Bulletin*, 30 May 2005, www.iisd.ca/forestry/unff/unff5/.

127 *Ibid.*

128 See Jennifer A. Loughrey, 'The Tropical Forest Conservation Act of 1998: Can the United States really protect the world's resources? The need for a binding international treaty convention on forests', 14 *Emory International Law Review* (2000) 315.

129 David Humphreys, 'The Elusive Quest for a Global Forests Convention', 14 *Review of European Community and International Law* (2005) 1 at 9.

130 *Ibid.*, at 10.

Other relevant instruments and initiatives

International Tropical Timber Agreement

First negotiated under the auspices of the UN Conference on Trade and Development in 1983, the International Tropical Timber Agreement (ITTA)[131] is concerned essentially with the market structure of the international timber market and equitable remuneration for tropical timber products, although it does incorporate a commitment to sustainable management of forests.[132] The agreement was renegotiated in 1994 and moves are afoot to negotiate a new successor agreement. One of the issues under consideration is the extent to which the agreement ought to incorporate further conservation considerations, but this does not seem likely, particularly because conservation matters relating to tropical forests are believed to be adequately catered for in other instruments already.[133]

Forest Stewardship Council

The Forest Stewardship Council (FSC) calls itself an international network to promote responsible management of the world's forests.[134] The FSC and other certification initiatives are market-based initiatives aimed at improving the quality of forest management and promoting higher prices or better market access for wood products derived from sustainably managed forests.[135] Despite initial concerns with sustainable forest management, it has been observed that 'owners of forest operations being certified today appear to be motivated more by improving their marketing image (e.g., to gain an advantage over other suppliers in some ecologically sensitive markets) than by improving forest management.'[136] According to Siry et al., only a fraction of global forests are certified and of those that are, 93 percent are in the North.[137] Estimates suggest that 5,509,000 hectares of African forests have management plans (1 percent of the total) and 1,107,000 hectares are

131 International Tropical Timber Agreement, Geneva, 26 January 1994, in force 1 January 1997, www.itto.or.jp/live/PageDisplayHandler?pageId=201.

132 See Phillip E. Wilson Jr., 'Barking up the Right Tree: Proposals for enhancing the effectiveness of the International Tropical Timber Agreement', 10 *Temple International and Comparative Law Journal* (1996) 229.

133 See Lauren Flejzor, 'Reforming the International Tropical Timber Agreement', 14 *Review of European Community and International Law* (2005) 19.

134 FSC website, www.fsc.org/en/about.

135 Jacek P. Siry, Frederick W. Cubbage and Miyan Rukunuddin Ahmed, 'Sustainable Forest Management: Global trends and opportunities', 7 *Forest Policy and Economics* (2005) 551 at 557.

136 Cathy L. Wittmeyer, 'A Public Procurement Paradox: The Unintended consequences of forest product eco-labels in the global marketplace', 23 *Journal of Law and Commerce* (2003) 69 at 76.

137 Siry, Cubbage and Rukunuddin, 'Sustainable Forest Management', *supra* note 135, at 557. See also Ewald Rametsteiner and Markku Simula, 'Forest Certification – An Instrument to promote sustainable forest management?', 67 *Journal of Environmental Management* (2003) 87; Peter Leigh Taylor, 'In the Market but Not of It: Fair Trade Coffee and Forest Stewardship Council certification as market-based social change', 33 *World Development* (2005) 129; and Wittmeyer, 'A Public Procurement Paradox', *ibid*.

certified (0.2 percent of the total).[138] Since most certified forests appear to have been managed sustainably before certification, the certification process does not seem to have made much of an impact as far as sustainable forest management is concerned,[139] although its potential should not be ruled out.

Other initiatives

There are other initiatives and instruments that have direct or potential relevance to African forest issues, such as the EU Forest Law Enforcement, Governance and Trade (FLEGT) initiative[140] and the G-8 Action Plan on Forests. Space does not permit comprehensive discussion of all of these and it should be noted that those initiatives discussed in some detail in this paper do not constitute an exhaustive list.

Obstacles to Intervention

It is clear from the initiatives discussed above that forests, and African forests, are firmly on the international agenda, even if not the subject of a dedicated international convention. As with any international initiative, however, domestic implementation is crucial. While there are several encouraging developments at national level, such as in East Africa[141] (Kenya, Uganda and Tanzania)[142] and South Africa, there are a number of obstacles to the effective combating of environmental threats to African forests that are sadly prevalent in many areas. Issues such as poverty, war and corruption not only make it difficult to address threats to forests but also in many cases are the source of such threats.

Poverty

Poverty operates as a threat to forests at two levels. National indebtedness encourages countries with forests to exploit them for financial gain.[143] At a second level, poverty of individuals frequently influences behaviour that has negative impacts on forests. In the United Nations Development Index, African nations feature prominently at the bottom of the list. Of the 175 countries listed on the index, the bottom 25 are all African countries, and no mainland African states feature in the top 100.[144] Of the states that comprise the Congo Basin, the top-ranked is Equato-

138 Siry, Cubbage and Rukunuddin, 'Sustainable Forest Management', *supra* note 135, at 552.

139 *Ibid.*

140 See Brack, 'Controlling Illegal Logging', *supra* note 15.

141 Godber Tumushabe, 'Country Experiences in the Implementation of the Rio Forest Principles: A Case study of the East African Community states', 32 *Golden Gate University Law Review* (2002) 665.

142 See comment by Jon C. Lovett on the Tanzanian Forest Act of 2002, 47 *Journal of African Law* (2003) 133.

143 See Diana Eitman, 'Maintaining Sovereignty and the Tropical Rainforests: The Promise of debt-for-nature swaps', 24 *Environmental Law and Policy Journal* (2001) 29.

144 The only African states in the top 100 are Mauritius and the Seychelles.

rial Guinea, ranked at 116.[145] The World Bank has identified that a large share of people suffering from extreme poverty live on fragile lands, including arid zones, slopes, poor soils, and forest ecosystems.[146] While development is clearly a prerequisite to reducing poverty, development per se will not lead to reductions in pressure on forests. The distribution of income is also an important determinant. Koop and Tole and others have shown that 'in countries where levels of inequality are high, development will tend to exacerbate deforestation rates', but, conversely, 'in countries where distributional profiles are above the average for egalitarianism, distributional factors will tend to have a positive impact, ameliorating the negative effects of growth and development outcomes on forest cover'.[147]

Armed conflict and political instability

Civil war in Central Africa has had a severe impact on forest ecosystems. Vedder at al. have identified the following incidents which are illustrative of these impacts. In Rwanda, in 1991-1994, the Volcanoes and Akagera National Parks were 'intermittent battlegrounds where the combatants set fires, laid mines, stored weapons, and killed wildlife for food.'[148] Refugees and combatants from this war settled in the Nyungwe Forest Reserve, where they engaged in 'widespread hunting, woodcutting, looting, and harassment of local populations.'[149] The natural savannah of the Akagera Park has been largely converted to cattle pasture and the 400 square kilometres Gishwati Forest has been completely cleared for farming. Large numbers of researchers and park guards were killed. In the DRC, more than 1.2 million refugees lived alongside or in the Virunga and Kahuzi-Biega National parks, which led to 'unprecedented poaching, forest clearing, and mining in the parks.'[150] Half the hippos in Virunga were killed as were at least 150 of the 600 elephants in the park. The park also lost about 115 square kilometres of forest due to firewood collection. Up to 40,000 refugees in the Goma camp entered the Virunga park every day and extracted between 410 and 770 tons of forest products every day. The onset of "democracy" in the DRC following Mobutu's fall was seen by many as a signal to enter reserves from which they had been previously excluded, leading to further woodcutting and hunting, the latter exacerbated by the proliferation of weapons. Congolese dissident fighters entered the core of the Kahuzi-Biega National park,

145 The other COMIFAC countries are ranked as follows: Gabon (118), Congo (Brazaville) (140), Cameroon (142), Rwanda (158), Chad (165), DRC (167), Central African Republic (168), Burundi (171), and Sao Tome and Principe (not listed).

146 World Bank, *World Development Report 2003: Sustainable Development in a Dynamic World: Transforming Institutions, Growth, and Quality of Life* (World Bank: Washington D.C., 2003). See also William D. Sunderlin et al., 'Livelihoods, Forests and Conservation in Developing Countries: An Overview', 33 *World Development* (2005) 1383.

147 Gary Koop and Linda Tole, 'Deforestation, Distribution and Development', 11 *Global Environmental Change* (2001) 193 at 200.

148 Amy Vedder et al., 'Epilogue: Conflict and Conservation in the African Rain Forest' in William Webber et al. (eds.), *African Rain Forest Ecology & Conservation*, *supra* note 7, at 557.

149 *Ibid.*, at 558.

150 *Ibid.*, at 600

the home of about 70 percent of the eastern lowlands gorilla population, endemic to the eastern DRC. It is estimated that the dissidents, who now control the park, have killed most of the elephants and at least a quarter of the gorillas.

The direct impacts of war on forest (and other) ecosystems are clear from these accounts, but the war has another important, less direct, effect. One of the benefits of forests, particularly forest such as those containing fauna that attract people from all over the world is ecotourism, which is all but dried up by unrest, for obvious reasons. Added to this, of course, is the fact that war frustrates a country's efforts at any kind of normal implementation of such conservation laws that may exist in the country. Not only does war impact on natural resources, including forests, in ways mentioned above, but those resources are often used to finance armed conflict.[151] Reports suggest that logging concessions in the extent of 34 million hectares have been given by the DRC in return for military assistance in the government's fight against rebels.[152] In May 2003, the UN Security Council imposed sanctions against timber exports from Liberia in an effort to undercut funding for the war there.[153] Where war ends and the result is the onset of democracy – often, unfortunately, only a brief respite – the prospects for forest conservation are good. Empirical analysis has shown that a 'strong negative correlation exists between the rate of tropical deforestation and the level of democracy.'[154] What this means is that as a country becomes more democratic, a reduction in the rate of tropical deforestation may be expected.

Corruption

Corruption not only impedes effective implementation of laws, but it has direct impact on biodiversity. As Laurance observes

> Although corruption can reduce environmental pressures by hindering development activity, it is usually perceived as a threat to sustainable development. Corruption can have a significant impact on nature conservation by promoting overexploitation of forests, wildlife, fisheries and other resources, and by reducing the effectiveness of conservation programs.[155]

Moreover, analysis has shown that increased corruption leads to greater land con-

151 Philippe le Billon, 'The Political Ecology of War: Natural Resources and Armed Conflicts', 20 *Political Geography* (2001) 561.

152 W.F. Laurance, 'Immense Logging Deal to Sustain War in the Congo', 16 *Trends in Ecology and Evolution* (2001) 670.

153 Brack, 'Controlling Illegal Logging', *supra* note 15, at 30.

154 Dal O. Didia, 'Democracy, Political Instability and Tropical Deforestation', 7 *Global Environmental Change* (1997) 63 at 74.

155 William F. Laurance, 'The Perils of Payoff: Corruption as a threat to global biodiversity', 19 *Trends in Ecology and Evolution* (2004) 399, at 399.

version.[156] The organization Transparency International publishes an annual Corruption Perceptions Index, which is derived from several different surveys that garner the perceptions of both residents and expatriates, both business people and risk analysts; the index provides an indicator of the views of decision-makers, who take key decisions on investment and trade.[157] Although the 2004 index[158] does not include all the approximately 200 countries in the world, African countries occupy many of the lowest rungs on the ladder. On a scale of 10 (highly clean) to 0 (highly corrupt), examples of poor African performers are Nigeria (1.6), Chad (1.7) and the DRC, Angola and Côte d'Ivoire (2.0), with several others not much better. The best performing African country is Botswana (6.0), which is the only country scoring more than 5. Much of the literature on corruption in the timber industry focuses on Asia,[159] but there is no reason to doubt, given the pervasive corruption in many afforested African countries, that it is a problem in Africa too.

Conclusion

It is clear that there is a myriad of complex issues impacting on the future of Africa's forests. This paper highlights numerous international and regional initiatives which may either directly or indirectly contribute to forest conservation. Africa, however, presents many challenges to successful implementation of these initiatives. Perhaps the pivotal factor for conservation not only of forests but of biodiversity generally is the alleviation of poverty. It is poverty that to a greater or lesser degree underpins all of the other negative forces identified in this paper: population pressure, armed conflict and political instability and corruption. It is perhaps fitting then to end this paper with reference to another international initiative whose relevance to forests may not be immediately obvious. The United Nations Millennium Development Goals derived from the Millennium Declaration present unequivocal commitments to eradicating extreme poverty and hunger while simultaneously ensuring environmental sustainability.[160] Achievement of these goals presents a huge challenge, not just because of the scale of the problems that have to be addressed, but also because the twin goals of human development and biodiversity conservation require a great deal more thought if they are not to pull in opposite directions.[161] If this does happen, it is likely that the conservation agenda will lose the tug of war and the world's biodiversity, including forests, will suffer.

156 Edward B. Barbier, Richard Damania and Daniel Léonard, 'Corruption, Trade and Resource Conversion', *Journal of Environmental Economics and Management* (2005), in print.

157 Transparency International website,www.transparency.org/.

158 For the 2004 index, see www.transparency.org/policy_and_research/surveys_indices/cpi#cpi2004.

159 For example, Laurance, 'The Perils of Payoff', *supra* note 155; S. Corbridge and S. Kumar, 'Community, Corruption, Landscape: Tales from the tree trade', 21 *Political Geography* (2002) 765.

160 The relationship between forests and the MDGs are addressed in more detail in Tiina Vähänen's paper in the present Review.

161 Sanderson, 'Poverty and Conservation', *supra* note 74.

Forests and the Millennium Development Goals[1]

Tiina Vähänen[2]

Introduction

The world's forests cover one-third of the Earth's total land area. The rate of deforestation and forest degradation appear to be slowing down slightly, but is still substantial in many parts of the tropics. Forests face severe pressure from expansion of agricultural land, forest fires and climate change. Coupled with large population increases and growing consumption, achieving sustainable forest management remains challenging, especially as many of the problems and solutions lie outside the forestry sector. However, there are also positive trends, such as improvements in forest policy and institutional frameworks and participatory approaches. Given the high number of people who rely on forest products and services for subsistence and income, forestry plays a big part in securing sustainable livelihoods. The contributions of forests and trees outside forests to achieving the Millennium Development Goals (MDGs) could be significant, especially if the sector was more fully integrated into wider national development and poverty reduction strategies. Environmental sustainability is being mainstreamed into forest policies around the world, particularly since the United Nations Conference on Environment and Development (UNCED), while the integration of the goals of poverty and hunger reduction in forest policies and plans is less widespread. To maximize the contribution of sustainable forest management to sustainable development and to the achievement of the MDGs will require better co-ordination of economic, social and environmental policies and integrated land use approaches.

1 This paper is based on lectures given by the author on 15 and 16 August 2005.

2 Forestry Officer, FAO.

State of the World's Forests

Trends in Forest Resources

The *Global Forest Resources Assessment 2000* estimated that the world's forest cover was about 3.9 billion hectares – or roughly 30 percent of the total land area of the Earth. About 95 percent of the forest area was natural forests and five percent forest plantations.[3] The distribution of forests among countries is uneven. Sixty percent of the world's forest cover is located in just seven countries: Russia, Brazil, Canada, the United States, China, Australia and the Democratic Republic of Congo. Ten countries have more than 70 percent of their land area covered by forests, while 51 countries are in the low forest cover category, with less than 10 percent forest cover. Although the rates of deforestation and forest degradation appear to have slowed down in recent years, they are still substantial. The deforestation rate in the 1990s was estimated at 14.6 million hectares per year, while 5.2 million hectares were gained through afforestation and natural expansion of forests. The net rate of change was thus a loss of 9.4 million hectares of forest per year. Most of the losses occur in the tropics.[4] In non-tropical regions the net change is positive.[5] This is due to large areas of natural forest expansion on abandoned agricultural land, for example, as well as concerted afforestation efforts.[6]

Forest plantations play an increasing role in meeting the demand for wood products. In 2000, forest plantations covered 187 million hectares, 62 percent of which was in Asia. Although accounting for only five percent of the total global forest cover, plantations supply about 35 percent of global roundwood, with this number expected to increase to 44 percent by 2020. In developing countries, about one-third of the total forest plantation estate is primarily grown for wood fuel.[7] Forests and sustainable forest management play a crucial role in the conservation of biological diversity and large areas of forests have been set aside as protected areas. A mapping project by the Food and Agriculture Organization of the United Nations (FAO) and the World Conservation and Monitoring Centre of the United Nations Environment Programme (UNEP-WCMC) indicates that 12.4 percent of the world's forest area is located in protected areas as classified by the World Conservation Union (IUCN). It should be noted that FAO released updated Forest Resource Assessment figures at the end of 2005.[8]

3 Food and Agriculture Organization, *Global Forest Resources Assessment 2000* (FAO: Rome, 2001).
4 Net change of -12.3 million hectares per year.
5 Net change of +2.9 million hectares per year.
6 FAO, *Global Forest Resources Assessment 2000*, *supra* note 3.
7 *Ibid.*
8 For the *Global Forest Resources Assessment 2005*, see www.fao.org/forestry/site/fra2005/en.

Pressures on forests

Agricultural expansion is a major factor of deforestation. Indeed, much of the increase in food production has been at the expense of forests, and additional land will be cleared in the future. However, it is important not to generalize, and more work is needed to examine the situation. Recent FAO findings indicate that in one-third of the countries where agricultural land is expanding, forests are also expanding.

Forest fires are a severe threat to forests, destroying millions of hectares of valuable timber and other forest products every year. According to some estimates 300 to 400 million hectares burn annually in uncontrolled fires.[9] The main causes of forest fire outbreaks in rural areas are agricultural burning and the conversion of forests into croplands, the burning of residues and waste, the burning of forests to improve hunting and arson. Barbecues and fires in campsites also cause many wildfires.

Forests respond to climate change in different ways. Enhanced photosynthesis and/or tree growth has been observed in many regions of the world while, for example, permafrost thawing in Central Alaska threatens natural lowland birch forests. Shielding forests from and adapting forest management to climate change is a crucial future challenge. Despite a growing awareness of the multiple benefits of forests and the need for an integrated management approach, these pressures coupled with large population increases and growing consumption present new challenges to the sustainable management of the world's forests.

Trends in the economic importance of the forestry sector

According to a FAO assessment over the period 1990 to 2000, the total added value in the forestry sector had increased globally very little in real terms. Added value in forestry (roundwood production) increased from around USD 71 billion in 1990 to USD 77 billion in 2000. Added value in the wood-processing sector (sawnwood, panels, paper and pulp) remained about the same, at around USD 277 billion. No information is available about the amount of investment in the sector, but it is likely that trends would be similar to those relating to added value.[10]

The contribution of the forestry sector to total global GDP was USD 349 billion, or 1.6 percent, in 1990 and USD 354 billion, or 1.2 percent, in 2000. The lower relative figure in 2000 is due to an overall increase of the global GDP.[11] The forestry sector accounts for about 0.5 percent of all employment at the global level. Employment

9 Food and Agriculture Organization, *State of the World's Forests 2005* (FAO: Rome, 2005).

10 Food and Agriculture Organization, *Forest Products Yearbook 2003* (FAO: Rome, 2005).

11 A. Lebedys, *Trends and Current Status of the Contribution of the Forestry Sector to National Economies*, Forest Finance Working Paper FSFM/ACC/07 (FAO: Rome, 2004).

in forestry has increased slightly, but employment in the wood processing sector has declined. This is probably due to improvements in productivity over the period of the assessment. In total, the number of people employed in the formal forestry sector increased from around 12.4 million in 1990 to 12.9 million in 2000.[12] The real value of forest product exports increased significantly, from a total of USD 96 billion in 1990 to USD 144 billion in 2000, mainly due to increased exports of processed wood products.[13]

Although added value, employment and export figures have increased over the period, the forestry sector has not expanded as quickly as other parts of the global economy. The sector is becoming less important to trade and GDP at the global level. It should also be noted that all of these figures cover only the formal forestry sector. Informal activities could be significant, particularly in the case of employment. Furthermore, non-wood forest products are a major source of food and income. However, few countries monitor these products systematically so an accurate global assessment is difficult.

Trends in policy and institutional frameworks

In the past decade, the forestry sector has undergone fundamental changes, largely as a result of restructuring, shifts in ownership patterns due to large scale privatization efforts and land reforms, more pluralistic institutional arrangements, devolution of responsibilities to the local level and the adoption of participatory approaches to decision-making. National forestry agencies are commonly undergoing decentralization, restructuring and downsizing. On the other hand, the involvement of local communities in forest management is now a significant feature of national forest policy.[14] Private ownership of forest is growing. It is expected that by 2050, 40 percent of the world's forests will be managed or owned by communities and individuals, calling for more organized support services.[15] Moreover, large companies have grown even larger through mergers and they own or control significant forest areas worldwide.

Most countries have a national forest programme, usually an iterative forest sector planning process leading to the development of a comprehensive forest policy framework. In many countries, this has contributed to the revision of forest policies and legislation and to wider stakeholder participation in forest planning and decision-making. However, several constraints still hinder the proper implementation of national forest programmes, including a shortage of reliable and up-to-date information on the forest sector, lack of institutional effectiveness and intersectoral col-

12 *Ibid.*

13 *Ibid.*

14 FAO, *State of the World's Forests 2005*, *supra* note 9.

15 Food and Agriculture Organization, *State of the World's Forests 2001* (FAO: Rome, 2001).

laboration, and insufficient funding and institutional capacity.[16] Further efforts are also needed to link forest policy and planning with broader national development strategies, particularly those related to poverty alleviation, as well as to increase linkages to the policies of other sectors, notably agriculture, industry and environment.

Improving legal compliance in the forest sector

According to the World Bank, between USD 10 and 15 billion are lost to countries every year because of illegal activities in the forest sector.[17] Most of the causes are related to poor governance, corruption and the lack of law enforcement capacity. Furthermore, many administrations in developing countries lack an efficient culture of communication and information sharing. In many cases, the proportion of illegally produced timber far exceeds legal production. Corrupt activities depress prices, undermine profitability of legitimate enterprises and help to finance wars and civil strife, all of which weaken efforts to alleviate poverty. Households engaging in small-scale forestry are often forced to pay bribes or sell products to unscrupulous agents at prices far below market value. They have no recourse when corrupt officials or private companies threaten them with violence and illegally deny them access to forest resources to meet their basic needs.[18] Ineffective legislative compliance systems also translate into poor forest management, contributing to deforestation and forest degradation as the economic competitiveness of sustainable forest management disappears in the face of financially more profitable illegal ways of using forests.[19]

Intergovernmental dialogue on sustainable forest management

Intergovernmental forest policy debates within and outside the UN system have focused in the past 15 years on progress towards sustainable forest management, an approach that encompasses environmental, economic and socio-cultural objectives of management in line with the Forest Principles[20] adopted at UNCED in 1992. Principle/Element 2(b) specifically states that:

> Forest resources and forest lands should be sustainably managed to meet the social, economic, ecological, cultural and spiritual needs of present and future generations.

16 Economic and Social Council of the United Nations, Report of the Secretary-General on national forest programmes, ECOSOC Doc. E/CN.18/2002/4 (UNFF: New York, 2002).

17 World Bank, *Sustaining Forests: A Development Strategy* (World Bank: Washington D.C., 2004).

18 FAO, *State of the World's Forests 2001*, *supra* note 15; FAO, *State of the World's Forests 2005*, *supra* note 9.

19 Food and Agriculture Organization and International Tropical Timber Organization, *Best Practices for Improving Forest Law Compliance*, FAO Forestry Paper 145 (FAO: Rome, 2005).

20 Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests, Rio de Janeiro, 3-14 June 1992, UN Doc. A/CONF.151/26 (Vol. III), www.un.org/documents/ga/conf151/aconf15126-3annex3.htm.

Important fora that develop consensus and propose actions to achieve sustainable forest management include the FAO Committee on Forestry (since 1972); the International Tropical Timber Council (since 1986), the United Nations Forum on Forests (since 2000, with an initial mandate up to 2005) and the Conference of Parties of the Convention on Biological Diversity, with dialogue on the expanded Programme of Work on Forest Biological Diversity (since 2002). The last two often suffer from complicated procedural matters, however, that overtake substantial discussions making progress more difficult than expected.

The Role of Forests in Contributing to the Millennium Development Goals

Millennium Development Goals

The Millennium Development Goals (MDGs) unite the international development community around a common, global agenda to reduce poverty. World leaders adopted the Millennium Declaration[21] at the Millennium Summit in September 2000. The Declaration consolidates the MDGs reinforcing goals agreed at world summits, including the World Food Summit, and global conferences held during the 1990s. Each of the eight MDGs[22] has numerical targets to be achieved by the year 2015. Indicators have been identified for each target to monitor progress. The proportion of land area covered by forests globally is one of the indicators for the MDG 7. FAO provides data for this indicator through its global Forest Resources Assessment (FRA). A review of progress in the achievement of the MDGs took place at the Millennium+5 Summit at UN Headquarters on 14-16 September 2005.[23]

With regard to forests, the Millennium Declaration calls for intensified efforts for the management, conservation and sustainable development of all types of forests. Forests contribute to most of the MDGs through their multiple social, economic and environmental functions and services. However, they make the most direct contribution to eradicating extreme poverty and hunger and to ensuring environmental sustainability. Forests are often beneficial to other sectors – notably agriculture, energy and industry – and forests also provide considerable cultural

21 United Nations Millennium Declaration, GA Res. 55/2, 18 September 2000, www.un.org/millennium/declaration/ares552e.pdf.

22 The eight MDGs are: 1) Eradicate poverty and hunger; 2) Achieve universal primary education; 3) Promote gender equality and empower women; 4) Reduce child mortality; 5) Improve maternal health; 6) Combat HIV/AIDS, malaria and other diseases; 7) Ensure environmental sustainability; 8). Develop a global partnership for development. For more information on the MDGs see www.un.org/millenniumgoals/.

23 Committee on Forestry, *The Role of Forests in Contributing to the Millennium Development Goals* (FAO: Rome, 2005).

and recreational values. In addition, wood is a source of renewable energy and of construction and packing materials, substitutes of which are not as environmentally friendly. Indirectly, forests can help reduce child mortality and improve maternal health by improving food security and access to natural medicines. Forest-derived income helps enable rural families to send their children to primary school. Gender-sensitive forest programmes around the world are helping to empower women and improve their access to forest-derived benefits.[24]

Forests and poverty

Forests provide two essential means of living: subsistence and income. Forests are home to 300 million people around the world[25] and one out of four poor people depend on forests for wood fuel, medicinal plants and food for their livelihood.[26] In developing countries, 1.2 billion people use trees on farms to generate food and cash,[27] whereas mangrove forests support the life cycles of the majority of the world's commercial fish species.[28] Wood energy accounts for 7-9 percent of global energy consumption, and up to 80 percent of energy consumption in some developing countries. More than 2 billion people rely mainly on wood fuel for cooking and heating.[29] Natural products, many from forests, are the only source of medicine for 75-90 percent of people in developing countries.[30] The forestry sector therefore has a potential to help people rise out of poverty through securing forest-based employment or developing small-scale forest enterprises, for example.

Forests and trees outside forests produce wood for fuel and for other purposes such as construction materials, furniture, paper, etc. Forests and trees outside forests also produce a wide range of non-wood forest products such as bushmeat, fodder, fibres, oils and medicines, etc., for subsistence use and for sale in local markets. Forests can provide crucial safety nets, keeping many poor rural people from sinking deeper into poverty and can serve as a lifeline in times of emergency.[31] In many developing countries, poverty is a direct and underlying cause of deforestation and forest degradation. Most deforestation is the result of the conversion of forests to other land uses, particularly agriculture. Many of the problems plaguing

24 *Ibid.*

25 World Bank, 'World Bank Reviews Global Forest Strategy', Press Release No. 2000/193/S, web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20012961~menuPK: 34463~pagePK:34370~piPK:34424~theSitePK:4607,00.html.

26 *Ibid.*

27 World Bank, *A Revised Forest Strategy for the World Bank Group* (World Bank: Washington D.C, 2001).

28 Food and Agriculture Organization, *State of the World's Forests 2003* (FAO: Rome, 2003).

29 Unite Nations Development Programme, United Nations Department for Economic and Social Affairs, World Energy Council, *World Energy Assessment* (UNDP: New York, 2000).

30 Food and Agriculture Organization, 'Forestry and Food Security', Brochure prepared for the World Food Summit (FAO: Rome, 1996).

31 FAO, *State of the World's Forests 2003*, *supra* note 28.

forestry therefore come from outside the sector. It is inevitable that some forest land will be converted to agriculture in order to reduce poverty and hunger but effective cross-sectoral planning mechanisms are needed to identify which land would make a relatively greater contribution to sustainable development if converted from forests to other uses.

While policy-makers are showing growing interest in assessing the effects of external factors on the forest sector, and vice versa, intersectoral co-operation is still vague. Recently, the links between forests and poverty reduction and between forests and food security have gained more attention in development assistance. Community-based forestry is particularly well placed to address poverty reduction. Improving local peoples' rights and access to forest resources and participation in decision-making is a prerequisite to sustainable forest management and forest-based development. Although improving rights and access to forest resources and developing small-holder forest-based enterprises show particular promise for poverty reduction, local political and economic realities, opportunity costs for the use of local resources and other factors may prevent the poor from benefiting from community-based forestry programmes to the extent intended.[32] Much still remains to be done to clarify and secure access rights. While progress has been made in incorporating sustainable development goals into forest sector policies and planning, the integration of forests and agroforestry into national sustainable development plans is less advanced. Forestry and agroforestry are overlooked or feature weakly in most national Poverty Reduction Strategy Papers (PRSPs), which are the key country level planning mechanisms for implementing the MDGs. Forest departments often have limited involvement in the development of PRSPs and in other sustainable development plans.[33]

Forests and environmental sustainability

The MDGs call for the integration of the principles of sustainable development into environmental, and thus also forest policies. Failure to achieve environmental stability will undermine social and economic development efforts. Forests play a critical role in sustaining the health of the environment by mitigating climate change, conserving biological diversity, maintaining clean and reliable water sources, controlling erosion, protecting agricultural soils, sustaining and enhancing land productivity, protecting coastal and marine resources, providing low cost and renewable energy and enhancing the urban environment. These environmental services are well documented and their social benefits quite well understood, but the means to capture their economic values are as yet underdeveloped.

32 D. Gilmour, Y. Malla, M. Nurse, *Linkages between community forestry and poverty* (Regional Community Forestry Training Center for Asia and the Pacific: Bangkok, 2004).

33 COFO, *The Role of Forests*, *supra* note 23.

There appears to be more and more cases of payment being made for the environmental services that forests provide. An example of this is payment for a forest owner or a local community for watershed protection, in order to guarantee drinking water to users, a practice which is expected to become more widespread. Payment for biodiversity conservation and carbon sequestration are two other emerging areas that are receiving significant attention. Forest-based ecotourism is increasing in popularity as well. If managed properly, it can generate income and employment for those faced with few alternative livelihood opportunities.[34]Managing forests for the range of inherent values they have, including environmental value, will be impossible if the sector as a whole is not financially viable. While protection of forests is important for conservation of biological diversity, forests in general are a renewable resource, meant to be used.

Conclusion

Forests and trees support economic and social development, environmental sustainability and the ecological functioning of landscapes in a number of ways. They provide income, employment and goods to sustain hundreds of millions of families, helping some of them to rise out of poverty and they support rural development. They provide fuel for cooking and heating to more than one billion people, and generate tax revenues and stimulate overall economic growth. Forests and trees improve soil fertility, produce livestock fodder, protect agricultural soils and also provide wild meat, fruits and other edible forest products which are a major source of protein, vitamins and medicines to hundreds of millions of poor people. Finally, forests and trees mitigate climate change, conserve biological diversity, maintain clean and reliable water resources, control erosion, protect coastal and marine resources and enhance the urban environment. Some of the key ways to maximize the contribution of forestry to sustainable livelihoods are to make forests and trees outside forests part of wider strategies for economic and social development, secure strong national commitment to improve governance and fight corruption, empower forest-dependent people and build their entrepreneurial skills and provide assistance to implement realistic action plans that bring lasting change.[35]

Intersectoral co-ordination is crucial for the achievement of all MDGs. Forest-based poverty reduction efforts tend to be linked to other land uses and should form part of rural development strategies. Conversely, the potential of forests and trees outside forests to contribute to environmental sustainability cannot be fully realized without intersectoral co-operation and co-ordination. Although difficult

34 El-Lakany, 'Broader Development Strategies: Making Room for Forestry', Jack Westoby Lecture, Australian National University, Canberra, Australia, 15 August 2005.

35 *Ibid.*

and time-consuming, such co-ordination is necessary for sound decisions to be made on land use and resource allocation. Although trade-offs are inevitable at times, the right balance among the economic, environmental and social dimensions of forestry is the key to sustaining forests and to their contribution to the achievement of the MDGs.

The United Nations Forum on Forests: Building a stronger regime[1]

Pekka Patosaari[2]

Introduction

This paper will begin by presenting some facts and views on forests in the context of international environmental law-making and diplomacy. Recent developments with respect to forests and forest policy will be discussed, followed by an overview of the linkages between international law and forest policy, particularly as it relates to the work of the United Nations Forum on Forests (UNFF).[3] Finally, the paper will look at lessons learned and will present some suggestions for future negotiators and practitioners.

Forests as a Microcosm

The world has about 4 billion hectares of forests that constitute about 30 percent of the Earth's surface area. All of the Earth's inhabitants depend to varying degrees on forests for their livelihoods. The major challenge is how to respond to the growing needs of people and their communities. Forests provide subsistence and income to about 350 million people who live within or near forests. Forest industries provide employment to nearly 100 million people. Forests are the largest reservoir of terrestrial biological diversity, they are a regulator of climate and water cycles and they provide a habitat for known and unknown plant and animal gene pools

1 This paper is based on a lecture given by the author on 15 August 2005.

2 Director, United Nations Forum on Forests Secretariat, United Nations Department of Economic and Social Affairs.

3 For more information on the United Nations Forum on Forests, see www.un.org/esa/forests/index.html.

and a space for the cultural and spiritual well-being of human civilization. However, the forests of the world are at grave risk today. Millions of hectares of forests are lost every year due to deforestation and forest degradation, risking the welfare of present and future generations.

Forests have one particular characteristic, which is both advantageous and disadvantageous. Due to the wide range of products and services that forests provide, forests also have a multitude of stakeholders with a wide range of interests. Often such interests conflict. For example, forests are a source of revenue for governments. They can provide excess land for cultivation to poor landless farmers. They are wildlife habitats to be protected as well as watersheds for downstream populations. They can be a spiritual or hunting ground or a game or recreational refuge to city-dwellers. They provide industry with raw material for making lumber or paper. The growing significance of international trade and environmental problems and climate change make forests an issue of global concern, too. Additionally, policies and actions in other sectors such as energy and agriculture impact on the health and survival of forests. In such complex and challenging circumstances, sustainably managing this precious natural resource in the best possible way is a big policy challenge to national and international decision makers.

Sustainable Forest Management as Part of a Broader Development Agenda

In 2000, heads of state and governments came together to create a holistic vision for development, encapsulated in the eight inter-connected Millennium Development Goals (MDGs).[4] Forests could indeed help a great deal in finding solutions to development challenges. In particular, they could help alleviate poverty, as envisaged by the MDGs. Despite such huge potential and the adoption of the Forest Principles[5] and Chapter 11 of *Agenda 21*[6] thirteen years ago at the Earth Summit, there are still many challenges to be faced in halting deforestation and land degradation. Globalization and the fast pace of development in several parts of the world also represent new pressures on forests, and on their ability to contribute to critical socio-economic and environmental challenges.

The United Nations Forum on Forests was established in 2000, particularly for discussion and policy development on these interlinked forest-related issues, and

4 See www.un.org/millenniumgoals.

5 Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests, Rio de Janeiro, 3-14 June 1992, UN Doc. A/CONF.151/26 (Vol. III), www.un.org/documents/ga/conf151/aconf15126-3annex3.htm.

6 *Agenda 21: Environment and Development Agenda*, UN Doc. A/CONF.151/26, www.un.org/esa/sustdev/documents/agenda21/index.htm.

to foster co-operation on such cross-sectoral priorities at all levels. As a high-level body under the United Nations Economic and Social Council (ECOSOC), with universal membership and a mandate to address sustainable management of all types of forests, the UN Forum on Forests has pulled together various forest-related international and regional processes, institutions and instruments, as well as stakeholders from civil society and integrated these pieces into an international arrangement for action, for forests and for people.

Implementation of these policies has to occur at the country level, facilitated by international and regional organizations and instruments and various stakeholder groups. To support the work of the UN Forum on Forests, the heads of international organizations have formed a voluntary partnership: the Collaborative Partnership on Forests. This voluntary partnership has not only supported the Forum and its member states in the implementation of the ad hoc Intergovernmental Panel on Forests (IPF) and the ad hoc Intergovernmental Forum on Forests (IFF) proposals for action, but it has also provided technical and financial support to various countries.

International Law and Forests

States have opted for formal agreements to solve certain transboundary and global issues, preventing further damage to the environment or to human health, and/or achieving desired objectives of higher environmental quality. These agreements can take a number of forms and labels and collectively constitute international law. Many factors compel the international community to initiate a negotiating process. The likelihood of achieving an agreement generally increases when public concern surrounds a problem. Moreover, greater scientific knowledge about the causes and seriousness of a problem as well as broadening the understanding and consensus among states make the agreement more likely. Issues of international concern are often addressed through a legal instrument. However, there is a general need to strike a balance between co-operation and regulation, to recognize state sovereignty, and to take into account voluntary commitments, the role of stakeholders and the business sector, and the importance of access to relevant information. These are among the key elements that may form part of the basis for an effective international legal regime.

These international agreements are developed to modify state behaviour, and through them, those of private actors related to specific sectors. Once created, an international agreement will be as effective as the parties commit to make it. Thus, the implementation or compliance of the provisions (and spirit) of the agreement should be paramount, and would require to be systematically monitored, assessed and reported. There are various ways in which existing international regimes have

incorporated or applied non-binding instruments or decisions in order to address certain matters or to facilitate the application or development of the regime in question. Examples can be drawn from the Convention on Biological Diversity,[7] CITES,[8] the Ramsar Convention,[9] the World Trade Organization's Agreement on Technical Barriers to Trade[10] and Agreement on the Application of Sanitary and Phytosanitary Measures,[11] the United Nations Convention on the Law of the Sea[12] and the United Nations Framework Convention on Climate Change.[13] International instruments or agreements frequently contain an articulation of general principles and frameworks for action to address specific problems under the purview of the instruments. They often call for specific country-level actions, such as the adoption of national regulation standards and implementation strategies. Other common provisions of such instruments include international co-operation, monitoring and reporting; research; exchange of information; well-established dispute resolution processes; and co-ordination among related agreements and establishment of independent secretariats.

An Effective International Forest Regime

As the past has shown, there is little doubt that developing an effective international forest regime will be difficult. As with most other international agreements, developing and effectively implementing an international policy framework on forests needs to meet the challenge of balancing the issue of territorial sovereignty with the cross-border nature of the respective problems they address. Sovereign rights over forest resources and their use for national economic development, particularly for poverty reduction, jobs and income generation, dominate national priorities on forests. Some argue that forest policy is a national issue that should not be internationalized. Furthermore, tropical forests often have the greatest bio-

7 Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, www.biodiv.org/doc/legal/cbd-en.pdf.

8 Convention on International Trade in Endangered Species of Wild Flora and Fauna, Washington D.C., 3 March 1973, in force 1 July 1975, 993 *United Nations Treaty Series* 243, www.cites.org/eng/disc/text.shtml.

9 Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar, 2 January 1971, in force 21 December 1975 , 996 *United Nations Treaty Series* 245, www.ramsar.org/key_conv_e.htm.

10 Agreement on Technical Barriers to Trade, Marrakesh, 15 April 1994, in force 1 January 1995, www.wto.org/english/docs_e/legal_e/17-tbt_e.htm.

11 Agreement on the Application of Sanitary and Phytosanitary Measures, Marrakesh, 15 April 1994, in force 1 January 1995, www.wto.org/english/docs_e/legal_e/15sps_01_e.htm.

12 United Nations Convention on the Law of the Sea, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261, www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf.

13 United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf.

logical diversity and some of the most complex problems. International trade in forest products is significant and there are difficult issues relating to illegal logging and associated trade. Growing concerns for human rights and intellectual property rights, particularly regarding indigenous people and local communities, and tension in the rural-urban interface, and between local and global priorities, present another set of challenges. Furthermore, a multitude of interest groups are linked to forests, and often have conflicting demands on the uses of forest goods and services. Balancing their concerns in policy and programming for sustainable forest management, even at the national level, is sometimes complicated enough, and doing so at the global level is even more challenging.

The 5th Session of the UN Forum on Forests

Looking briefly back, the 5th Session of the UN Forum on Forests (UNFF-5) held on 16-27 May 2005, faced three major challenges that were inter-linked. First, the question of how to continue the advancement of the implementation of actions already agreed on by the UN Forum on Forests and the ad hoc IPF/IFF process needed to be answered. The second challenge was to assess the performance and effectiveness of the Forum in its first five years, and to consider with a view to recommending to ECOSOC, and through it to the General Assembly, the parameters of a mandate for developing a legal framework on all types of forests. The third challenge was to chart the way forward for the Forum: to consider its future work mandate and structure within the institutional framework of the UN system.

The reports of the UN Secretary General to UNFF-5, in discussing a possible future arrangement, concluded that there were only two main options to be considered by the Forum: strengthening of the current international arrangement on forests and developing a legally-binding instrument on all types of forests.[14] When considering the modalities of the first option, the reports emphasized a need to understand how, in a real sense, the current arrangement could be made stronger in terms of its mandate, working method and programme of work. To this end, the lessons from international environmental regimes indicate that the development of international technical guidelines could be a potential approach. Such voluntary guidelines, or other similar forms of so-called soft law, are developed in a less formal and incremental manner and can come into effect relatively quickly because they normally do not require national ratification. However, because of their very nature of informality, they also carry an inherent risk of limited compliance or non-compliance by states. Thus, the guidelines should be developed in a realistic manner and be coupled with concrete programming and assured means of implementation, and in particular be linked to financial resources and to

14 For the UNFF-5 documents, see www.un.org/esa/forests/documents-unff.html.

capacity-building. A potential advantage of a soft law approach is that it could evolve into a more legally-binding instrument, as information, experience and political consensus among states increase.

On the issue of a legally-binding instrument, the reports noted that the use of the framework convention plus protocol model has become the most common environmental treaty prototype in the past decades. This prototype allows an incremental approach to treaty-making, moving from a general agreement to more specific and concrete obligations in gradual steps. However, such an approach often implies a very long and drawn-out negotiation process. Furthermore, in the case of forests, it would be necessary to establish whether it covers all types of forests in the world, to ensure that, consistent with international law, it respects the sovereign rights of states, and that it would promote democratic values and the human rights of present and future generations. Any such instrument would probably build upon the Forest Principles, the provisions of Chapter 11, *Agenda 21*, the IPF/IFF proposals for action and the work of the UN Forum on Forests. The Forum deliberated on these issues, based on the UN Secretary-General's reports and other inputs. There were intense discussions on how to address the following: means of implementation; working modalities, including regional aspects; establishment of global goals and/or targets; and a possible voluntary code or international voluntary guidelines. However, different expectations among countries on how and what is required to strengthen the arrangement might have contributed to the resulting lack of agreement within the time available time at the 5th Session. As such, deliberations on the future arrangement will continue in February 2006, at UNFF-6.[15]

Modus Operandi

The principal objective of the new international forest arrangement should be to ensure that all of the world's forests are sustainably managed, and it should be logical to start by setting specific international goals and targets. This should indeed be the basis for designing an overarching and comprehensive framework for a good global governance structure for all types of forests. The lack of a co-ordinated, holistic approach leads to the sub-optimal use of resources at the national and international levels. In the case of official development assistance (ODA) financing, the lack of a common agenda has resulted in ineffective and inefficient aid delivery. The sector has been unable to convince policy makers of the need for

15 Although this paper only takes into account developments until December 2005, it should be noted that UNFF-6, held in February 2006, delivered a strong new mandate and guidance for future international forest policy. For the UNFF-6 documents and outcome, see www.un.org/esa/forests/session.html.

increased long-term ODA to support the international forest agenda. In fact, total commitments have decreased in recent years.

Many of the challenges to sustainable forest management come from issues outside the forest sector. The new framework would give forest policy issues a higher level profile and allow for the improved cross-sectoral policy coherence that is needed to address the above issues. The existing conventions relevant to forests were developed with specific objectives that do not necessarily reflect all the priorities necessary to achieve sustainable forest management. This has led to a situation where different approaches to sustainable forest management and decision-making processes have been piecemeal and fragmentary, with many gaps and overlaps. A Framework on Forests should be able to overcome this shortcoming. In so doing, it would also complement the existing obligations and enhance their forest-related objectives.

Future International Forest Policy

Some key elements in support of future international forest policy need to be reemphasized. First, coherent and predictable forest policies which recognize all forest benefits and the concerns of all stakeholders are needed. This is the cornerstone for sustainable forest management. These supportive policies and enabling environments are instrumental in attracting the socially and environmentally responsible private sector, and in creating the much-needed forest markets and revenues from forest products and services. Forests and forest products should be used in support of social development, environmentally sound management and conservation and economic growth in a sustainable manner, thus contributing to the overall development of society as a whole. Moreover, policies that bring stability and expand the capabilities of forest-dependent individuals and communities to diversify their income base are essential for long term sustainability. Strengthening institutional capacity for governance and providing extensive opportunities for education, especially for girls, will be important factors in maintaining a healthy local and national economy.

Second, efficient and effective land tenure systems and access to forest resources are crucial for local and indigenous communities, and provide an economic incentive for sustainable forest management. When people have control over and ownership of forests, they have greater opportunities to capitalize on forest assets, and greater incentives to sustain the resource. Good land stewardship and clear principles of social responsibility are prerequisites for sustainable forest management.

None of these pieces can come together without the third basic tenet of sustainable forest management: good governance and strong law enforcement. A lack

of economic opportunities combined with weak law enforcement often leads to illegal logging, which can destroy ecosystems and deprive the local forest-dependent community of the possibility of a sustainable livelihood. Illegal logging and trade in illegally harvested forest products have been eroding the resource bases of many countries and impacting on their socio-economic and ecological health. Internal conflicts and illegal harvesting of natural resources, including forest resources, go hand in hand in many countries. Often, illegally harvested timber is exported to finance violent activities. Often national governments are not able to cope with such crises, and they require the international community's support.

The Position of African Countries within the International Forest Process Regarding a Legally Binding Instrument, Including an Overview of African Fora on Forests[1]

Barbara M.G.S. Ruis[2]

Introduction

In this paper, an attempt will be made to give an overview of the international discussions on a legally binding instrument, or treaty, on forests and to point out the complexity of the issue in particular for African countries. A short overview of the international intergovernmental forest process will be made, indicating specific positions taken by African countries. The preparations by African countries for the 5th Session of the UN Forum on Forests, UNFF-5, will be discussed and the outcome of UNFF-5 on the subject of a forest treaty will be briefly addressed. The variety of existing African fora in which the topic of forests is under discussion will also be assessed. The paper aims to raise awareness on two issues in particular the complexity of the negotiations on a legally binding instrument on forests and the enormous difficulties developing countries, in particular African countries, face at the national level when implementing forest policies and laws.

1 This paper is based on a lecture given by the author on 17 August 2005. It takes into account developments until January 2006.

2 Legal Officer, Division for Policy Development and Law, United Nations Environment Programme (UNEP). The contents and views expressed in this paper do not reflect the position of UNEP or of the UN, or of their member states.

International Intergovernmental Forest Process

The Road to the intergovernmental panel on forests

There are many international and some regional instruments, including conventions, and many international and regional processes and institutions which in some way or other deal with forests. This results in much duplication and many gaps in mandates and activities in the forest area, although co-operation among the various regimes does exist. Among the multilateral conventions are the UN Framework Convention on Climate Changes (UNFCCC),[3] the Convention on Biological Diversity (CBD),[4] the UN Convention to Combat Desertification (UNCCD),[5] the Convention on International Trade in Endangered Species (CITES),[6] the RAMSAR Convention[7] and the International Tropical Timber Agreement (ITTA);[8] there are bodies like the United Nations Forum on Forests (UNFF), the Food and Agricultural Organization's Committee on Forestry (FAO COFO); and there are financial and trade institutions, with relevance for forests, such as the World Trade Organization (WTO) and the Global Environment Facility (GEF). It is thought that more than one hundred treaties and institutions exist that regulate forest issues. However, there is no single treaty on forests that integrates all possible forest issues.

The idea of such a treaty is already quite old. At the United Nations Conference on Environment and Development (UNCED) held in 1992 in Rio de Janeiro, the Conventions on Climate Change and Biodiversity were concluded. Originally, the UN General Assembly decided in December 1989 that forests should be one of the subjects to be discussed at UNCED, and during the course of 1990 many countries and institutions came with proposals for a global forest convention. However, during the negotiations in Rio it became apparent that the international community was far from reaching consensus on the contents of a forest convention. There was even disagreement about whether such a convention should be negotiated at all. In the end, the Non-Legally Binding Authoritative Statement of Principles for a Global

3 United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf.

4 Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, www.biodiv.org/doc/legal/cbd-en.pdf.

5 United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, Paris, 17 June 1994, in force 26 December 1996, 33 *International Legal Materials* (1994) 1309, www.unccd.int/convention/menu.php.

6 Convention on International Trade in Endangered Species of Wild Flora and Fauna, Washington D.C., 3 March 1973, in force 1 July 1975, 993 *United Nations Treaty Series* 243, www.cites.org/eng/disc/text.shtml.

7 Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar, 2 January 1971, in force 21 December 1975, 996 *United Nations Treaty Series* 245, www.ramsar.org/key_conv_e.htm.

8 International Tropical Timber Agreement, Geneva, 26 January 1994, in force 1 January 1997, www.itto.or.jp/live/PageDisplayHandler?pageId=201.

Consensus on the Management, Conservation and Sustainable Development of all Types of Forests was adopted.[9] Since a statement is, by its nature, non-legally binding, the inclusion of these words shows that this non-binding aspect needed extra emphasis, demonstrating the great divergence of views during the UNCED negotiations. The adding of the word authoritative is, from a legal point of view, of no consequence.

At the time, developed countries and developing countries, led in particular by Brazil and Malaysia, had irreconcilable concerns. To put it simply: developed countries wanted a treaty, developing countries did not. It has to be noted, though, that since 1992 many developing and developed countries have shifted position, sometimes more than once. At UNCED, African countries were not much involved in the intergovernmental negotiations on forests. In preparation for UNCED, some consultations took place within the African Ministerial Conference on the Environment (AMCEN), and a common African position was adopted on a variety of issues, including a rather general one on forests. At UNCED, developed countries did not propose to submit their own forests to the criteria of sustainable utilization; they initially wanted to focus on tropical forests only. The resulting polarization and sensitivity over sovereignty issues still, to this day, strongly influences discussions and makes the conclusion of a comprehensive global convention very difficult. It is submitted that this, along with the fact that developing countries' tropical forest resources are extremely carefully guarded as part of their national patrimony, is one of the main reasons why no forest convention exist today. *Agenda 21*,[10] the agenda for action adopted at UNCED, has only a general commitment calling on countries 'to consider the need for and feasibility of all kinds of appropriate internationally agreed arrangements to promote international cooperation'[11] on forests. It was agreed that the conservation and management of forests is predominantly of concern to the governments of the countries to which they belong.

After UNCED, the UN subsequently established the Intergovernmental Panel on Forests (IPF), which was followed by the Intergovernmental Forum on Forests (IFF) in 1997 and later the United Nations Forum on Forests (UNFF) in 2000. In all of these fora, the possibility of an international legal instrument has been discussed; IPF pushed the issue on to IFF, IFF in turn pushed it on to UNFF, and UNFF pushed it to the end of its five year term. At the end of UNFF-5 in May 2005, UNFF

9 Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests, Rio de Janeiro, 3-14 June 1992, UN Doc. A/CONF.151/26 (Vol. III), www.un.org/documents/ga/conf151/aconf15126-3annex3.htm.

10 *Agenda 21: Environment and Development Agenda*, UN Doc. A/CONF.151/26, www.un.org/esa/sustdev/documents/agenda21/index.htm.

11 Chapter 11.12(e), ibid.

deferred the topic to the next session, to be held in February 2006. These three fora will be briefly looked at, indicating relevant African countries' positions.

Intergovernmental Panel on Forests (1995 to 1997)

The first time after 1992 that forests were debated at a high level, was in 1995 at the third session of the Commission on Sustainable Development (CSD), where it was agreed to create IPF. IPF did not, however, discuss the possibility of a legally binding instrument, and African countries were not active during this period. There were just a few statements made at its last session. For example, Zimbabwe and Uganda spoke out against a global forest convention, Gabon spoke in favour of one and the Democratic Republic of Congo (DRC) took a position in between.

Intergovernmental Forum on Forests (1997 to 2000)

IFF mainly took inventory of the work already underway on forests; it explored other conventions' and organizations' roles and mandates in the area of forests. No steps were taken to concretely discuss the contents of a global forest convention and also during this period African countries were not notable for specific positions taken. In 1999, Gabon, South Africa, Senegal and Benin spoke in favour of a convention, and Cameroon and Nigeria against. There was also a statement of the G-77 and China, supported by Namibia, Nigeria, Benin and Gabon, that deemed consideration of a convention premature due to a lack of consensus on many elements.

The fourth and final session of IFF was held in 2000, and within AMCEN a preparatory meeting took place. As a result, in the opening plenary, Zambia, on behalf of AMCEN, noted that African countries did not support a convention without a viable financial mechanism, and preferred improved co-ordination of existing arrangements and a new permanent intergovernmental forum for forest policy deliberations. However, at a later stage in the meeting Zimbabwe, Niger and Benin supported a convention and called for a structure allowing greater African representation.

United Nations Forum on Forests (2000 to present)

When UNFF was established in 2000, it was also directed that, within five years, it was to consider with a view to recommending to ECOSOC, and through it to the General Assembly, the parameters of a mandate for developing a legal framework on all types of forests.[12] At UNFF-1 in 2001, it was decided to establish three ad hoc expert groups to provide technical advice, including the Ad Hoc Expert Group on Consideration with a View to Recommending the Parameters of a Mandate for Developing a Legal Framework on All Types of Forests (AHEG-PARAM). Only at UNFF-3 in 2003 were the terms of reference for the ad hoc expert groups finalized.

12 United Economic and Social Council Resolution 2000/35.

In September 2004, the first and up until now only meeting of AHEG-PARAM took place. About 70 experts were present, acting in their personal capacity, although country positions often played a dominant role. They adopted a report providing a range of options for the future framework, to be forwarded to UNFF-5, including legally binding and non-legally binding options. Although the meeting tried to avoid it, it ended rather polarized, with some experts in favour of a convention and others in favour of a non-legally binding option.

Since AHEG-PARAM did not come to a clear result for discussion at the last UNFF meeting to be held within the initial five year period, Mexico and the United States took the initiative, later supported by other countries, to hold a Country-Led Initiative in support of UNFF, held in Guadalajara, Mexico, in January 2005. At this meeting more concrete discussion took place on the potential options of how to go forward, with a treaty or not. The participants of the meeting agreed on four options, listed below, and discussed the pros and cons of each one.

Option 1: Discontinue the current International Arrangement on Forests.
Option 2: A non-legally binding instrument such as an enriched and stronger version of the current International Arrangement on Forest, or another instrument such as Guidelines or a Programme of Action.
Option 3: A legally binding instrument such as a Framework Convention, which would likely establish overarching principles and general objectives and make provisions for subsequent protocols subsidiary to the Convention.
Option 4: A legally binding instrument such as a stand alone convention or a Protocol under an existing Convention

Options 2 and 3 were seen by participants as the most viable alternatives, with about half of the participants in favour of option 2 and the other half in favour of option 3.

The report of this meeting was forwarded to UNFF-5, held in May 2005, which needed to make the ultimate decision on whether to start negotiating a convention or not. However, at UNFF-5 little attention was paid to both the AHEG-PARAM and the Guadalajara reports. At the end of UNFF-5, countries were unable to come to a consensus on whether negotiations on a legally binding instrument should start or not. In the end it was decided to defer the discussion to UNFF-6, thus not fulfilling the mandate set by the original 2000 ECOSOC Resolution to consider the parameters of a mandate within five years. The African trajectory to UNFF-5 followed by some additional developments between UNFF-5 and UNFF-6 will now be discussed.

African preparatory process for UNFF-5

The 14th session of the African Forest and Wildlife Commission (AFWC),[13] which took place in Ghana in February 2004, endorsed a report of a meeting held in conjunction with it, namely the FAO Regional Workshop on Implementation of IPF/IFF Proposals for Action in Africa. The workshop also provided an opportunity to inform experts about the international forest dialogue and to discuss how they, as country and regional representatives, could better prepare themselves to participate in meetings such as UNFF-5. The report concludes:

> Participation of African Countries in the International Forest Dialogue
> Observations/Lessons Learned:
> 12. The African voice is not heard at the international negotiations. Only few countries are able to participate, often with only one person in the delegation.
> 13. UNEP's role in helping African countries to prepare for IFF-4 and UNFF's efforts to support participation were recognized. Regional preparations and building of a common African position in future international forest policy negotiations are crucial.
> 14. African countries have limited capacity to take advantage of existing opportunities, for instance, the Global Environment Facility's (GEF) grants on land degradation.
> 15. Few regional/sub-regional bodies are accredited to the UNFF.
>
> Recommendations:
> 16. AFWC, in collaboration with sub-regional organizations, should provide a forum for strong regional policy dialogue, including preparations for future global meetings and for a common African position at UNFF-5.
> 17. Domestic resources from both the public and private sectors should be harnessed to support both participation in and implementation of proposals for action.
> 18. Countries should improve consultations with stakeholders.
> 19. Background information should be available well in advance of UNFF sessions.
> 20. All countries should designate focal institutions/persons.[14]

With this in mind, the AFCW prepared a position paper for UNFF-5.

A parallel African process, with no link to the AFWC process mentioned above, took place immediately prior to UNFF-5. In April 2005 a regional preparatory meeting organized by the African Academy of Sciences and the African Forest Research Network was held in Nairobi. It was funded by Sweden under a project to enhance African participation in international forest-related processes and initiatives. This preparatory meeting was convened in a rather rushed way to assist delegates from selected African countries to prepare themselves for UNFF-5. The following African countries attended: Burkina Faso, Congo (Brazzaville), the Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Malawi, Nigeria, Uganda, Senegal, the Sudan, South Africa, Tanzania, Zambia and Zimbabwe. The reason

13 See also below.

14 See www.fao.org/DOCREP/MEETING/007/J1717E/j1717e03.htm#P104_7344.

why these countries were selected has never been disclosed. In addition, a small number of regional organizations and external resource persons were invited.

The Nairobi preparatory meeting agreed, among others, that there is a low and inconsistent participation of African countries and African regional organizations in the various international forest-related processes, and that African contributions are not influencing the outcomes of the on-going international forest processes. The participants adopted a statement and decided to circulate this to other African delegations directly, as well as through the African Union Secretariat, and to Africa's representative in the UNFF Bureau, Uganda's Permanent Representative to the UN. A Technical Support Team (TST) accredited under the African Union was also established to provide assistance as needed in the UNFF-5 negotiation process. The Nairobi preparatory meeting proposed that, during UNFF-5:

> i) African Group meetings should be organized in harmony with those of the G-77 and China;
> ii) the TST should provide input during African Group meetings and work on emerging issues during plenary and other sessions;
> iii) the African Group should make a deliberate and specific effort to identify its possible allies and detractors; and
> iv) the African delegations and the TST should ensure that they organize themselves to attend parallel sessions and contact group meetings.[15]

It was also decided that after UNFF-5 the African Group should agree on a mechanism to continue with a continent-wide dialogue on forest issues.

At UNFF-5, Nigeria made a statement against starting negotiations for a convention, while Mozambique and Namibia were in favour. As a result of the divergent opinions, even the G-77 and China had to admit that they could not agree to a common position. During the meeting, the spokesperson of G-77 and China first came with proposals noting that not all members supported them; controversy increased in particular on the desirability of a legally binding instrument and uncertainty as to what a possible voluntary code might entail. Some donor countries also made vague promises referring to different forms of increased funding, which may have influenced a solid G-77 and China position.

At no occasion did African countries take a common position either in favour of or against a future treaty on forests. There were, however, various other issues on which African countries did speak with one voice through the African Group. For example, while acknowledging the lack of agreement on a legal framework, the African Group urged countries to draw up national codes for sustainable forest management on a voluntary basis. Later that year, in August 2005, some of the African delegates that attended the Nairobi preparatory meeting were asked

15 Nairobi UNFF-5 Preparatory Meeting Proposals, unpublished, document on file with author.

if they thought this meeting had any effect at all, given the failure to come to an outcome at UNFF-5. Most of the delegates were of the opinion that this preparatory meeting did have a positive effect; although the G-77 broke down, the African group remained intact. The absence of a common African position on the subject of a convention was not seen as a loss; the delegates were proud that African states had stood together.[16]

The author would like to note that there were many more statements of the African group at UNFF-5 than in any other IPF/IFF/UNFF meeting and this certainly has an effect on international negotiations. If other countries hear a common position, the group gets more attention, and is taken more seriously. On the other hand, the author observed that at the Nairobi preparatory meeting there was an emerging consensus in favour of supporting a framework convention. This view did not come out through the African Group at all at UNFF-5, which instead gave rather tentative and very careful support to the idea that in the future an agreement might be reached on a non-legally binding instrument. When confronted with this change of position, delegates stated that indeed they had changed their minds on this. This is perhaps indicative of the important role some other African states which were not present at the Nairobi preparatory meeting, traditionally play in this field. It may also serve as an indication that some African governments do not have a fixed position on the issue, or perhaps have no position at all, and that this is left to the individual negotiators present at the meeting.

Since UNFF-5 did not yield any concrete results on a possible instrument on forests, a Country-Led Initiative took place in November 2005 in Germany, in the form of an International Expert Meeting on Scoping for a future agreement on forests. The key objective of this international expert meeting was to advance the basis for consensus at UNFF-6, scheduled for February 2006, on a future international agreement on forests. The most interesting discussion at this meeting evolved around the possible content of a non-legally binding instrument, the first time the issue was discussed. Of course no consensus emerged and some countries were not supportive of the discussion since their aim is still to agree to a legally-binding instrument.

In January 2006, South Africa, in its role as the 2006 co-ordinator of the G-77 and China group, convened a one-day preparatory meeting for selected African countries in preparation for UNFF-6. The nine countries present strategized in particular about their participation in G-77 and China during UNFF-6; they agreed on their preference for UNFF-6 to agree on developing a non-legally binding instrument by the end of 2007, after which date the option of a legally binding instrument on all types of forests could be considered.

16 These views were obtained through conversations by the author with various delegates.

Existing African Forest Fora

In the second and final part of this paper the different fora African countries work in, and with, on forest issues shall be highlighted. There is a variety of international organizations and instruments with relevance to forests in general, including African forests.[17]

Organizations and instruments relevant to African forests

There are about thirty major organizations and legal instruments on forests, which are not specifically intended for African countries, but which are relevant to them. Among them are the following.

Collaborative Partnership on Forests (CPF)

This is a form of successful interagency collaboration to support countries. The CPF is an innovative partnership of 14 major forest-related international organizations, institutions and convention secretariats, including UNEP. It was established in April 2001. It will gain increasing importance, also for African countries, now that the focus also in UNFF is increasingly moving towards implementation at the national level.

Convention on Biological Diversity (CBD)

The Convention on Biological Diversity has a far wider scope than merely conservation of forests and forest biodiversity, but the provisions of the CBD are clearly very relevant to African forests. The text of the Convention does not specifically mention forests; in the mid-1990s there were discussions to develop a protocol on forests so that there would be no more need for a global forest convention, but this did not lead to any result. In 1998, the CBD Work Programme for Forest Biological Diversity was adopted, which established an ad hoc technical expert group on forest biological diversity. In 2002, the CBD expanded Programme of Work on Forest Biological Diversity was adopted, which is composed of three elements:

i) conservation, sustainable use and benefit sharing;
ii) institutional and socio-economic enabling environment; and
iii) knowledge, assessment and monitoring.[18]

It also refers to strategies on in situ and ex situ conservation, sustainable resource use, the need to establish, evaluate and strengthen protected area networks, forest law enforcement, national co-ordination and the need to facilitate the participa-

17 For an overview, see Barbara M.G.S. Ruis, 'No Forest Convention but Ten Tree Treaties', Unasylva No. 206: Global Conventions Related to Forests, Vol. 52, 2001/3, www.fao.org/documents/show_cdr.asp?url_file=//docrep/003/y1237e/y1237e03.htm; and various background documents prepared for the IFF/UNFF, available at www.un.org/esa.

18 Convention on Biological Diversity, Decision VI/22, Forest Biological Diversity, www.biodiv.org/decisions/default.aspx?dec=VI/22.

tion of local and indigenous communities in the management of protected areas. The CBD Work Programme on Forest Biological Diversity is voluntary and non-binding and there are no time-bound commitments or targets. It will be reviewed in 2008. Many case studies on forest biodiversity, including in African countries, have been undertaken and national implementation of the CBD is continuously under way.

FAO Committee on Forestry (COFO)

The Committee on Forestry is the most important of the Food and Agriculture Organization (FAO) Forestry Statutory Bodies, which also include the Regional Forestry Commissions, the Advisory Committee on Paper and Wood Products, the Committee on Mediterranean Forestry Questions, the International Poplar Commission and the Panel of Experts on Forest Gene Resources. The biennial sessions of COFO, held at FAO headquarters, bring together heads of forestry services and other senior government officials to identify emerging policy and technical issues, seek solutions and advise FAO and others on appropriate action. This is achieved through periodic reviews of international forestry problems and appraisal of these problems; review of the FAO forestry work programmes and their implementation; advice to the Director-General on the future work programmes of FAO in the field of forestry and on their implementation; reviews of and recommendations on specific matters relating to forestry referred to it by the FAO Council, Director-General or member States; and reports to the FAO Council. Membership in COFO is open to all FAO member states wishing to participate in its work. The 17th Session of COFO in March 2005 decided on many issues, including the request to FAO to strengthen the Regional Forestry Commissions in order to boost national implementation of sustainable forest management

International Tropical Timber Agreement (ITTA) / International Tropical Timber Organization (ITTO)

The original ITTA entered into force in April 1985. It remained in force for an initial period of five years and was extended twice for three-year periods. The Agreement was renegotiated during 1993-1994. The successor agreement, ITTA 1994, entered into force on 1 January 1997. Its scope is broader and allows, for example, for consideration of non-tropical timber issues as they relate to tropical timber, and included the ITTO Objective 2000 to achieve export of tropical timber from sustainably managed sources by the year 2000. The ITTA 1994 was extended twice and is scheduled to expire on 31 December 2006. Currently negotiations are on-going in the UN Conference for the Negotiation of a Successor Agreement to ITTA. Three sessions have been held, and the fourth is scheduled for January 2006. The ITTA is a commodity agreement under the auspices of the United Nations Conference on Trade and Development (UNCTAD). The ITTA also established the International Tropical Timber Organization. The ITTO has members divided into two caucuses: producing members (33 members) and consuming members (26 members). Its

member states accounts for 80 percent of the world's tropical forests and 95 percent of world trade in tropical timber. Recent activities and issues receiving special attention include the establishment of new public-private forest partnerships such as the Congo Basin Forest Partnership.

United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD)

UNCCD aims at combating desertification, mitigating the effects of drought and contributing to sustainable development. This involves long-term strategies that focus on improved productivity of land and on the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions for people. The significance of UNCCD for forests is potentially enormous. Protection and expansion of forests are important elements in UNCCD, since forests have significant ecological functions that mitigate effects of drought and prevent desertification. Strategies to deal with desertification are likely to mitigate forest loss as well, and vice versa. Intact forest ecosystems help stabilize the soil. Consequently, deforestation fosters both desertification and land degradation and deforestation has serious consequences in terms of water runoff, soil erosion and loss of soil fertility.

In addition to this ecological connection, the underlying socio-economic conditions and causes of forest loss and desertification are very similar. Deforestation and other unsustainable forestry practices carried out by poor rural communities for economic, commercial or survival purposes have contributed to land degradation and loss of soil fertility in many developing countries. Sustainable forest management is an important part of the corrective actions envisaged under UNCCD to tackle land degradation, promote sustainable agricultural and rural development and reduce rural poverty.

Specific African Fora

There are also specific African fora. Hereunder you will find a short description of 15 of these, but there undoubtedly are more.

The African Ministerial Conference on the Environment (AMCEN)

AMCEN was established in 1985 to strengthen co-operation between African governments on economic, technical and scientific activities to halt the degradation of Africa's environment and satisfy the food and energy needs of the continent's people. Its mandate was to provide information and advocacy for environmental protection in Africa, to ensure that basic human needs are met adequately and in a sustainable manner, to ensure socio-economic development is realized at all levels and to ensure that agricultural activities and practices guarantee food security of the region. However, a number of constraints were encountered in the imple-

mentation of the AMCEN programme of work. Such constraints included limited resources – human, technological, institutional and financial. In 2000, AMCEN agreed to restructure its organizational arrangement and to establish an AMCEN Trust Fund that would be replenished by member states according to an agreed scale of contributions.

With respect to forests, AMCEN adopted the objectives of ensuring an effective and co-ordinated regional approach to Africa's participation in the on-going international dialogue on forests. It therefore agreed in January 2000 to an AMCEN common position on the IFF-4 agenda items and established an AMCEN Forum on Forests to forge a collaborative regional partnership whose main responsibilities would be to ensure an effective response to the global agenda on forests within the context of IFF. AMCEN requested in 2002 during the finalization of the action plan on the environmental initiative of the New Partnership for Africa's Development (NEPAD) that forest ecosystems be addressed as one of the major areas of intervention and that an operational framework for harnessing data, information and knowledge for sustainable development as a basis of national, subregional and regional integrated environmental assessment and reporting be included. In 2005, discussions were underway to establish AMCEN as a Specialized Technical Committee of the African Union.

Central Africa: Conference on the Central African Moist Forest Ecosystems
The Conference on the Central African Moist Forest Ecosystems (CEFDHAC) is a multi-stakeholder, governmental and non-governmental process. CEFDHAC, also known as the Brazzaville Process, was launched in May 1996 as a forum for consultation, information exchange and strengthening of subregional co-operation in matters concerning central African forests. The member countries are Burundi, Cameroon, the Central African Republic, Congo (Brazzaville), DRC, Equatorial Guinea, Gabon, Rwanda and Sao Tome and Principe. CEFDHAC is open to governments, non-governmental organizations, the private sector, research institutions and development agencies. CEFDHAC is a very broad discussion forum intended to foster collaboration on the conservation and sustainable use of the ecosystems of Central Africa's closed moist forests.

The Yaoundé Process / COMIFAC
The Yaoundé Declaration[19] was adopted by the Summit of Central African Heads of State on the Conservation and Sustainable Management of Tropical Forests, held in March 1999 in Yaoundé, Cameroon. The following countries participated in the summit: Cameroon, Chad, Congo (Brazzaville), Equatorial Guinea and Gabon. Among other activities and aims, the Yaoundé Declaration calls for action

19 For the French text of the Declaration see www.riddac.org/document/pdf/declarationyaounde.pdf . The Yaoundé Declaration spoken of here should not be confused with the Yaoundé Declaration, adopted in 1996, which deals with the promotion and protection of human rights.

towards harmonized national policies; participation of the rural population and the private sector in decisions on forests; transboundary protected areas; the fight against poaching and other unsustainable exploitation; financial systems that support sustainable forest management; and international co-operation.

The Conference of Ministers for Forests of Central Africa (COMIFAC) was established in 2002. COMIFAC is consequently defined as the only authority of orientation, decision-making and co-ordination of the subregional actions and initiatives as regards conservation and sustainable management of forest ecosystems. It ensures the follow-up to the Yaoundé Declaration and also the application of international conventions and forestry development initiatives in Central Africa. During the second extraordinary ministerial session of September 2004 in Libreville, Gabon, the organization became the Central Africa Forests Commission, keeping the initials COMIFAC.

Although its status had been adopted, COMIFAC had no viable legal basis which could enable it to benefit from financial flows coming from partners. Therefore, COMIFAC undertook negotiations with various member states to set up an internationally recognized legal framework. The unanimously accepted framework was baptized the Treaty on the Central Africa Forests Commission, and was adopted at the 2004 Libreville meeting. It was submitted for signature to the Second Summit of Heads of State on the Conservation and Sustainable Management of Forest Ecosystems in Central Africa which took place in Brazzaville in February 2005, and is subject to ratification or approval by the states in accordance with their respective procedures. The treaty intends to set up an overall legal framework which will govern and consolidate subregional co-operation in the field of conservation and sustainable management of forest ecosystems. It enables COMIFAC to be recognized on the international scene, and to benefit easily from various forms of support from partners and international donors. It also welcomed two more Central African nations, Angola and Sao Tome and Principe, to the Yaoundé Process of helping to conserve the region's forests. At the same summit, the governments of Cameroon, Congo (Brazzaville) and Gabon signed the TRIDOM agreement, allowing for the transborder management of 37 million acres of forest including Dja, Odzalka and Minekebe National Parks. This amounts to about 7.5 percent of the entire Congo Basin. The agreement is supported by a United Nations Development Programme – Global Environment Facility grant of USD 10 million.

Congo Basin Forest Partnership (CBFP)

At the World Summit on Sustainable Development (WSSD) in 2002, the Governments of South Africa and the United States, along with Conservation International, WWF, the Wildlife Conservation Society and many others, announced the establishment of the Congo Basin Forest Partnership (CBFP) to promote economic development, alleviate poverty, improve governance and enhance conservation

of natural resources in the region. These shared goals will be pursued through a network of national parks and protected areas, well managed forestry concessions and assistance to communities that depend on forest and wildlife resources in 11 key landscapes in six Central African countries: Cameroon, the Central African Republic, Congo (Brazzaville), DRC, Equatorial Guinea and Gabon. CBFP is an informal structure which comprises twenty-nine governmental and non-governmental organizations. It is qualified as a WSSD Type II partnership, i.e. a non-binding association of governments, private companies and civil society organizations. It is not an institution and does not have a secretariat. Working together, governments, business and civil society are committed to investing time, energy and resources to bring about positive change in natural resource management and sustainable livelihoods in one of the world's largest blocks of intact and interconnected tropical forest. Nobel Laureate Wangari Maathai of Kenya has been appointed as Goodwill Ambassador for the Congo Basin.

The CBFP is a mirror body intended to implement the timetable approved in Johannesburg and also to respond to the Yaoundé Declaration[20] on the conservation and sustainable management of forests. Its principal task is to co-ordinate the various partners, without taking part directly in the implementation or in the financing of programmes, and also to promote guidelines and actions validated by the beneficiary countries and COMIFAC. The first CBFP meeting was held in Paris in January 2003. It enabled the partners to make a review of their respective activities and to examine the future stages of the Partnership. On this occasion, it was decided to entrust the facilitation of CBFP to the United States for a two-year period. The second CBFP meeting was held in Brazzaville in June 2004. It devoted its attention to the examination of COMIFAC's Convergence Plan and considered financing mechanisms. CBFP also allows stressing common relevant points in other fora. For example, a representative of CBFP attended the Intergovernmental Meeting on Great Apes and the First GRASP Council Meeting, held in September 2005 in DRC. He noted that CBFP, like GRASP, is a WSSD Type II partnership, with involvement of both civil society and the private sector. GRASP was urged to take into consideration the use of forests by the private sector when considering great ape conservation, stressing the value of ensuring that private sector use is the least disturbing as possible for great apes.

Southern African Development Community (SADC)

The Declaration and Treaty establishing the Southern African Development Community (SADC) was signed on 17 August 1992.[21] SADC has 16 member states, some of which are members of the Common Market for Eastern and Southern

20 See above.

21 Declaration and Treaty establishing the Southern African Development Community, 17 August 1992, in force 30 December 1993, www.sadc.int/english/documents/legal/treaties/declaration_and_treaty_of_sadc.php.

Africa (COMESA). SADC objectives include regional economic integration, poverty alleviation, harmonization and rationalization of policies and strategies for sustainable development in all areas. The SADC Trade Protocol calls for an 85 percent reduction of internal trade barriers. Within the SADC region, the national currencies of Namibia, Lesotho, and Swaziland are linked to the South African rand through the Common Monetary Area (CMA). SADC members are working to eliminate exchange controls in preparation for an eventual single currency in the region. In March 2004, the SADC executive secretary announced a strategic plan that sets out a time frame for the economic integration of the region. Some of the outlined measures include the creation of a free trade area by 2008, establishment of a SADC customs union and implementation of a common external tariff by 2010, of a common market pact by 2012 and establishment of a SADC central bank and preparation for a single SADC currency by 2016.

SADC attempts also to provide a framework for co-operation in forestry among its member states through its Forestry Sector Policy and Development Strategy of 1997. Issues addressed in the Community's Forestry Sector Policy are reflected in the SADC Forestry Programme of Action, which is aimed at developing and implementing regional projects. The six programme components include: forestry training and education; improved knowledge of the forest resource base (forest resources assessment and monitoring, for example), forestry research, forest resources management (of indigenous, or natural, forests and plantations), forest industries, markets and marketing and environmental protection. Current SADC initiatives include the establishment of a Forest Resource Data Bank and the development of a Forestry Protocol for SADC,[22] which has been adopted but has not yet entered into force.

New Partnership for Africa's Development (NEPAD)

The NEPAD strategic framework document arises from a mandate given to the five initiating heads of state (Algeria, Egypt, Nigeria, Senegal, and South Africa) by the Organization of African Unity (OAU) to develop an integrated socio-economic development framework for Africa. The 37th Summit of the OAU in July 2001 formally adopted the strategic framework document.[23] NEPAD's primary objective is to eradicate poverty in Africa and to place African countries both individually and collectively on a path of sustainable growth and development and thus to halt the marginalization of Africa in the globalization process. Essentially, it calls for a new partnership relationship between African and the international community. NEPAD's priority areas are political governance, economic governance, market access and agriculture, human development, infrastructure, science and technology,

22 Southern African Development Community Protocol on Forestry, 3 October 2002, not yet in force, www.sadc.int/index.php?action=a1001&page_id=protocols_forestry.

23 Organization for African Unity, *The New Partnership for African's Development (NEPAD)* (OAU: Addis Ababa, 2001), www.nepad.org/2005/files/documents/inbrief.pdf.

and environment and tourism. NEPAD adopted the Environment Initiative, with combating desertification as one of its priority areas, and it has a Comprehensive Africa Agriculture Development Programme. Recently the NEPAD Secretariat has become more involved in forestry, including through participating in African forestry-related meetings. In October 2003, the ministers pledged to fight violations of forest laws by strengthening national institutions and by intensifying collaboration. The African Forestry and Wildlife Commission (AFWC)[24] organized, in 2004, a seminar on the place of forests in the implementation of NEPAD.

African Timber Organization (ATO)

The African Timber Organization (ATO) was formed in 1976 by Angola, Cameroon, the Central African Republic, Congo (Brazzaville), Côte d'Ivoire, Equatorial Guinea, Gabon, Ghana, Liberia, Nigeria, Sao Tome and Principe, Tanzania and what was then Zaire (now DRC). Collectively, these countries have more than 80 percent of total African forest cover. At its first regional seminar in Gabon in 1993, the ATO agreed to establish a regional sustainable forest management process with the ATO co-ordinating the programme and ensuring transparency and credibility. The ATO has developed principles, criteria and indicators for sustainable forest management, with assistance from the Forest Stewardship Council (FSC) and ITTO. In May 1996, a preliminary version of criteria and indicators for sustainable forest management was approved. By 2000, several African countries had embarked on a programme of developing and implementing criteria and indicators either through ATO or alternative organizations active in other subregions. Namibia, South Africa and Zimbabwe have set up criteria and indicator programmes through the Dry Zone Africa Process, and also some of their forest areas are certified by the FSC. COMIFAC is promoting new wood products through ATO.

Economic Community of West African States (ECOWAS)

The Economic Community of West African States (ECOWAS) is a regional group of fifteen countries, founded in 1975. Its mission is to promote economic integration, particularly in industry, transport, telecommunications, energy, agriculture, natural resources, commerce, monetary and financial matters, and social and cultural issues, among others. In 2002, the Annual Report of ECOWAS entitled *Fostering Regional Integration through NEPAD Implementation*[25] focused on economic integration in West Africa and ECOWAS's role in contributing to an enabling environment to support NEPAD. Among the activities that feature prominently as priority programmes are the promotion of peace, stability and security, judicious management of member country's economies, human resource development, protection of the environment, food security and the development of infrastructures and agriculture. No decisions on forests have been taken but this could happen in the future.

24 See below.

25 ECOWAS, *Fostering Regional Integration through NEPAD Implementation*, Annual Report 2002 of the Executive Secretary, ECW/CM/XLIX/2 (ECOWAS: Abuja, 2002).

African Union (AU)

In 1999, the heads of state and government of the Organization of African Unity (OAU) issued the Sirte Declaration calling for the establishment of an African Union (AU), with a view to accelerate the process of integration in the continent and its role in the global economy.[26] The Durban Summit (2002) launched the AU and convened the 1st Assembly of the heads of states of the African Union. The main objectives of OAU were to divest colonization and apartheid, promote unity and solidarity among African states, co-ordinate and intensify co-operation for development, safeguard the sovereignty and territorial integrity of member states and promote international co-operation within the framework of the United Nations. Among the objectives of the AU are to achieve greater unity and solidarity between the African countries and the peoples of Africa, to accelerate the political and socio-economic integration of the continent, to promote and defend African common positions on issues of interest to the continent and its peoples, to promote democratic principles and institutions, popular participation and good governance, to establish the necessary conditions which enable the continent to play its rightful role in the global economy and in international negotiations and to promote sustainable development at the economic, social and cultural levels as well as the integration of African economies. The AU established a Specialized Technical Committee on Industry, Science and Technology, Energy, Natural Resources and Environment and created an Environment Division for Environment and Natural Resources.

Interstate Committee to Fight Drought in the Sahel (CILSS)

CILSS is an intergovernmental organization composed of nine Sahelian countries, namely, Burkina Faso, Cape Verde, Chad, the Gambia, Guinea-Bissau, Mali, Mauritania, Niger and Senegal. It was formed in 1973 with the mandate to invest in research for food security and in the struggle against the effects of drought and desertification to achieve a new ecological equilibrium in the Sahel. It adopted a Major Programme on Natural Resources Management that also pertains to forests.

African Ministerial Processes for Forest Law Enforcement and Governance (AFLEG)

In May 1998, the G-8 launched an action programme on forests, which gives high priority to eliminating illegal logging and the illegal timber trade. The action programme sought to complement actions undertaken at the regional and international levels, and states the G-8's commitment to identifying actions in both producer and consumer countries. Several Forest Law Enforcement and Governance (FLEG) processes are now running in parallel. Since 2000, the issue of illegal logging has come to the fore in international forest policy debates, highlighting much wider is-

26 Sirte Declaration, 8-9 September 1999, www.un.int/libya/sirte_dc.htm. The declaration eventually led to the adoption of the Constitutive Act of the African Union, Togo, 11 July 2000, in force 26 May 2001, www.africa-union.org/root/au/AboutAU/Constitutive_Act_en.htm.

sues such as appropriate forest governance, effective law enforcement, sustainable trade, and ethical investment. On the regional level, the AFLEG Ministerial Conference convened in Yaoundé, Cameroon, on October 13-16, 2003, drawing together ministers from Africa, Europe and North America to consider how partnerships between producers and consumers, donors, civil society and the private sector could potentially address illegal forest exploitation and associated trade in Africa. The Conference resulted in the endorsement of a Ministerial Declaration and an Action Plan for AFLEG.[27] The AFLEG process is part of the New Partnership for Africa's Development (NEPAD)[28] and is intended to strengthen international and multi-stakeholder commitment. The objectives of the AFLEG process are to confirm the will and commitment of producer and consumer country governments and other stakeholders to FLEG, to address the need for shared responsibility and co-operation between stakeholders, and to develop a programme of action.

African Development Bank (ADB)

The African Development Bank Group is a multinational development bank supported by its member countries: 53 independent African countries (regional) and 24 non-African countries (non-regional) from North and South America, Europe and Asia. Headquartered in Abidjan, Côte d'Ivoire, the Bank Group consists of three institutions: the African Development Bank (ADB), the African Development Fund (ADF), and the Nigerian Trust Fund (NTF). ADB is a financial development institution dedicated to combating poverty, improving social quality, mobilizing the flow of external and domestic public and private resources, promoting investments and providing technical assistance and policy advice. The agreement establishing ADB was adopted under the auspices of the United Nations Economic Commission for Africa and entered into force in 1964. It began its operations in 1966. The ADB's 1994 Forestry Policy Paper was designed to enable member countries to derive maximum economic and environmental benefits from their forest resources. The priority areas of ABD's forest policy included conservation and rehabilitation of degraded forests, the establishment of wood fuel and industrial plantations, raising sawn timber production capacity, natural resources conservation, training and technical assistance and sectoral analyses. The ADB has funded various national projects for sustainable forest management.

African Forestry and Wildlife Commission (AFWC)

The African Forestry and Wildlife Commission (AFWC) is one of six regional forestry commissions of the FAO, which are intergovernmental bodies. FAO, through its decentralized forestry structure, supports these commissions. They generally meet every other year, and provide a forum for FAO member countries to discuss both technical and policy issues at the regional level. AFWC was estab-

27 Available at, for example, www.bushmeat.org/cd/meetings/AFLEGDeclaration-2003.pdf.

28 See above.

lished in 1959 and held its 14th Session in 2004. In 2004, AFWC held a specific pre-commission workshop on the implementation of IPF/IFF proposals for action and recommended, inter alia, that the Commission should provide a forum for strong regional forestry policy dialogue, including preparations for future global meetings for a common African position at UNFF-5 and for the sharing of experiences in implementation. Good collaboration exists within AFWC, such as between FAO and UNEP including UNEP's active participation in AFWC, especially on issues such as low forest cover countries and NEPAD. FAO is working to further strengthen the six regional commissions and specifically plans to make AFWC the regional forest forum in Africa, as recommended by COFO[29] and the FAO Council. Poverty, progress towards sustainable forest management, forest law compliance and financing sustainable forest management will be among the key topics at the 15th Session of AFWC in March 2006 in Mozambique. The 17th Session of COFO in March 2005 recommended, inter alia, that the Regional Forestry Commissions address the following key issues in their future work: i) collaboration on forest fire management; ii) regional forest policy dialogue; iii) forestry's contribution to poverty alleviation and achievement of the Millennium Development Goals; iv) valuation of environmental services; v) combating the threats of invasive species; vi) forests and water; vii) illegal logging and associated trade of forest products; and viii) elevating the importance of forestry on the political agenda.

World Commission on Protected Areas (WCPA)

The World Commission on Protected Areas (WCPA) is the world's leading global network of protected area specialists, and its mission is to promote the establishment and effective management of a worldwide representative network of terrestrial and marine protected areas. WCPA has some 1,300 members from over 140 countries. WCPA is centrally co-ordinated by a steering committee and supported by the IUCN Programme on Protected Areas (PPA). It is organized geographically, thematically and functionally. As of March 2001, WCPA has sixteen regions, including Eastern and Southern Africa, North Africa/Middle East and Western and Central Africa.[30]

African Convention on the Conservation of Nature and Natural Resources 2003

This convention is a complete revision of the original 1968 Convention with the same title. It was adopted in Maputo in 2003, by the Assembly of the African Union and has not entered into force yet. It establishes a road map for African countries to manage their natural resources more sustainably. The updated version of the convention takes into account recent developments in the African environment and its natural resources, bringing the convention to the level and standard of modern multilateral environmental agreements. It includes several provisions

29 See above.

30 See www.iucn.org/wcpa/region/regionindex.htm.

which directly address forest issues, in particular Article VIII, entitled Vegetation Cover, under which states shall:

> a) adopt scientifically-based and sound traditional conservation, utilization and management plans for forests, woodlands, rangelands, wetlands and other areas with vegetation cover, taking into account the social and economic needs of the peoples concerned, the importance of the vegetation cover for the maintenance of the water balance of an area, the productivity of soils and the habitat requirements of species;
> b) take concrete steps or measures to control fires, forest exploitation, land clearing for cultivation, grazing by domestic and wild animals, and invasive species;
> c) establish forest reserves and carry out afforestation programmes where necessary;
> d) limit forest grazing to season and intensities that will not prevent forest regeneration.[31]

The convention is based on the fundamental obligation that parties 'shall adopt and implement all measures necessary to achieve the objectives of this Convention, in particular through preventive measures and the application of the precautionary principle, and with due regard to ethical and traditional values as well as scientific knowledge in the interest of present and future generations.'

Conclusion

Forests are an important issue in many African countries; they cross-cut with many other issues such as biodiversity, health, indigenous people, poverty, water and land rights. The intergovernmental forest process is moving only slowly. There are many issues at stake for African countries which are, however, only marginally involved, although this trend appears to have recently reversed slightly. Many African countries have forest laws in place, and a ministry dealing with forests, some even for a long time. Sudan, for example, has a Forest Department that started work in 1902. However, having a legal and policy infrastructure implies no guarantee of effective implementation of international and regional obligations.

There are many international and regional treaties and organizations dealing with one or more aspects of forests. It is hard to get an accurate overview and it must be virtually impossible for African countries at the national level to fully comply with all obligations and implement all outcomes, or to develop coherent forest policies. In addition, most countries also have bilateral projects, with donor funding. Furthermore, overlaps often exist in obligations under various organizations and instruments, which sometimes even contain conflicting obligations. The overabundance of reporting requirements do not make things easier either. The ques-

31 African Convention on the Conservation of Nature and Natural Resources (Revised Version), Maputo, 11 July 2003, not yet in force, www.africa-union.org/root/au/Documents/Treaties/Text/nature%20and%20natural%20recesource.pdf

tion then remains: African countries need to decide if there is enough regulation in the forest arena, or if an all-encompassing legally binding or non-legally binding instrument is necessary to fight the existing fragmentation. If another instrument is needed, the modalities and conditions of such an instrument need to be carefully negotiated. Funding arrangements, capacity-building, technology transfer and the specific situation of the African continent are among the items that will have to be taken into account.

Selected Bibliography:

Canadian Council of International Law, *Global Forests and International Environmental Law*, International Environmental Law and Policy Series (Springer, 1996)

Food and Agriculture Organization, *State of the World Forests* (FAO: Rome, 2001, 2003, 2005)

D. Humphreys, *Forest politics* (Earthscan: London, 1996)

Michel Prieur and Stéphane Doumbe-Bille (eds.), *Droit, forêts et development durable* (Bruylant: Brussels, 1996)

B.M.G.S. Ruis, 'No forest convention but ten tree treaties', in FAO Unasylva No. 206 *Global Conventions Related to Forests* www.fao.org/documents/show_cdr.asp?url_file=/docrep/003/y1237e/y1237e00.htm

Beate Schulte zu Sodingen, *Der völkerrechtliche Schutz der Wälder* (Springer, 2003)

Richard Tarasofsky (ed.), *Assessing the International Forest Regime*, IUCN environmental policy and law paper (IUCN: Gland, 1999)

World Commission on Forests and Sustainable Development, *Our forests, our future* (Cambridge University Press, 1999)

Restricting the Import of Timber and Timber Products Harvested through Illegal Logging: A Review of relevant provisions of multilateral environmental agreements and precedents in other fields of international law[1]

Marc Pallemaerts[2] and Katia Bodard[3]

Introduction

This paper aims to identify international legal mechanisms that could be employed to restrict and prevent the import of illegal timber and timber products. It first considers existing multilateral environmental instruments that are relevant to the protection of forest biodiversity and the sustainable management of forests. It examines international environmental agreements that could be applied directly or indirectly to prevent the import of illegally harvested timber or justify national measures to this effect. A distinction is made between, on the one hand, those multilateral agreements which are of substantive relevance, such as the Convention

1 This paper was provided as background material to participants of the 2005 University of Joensuu – UNEP Course on International Environmental Law-making and Diplomacy. It is based on a study carried out by the authors for the Belgian Federal Public Service for Public Health, Food Chain Safety and Environment.

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on International Trade in Endangered Species (CITES),[4] the Convention on Biodiversity (CBD)[5] and the International Tropical Timber Agreement (ITTA)[6] and, on the other hand, other multilateral environmental agreements (MEAs) that have trade-related provisions. The latter category, comprising the Stockholm POPs Convention,[7] the Rotterdam PIC Convention,[8] the Basel Convention,[9] the Montreal Protocol[10] and the Cartagena Protocol,[11] is analyzed only in order to identify different mechanisms they use to regulate trade and prevent illegal trade in environmentally sensitive products, with a view to assessing the possibility of transposing those mechanisms to the trade in illegal timber.

Precedents in other fields of international law where mechanisms have been established to combat illicit trade in illegally produced or acquired goods – such as illicit art and antiquities, narcotics, small arms and conflict diamonds – will also be looked into, as they may provide useful models and analogies. It should be noted that the paper is only intended as a survey of the field and does not consider the comparative effectiveness of different policy options and legal techniques or the broader policy implications of the choice of any particular option.

4 Convention on International Trade in Endangered Species of Wild Flora and Fauna, Washington D.C., 3 March 1973, in force 1 July 1975, 993 *United Nations Treaty Series* 243, www.cites.org/eng/disc/text.shtml (hereinafter CITES).

5 Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, www.biodiv.org/doc/legal/cbd-en.pdf (hereinafter CBD).

6 International Tropical Timber Agreement, Geneva, 26 January 1994, in force 1 January 1997, www.itto.or.jp/live/PageDisplayHandler?pageId=201 (hereinafter ITTA).

7 Stockholm Convention on Persistent Organic Pollutants, Stockholm, 22 May 2001, in force 17 May 2004, 40 *International Legal Materials* (2001) 532, www.pops.int/ (hereinafter Stockholm Convention).

8 Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, Rotterdam, 11 September 1998, in force 24 February 2004, 38 *International Legal Materials* (1999) 1, www.pic.int/en/ViewPage.asp?id=104 (hereinafter Rotterdam Convention).

9 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel, 22 March 1989, in force 24 May 1992, 28 *International Legal Materials* (1989) 657, www.basel.int/text/con-e.htm.

10 Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 16 September 1987, in force 1 January 1989, 26 *International Legal Materials* (1987) 154, www.unep.org/ozone/pdfs/Montreal-Protocol2000.pdf (hereinafter Montreal Protocol).

11 Cartagena Protocol on Biosafety to the Convention on Biological Diversity, Montreal, 29 January 2000, in force 11 September 2003, www.biodiv.org/doc/legal/cartagena-protocol-en.pdf.

Multilateral Environmental Agreements of Substantive Relevance

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)[12]

The 1973 Convention on International Trade in Endangered Species (CITES) aims to protect certain endangered plant and animal species from over-exploitation by controlling international trade through a system of import and export permits.[13] Endangered forest species subject to international trade can be listed under the conditions laid down in the Convention in one of the three appendices.[14] Appendix I offers the highest protection as no commercial trade is permitted for these species. It includes all species that are threatened with extinction and are or may be affected by trade. Trade is strictly limited. It must only be authorized in exceptional circumstances and requires both import and export permits, and re-export certificates.[15] Appendix II lists species that can only be traded under strict conditions. This concerns species that are not necessarily threatened with extinction but may become so unless trade in these species is strictly regulated. Commercial trade of these species is only allowed when it is not detrimental to the survival of the species. For Appendix II listings, an export permit is required, and the import of any specimen of species included in Appendix II shall require the prior presentation of either an export permit or a re-export certificate.[16] Appendix III listings concern species that a party has subjected to stricter domestic regulation in relation to their export to prevent or restrict exploitation, and for which it needs the co-operation of other parties. Parties can themselves decide to list a specific species on Appendix III.[17] By doing so, they ask for the co-operation of other parties to control transborder trade. This means that consuming, importing countries must only allow the import of species with official CITES permits from the exporting countries.

12 See also: www.cites.org; United Nations Forum on Forests, *Recent Developments in Existing Forest-Related Instruments, Agreements, and Processes*, Background Document No. 2, Ad hoc expert group on Consideration with a View to Recommending the Parameters of a Mandate for Developing a Legal Framework on All Types of Forests, New York, 7-10 September 2004 at 15-16; O. Schramm Stokke and Oystein B. Thommessen (eds.), *Yearbook of International Co-operation on Environment and Development 2003/2004* (Earthscan: London, 2003) at 208-210; Esther Schroeder-Wildberg and Alexander Carius, *Illegal Logging, Conflict and the Business Sector in Indonesia* (InWEnt-Capacity Building International, Berlin, 2003) at 51-52; Luca Tacconi, Marco Boscolo and Duncan Brack, *National and International Policies to Control Illegal Forest Activities*, A report prepared for the Ministry of Foreign Affairs of the Government of Japan (Center for International Forestry Research: Jakarta, 2003) at 32-33; David M. Ong, 'The Convention on International Trade in Endangered Species (CITES, 1973): implications of recent developments in international and EC environmental law', in 10 *Journal of Environmental Law* (1998) 291-314.

13 Tacconi, Boscolo and Brack, *National and International Policies*, *supra* note 12, at 32; Schroeder-Wildberg and Carius, *Illegal Logging*, *supra* note 12, at 51.

14 Tacconi, Boscolo and Brack, *National and International Policies*, *supra* note 12, at 32.

15 Articles II(1) and III, CITES.

16 Articles II(2) and IV, CITES.

17 Ong, 'CITES', *supra* note 12, at 293; UNFF, *Recent Developments*, *supra* note 12, at 15.

The listing criteria are further clarified by CITES Conference of the Parties Resolution 9.25.[18] Species can only be included in Appendix III when a party needs the co-operation of other parties in trade control. A party must ensure: i) that the species is native to its country; ii) that the national regulations are adequate to prevent or restrict exploitation and to control trade, for the conservation of the species, and include penalties for illegal taking, trade or possession and provisions for confiscation; iii) that its national enforcement measures are adequate to implement these regulations; and iv) that for species that are traded for their timber, consideration is given to including only that geographically separate population of the species for which the inclusion would best achieve the aims of the Convention and its effective implementation, particularly with regard to the conservation of the species in the country requesting its inclusion in Appendix III. The listing state needs further to determine that, notwithstanding these regulations and measures, there are indications that the co-operation of other parties is needed to control illegal trade. It needs to inform the major importing states of its intention to include the species in Appendix III and seek their opinion.[19] Yet, any party to the Convention can make a reservation for a specific species listed on Appendix III.[20]

Trade in Appendix III species requires the export state to issue an export permit. This implies that all exports from the state that listed the species must be accompanied by a CITES export permit issued by the government of the exporting state. This permit is a guarantee that the export is legal and sustainable. The import of Appendix III species requires the prior presentation of a certificate of origin, or in case of re-export a certificate by the state of re-export, and an export permit where the import is from a state which has included that species in Appendix III. The re-export of species listed on Appendix III need to be accompanied by a re-export permit. Certificates for any re-export may only be issued when the re-exporting state is satisfied that the specimen was imported legally, with CITES documents. The CITES parties are responsible for seizing specimens which are not accompanied by a permit.[21]

To date, 20 tree species are listed on CITES Appendices I and II.[22] For example, ramin, a tropical hardwood found in Asian rainforests, was listed on Appendix II in 2004 after initially being listed on Appendix III, when Indonesia decided, in August 2001, to enforce a zero export quota on ramin logs. This has not prevented certain groups from smuggling ramin, mainly to Singapore and Malaysia. These countries serve as intermediate countries from where the illegal wood is exported

18 CITES Resolution 9.25, Inclusion of Species in Annex III, www.cites.org/eng/res/all/09/E09-25R10.pdf.

19 Willem Wijnstekers, *The Evolution of CITES* (7th ed., CITES: Châtelaine-Geneva, 2003) at 61-65.

20 Tacconi, Boscolo and Brack, *National and International Policies*, *supra* note 12, at 32.

21 Articles II(3) and V CITES.

22 Tacconi, Boscolo and Brack, *National and International Policies*, *supra* note 12, at 34.

to the EU, the United States and other countries. To effectively implement its export ban, Indonesia needs the co-operation of these intermediate countries to regulate the trade in this particular species. For this reason Indonesia, Malaysia and Singapore have set up the Tri-National Ramin Task Force and are co-operating to improve trade control systems and enhance enforcement.

In the absence of any other relevant legislation, a listing under CITES is currently the only available means for importing countries to seize timber resulting from illegal logging. However, CITES as a tool to combat illegal logging is confronted with several obstacles.[23] First, the number of timber species listed in Appendix III is limited as this depends on the unilateral decision of a state of origin to protect a specific species and to list it on Appendix III. As the import of Appendix III listings only requires the prior presentation of a certificate of origin, where the import is not from a state that has included the species in Appendix III, species listed under Appendix III will easily be smuggled to a country that has made a reservation for a specific species listing under Appendix III.

In contrast with Appendix III listings, the listing of any species on Appendices I and II requires the consent of the other parties.[24] As the listing of certain commercial tree species has led to a lot of controversy and opposition amongst CITES parties, it might not be evident to add substantial numbers of new species, and employ this listing mechanism to control illegal timber trade in general. Parties may also make a reservation for species listed under Appendices I and II. CITES might also not be the best instrument to control a substantial volume of international trade. The Convention, however, has been successful in preventing the extinction of particular endangered species, especially in the case of Appendix I listings for which commercial trade has been completely terminated.

Another problem is that in practice CITES permits are often forged. The reliance on paper certificates leaves the door open to fraud, theft and corruption. For importing countries, it is not always possible to properly crosscheck the documents and the

23 See also Tacconi, Boscolo and Brack, *National and International Policies*, *supra* note 12, at 33-35; Schroeder-Wildberg and Carius, *Illegal Logging*, *supra* note 12, at 51-52; Ong, 'CITES', *supra* note 12, at 297; Geert van Hoorick, *Internationaal en Europees Natuurbehoudsrecht* (Intersentia Rechtswetenschappen: Antwerpen, 1997) at 113; and Abdulqawi A. Yusuf, 'International Law and Sustainable Development: The Convention on Biological Diversity', 2 *African Yearbook of International Law* (1994) 109-137.

24 Consent must be achieved from a two-thirds majority of parties present and voting (affirmative or negative) at meetings of the Conference of the Parties. For amendments between meetings of the Conference of the Parties in the case an objection by any party is received by the Secretariat, the amendment shall be adopted by a two-thirds majority of parties casting an affirmative or negative vote provided that votes are received from one-half of the parties. Parties may wish to make a reservation with respect to the amendment within 90 days after adoption. The concerned state will then not be considered as a party to CITES with respect to trade in the species concerned. See Article XV, CITES.

real contents of the delivery, and to identify particular species. One of the weaknesses of the CITES permit system is the lack of detailed permit procedures and importing state controls. The enforcement of CITES is basically left to the parties and the political will and resources to implement CITES are not always available. Moreover, CITES lacks a comprehensive and independent monitoring system.

Convention on Biological Diversity[25]

The Convention on Biological Diversity (CBD) constitutes a global and comprehensive legal regime for the conservation and sustainable use of the planet's living resources and the systems which support them.[26] Although the CBD itself does not make any specific reference to forests, many of the articles of the Convention apply to forest ecosystems and forest biological resources.[27] Furthermore, the CBD Conference of the Parties (COP) has, as early as its second meeting, explicitly recognized that deforestation is a substantial threat to biodiversity. COP Decision II/9 acknowledged that 'the maintenance of forest ecosystems is crucial to the conservation of biological diversity well beyond their boundaries.'[28] Tropical forests, for instance, are estimated to shelter 50 percent of all known vertebrates and 60 percent of plant species, and account even for 90 percent of the total number of species on the planet. Deforestation caused by several factors, including illegal logging, results in disappearance of habitats for many species, and thus has great consequences for species equilibrium.[29]

Several CBD COP decisions and related work programmes[30] address the link between forest management and biodiversity in general terms.[31] It is only recently, however, in the Expanded Programme on Work on Forest Biological Diversity, that

25 See also: www.biodiv.org; Secretariat of the Convention on Biological Diversity, *Handbook of the Convention on Biological Diversity* (Earthscan: London, 2001); UNFF, *Recent Developments*, *supra* note 12, at 13-14; van Hoorick, *Natuurbehoudsrecht*, *supra* note 23, at 165-175.

26 Cyrille de Klemm, in collaboration with Clare Shine, *Biological Diversity Conservation and the Law: Legal Mechanisms for Conserving Species and Ecosystems*, IUCN Environmental Policy and Law Paper No. 29, (IUCN: Gland, 1993) at 17-24, 50-51, 162; Yusuf, 'International Law and Sustainable Development', *supra* note 23, at 110; van Hoorick, *Natuurbehoudsrecht*, *supra* note 23, at 167.

27 UNFF, *Recent Developments*, *supra* note 12, at 13.

28 CBD, Decision II/9, Forests and biological diversity, Annex: Statement on biological diversity and forests from the Convention on Biological Diversity to the Intergovernmental Panel on Forests, Annex, para. 5, November 1995, www.biodiv.org/decisions/default.aspx?m=COP-02&id=7082&lg=0.

29 International Scientific Conference, 'Biodiversity: Science and Governance', 24-28 January 2005, Document on Biodiversity, at 11.

30 CBD Decision II/9, *supra* note 28; CBD Decision III/12, Programme of work for terrestrial biological diversity: Forest Biological Diversity, November 1996 (retired), www.biodiv.org/decisions/default.aspx?m=COP-03&id=7108&lg=0; CBD Decision IV/7, Forest Biological Diversity, Annex: Work programme for forest biological diversity under the Convention of Biological Diversity, May 1998, www.biodiv.org/decisions/default.aspx?m=COP-04&id=7130&lg=0 (retired).

31 The concept of *forest biodiversity* relates to the diversity of animal and plant species that have their natural habitat in forests.

parties to the CBD have explicitly expressed their concern about the unfavourable impacts of illegal logging on conservation efforts.[32] This programme embraces a broad set of goals, objectives and activities aimed at the conservation of forest biodiversity, the sustainable use of its components and the fair and equitable use of the benefits arising from the utilization of forest genetic resources.[33] It focuses in particular on three main elements. The first element relates to conservation, sustainable use and benefit-sharing and covers largely biophysical aspects, such as the reduction of threats to forest biological diversity through restoration, agro-forestry, watershed management and the establishment of protected areas. The second element deals with the institutional and socio-economic environment that in turn enables the conservation and sustainable use of forest biological diversity. The third element covers knowledge, assessment and monitoring.[34]

The expanded work programme, for the first time, sets out a range of activities to Promote forest law enforcement and address related trade. In this programme, the CBD parties were recommended to:

> i) invite parties, governments and relevant organizations to provide information on a voluntary basis to enable a better comprehension of the effects of unsustainable harvesting, exploitation of other forest resources and associated trade, as well as on the underlying causes, on forest biological diversity. On the basis of dissemination of this information countries may decide to take relevant measures such as enforcement actions;
>
> ii) evaluate and reform, as required, legislation to include clear definition of illegal activities and to establish effective deterrents;
>
> iii) develop methods and build capacity for effective law enforcement;
>
> iv) develop codes of conduct for sustainable forest practices in logging companies and the wood-processing sector to improve biodiversity conservation;
>
> v) encourage and support the development and implementation of tracking and chain-of-custody systems for forest products to seek to ensure that these products are legally harvested;
>
> vi) invite governments and relevant organizations to develop and forward to the Secretariat case-studies and research on the impacts of unsustainable timber and non-timber harvesting and related trade.

It is particularly noteworthy that the COP has underlined the importance of a clear definition of illegal logging and of the implementation of effective forest law enforcement mechanisms. It should, however, be recalled that the work programme on forest biological diversity is voluntary and non-binding. There are no time-

32 CBD Decision VI/22, Forest Biological Diversity, Annex: Expanded Programme of Work on Forest Biodiversity, May 2002, www.biodiv.org/decisions/default.aspx?m=COP-06&id=7196&lg=0.

33 See CBD, 'Forest Biodiversity: Introduction', www.biodiv.org/programmes/areas/forest/default.asp.

34 *Ibid.*

bound commitments or specific targets either.[35] The activities in the programme are merely intended to provide guidance, and it is the right and responsibility of the parties to define their priorities in the implementation of these activities.[36] The CBD and the decisions of its COP do not contain specific provisions on trade control measures, licenses and exploitation possibilities, but they are relevant for their general principles and objectives relating to conservation and sustainable use of biodiversity.

International Tropical Timber Agreement (ITTA)[37]

The International Tropical Timber Agreement (ITTA) 1994[38] is the successor agreement to ITTA 1983, established under the auspices of the United Nations Conference on Trade and Development (UNCTAD). ITTA is the only legally binding forest-related international instrument, which is dedicated exclusively to certain aspects of forest management. The scope of this agreement is, however, rather limited as it only deals with tropical forests. As the first ITTA was being negotiated in the early 1980s, there already was increasing concern over the fate of tropical forests, prompting the international community to take action.[39] ITTA has 33 producing and 26 consuming members,[40] representing 95 percent of world trade in tropical timber and over 80 percent of the world's tropical forests. Its main objectives are consultation and co-operation to promote non-discriminatory international tropical timber trade practices and sustainable forest use, management and development.

The provisions and operations of this agreement are supervised by the International Tropical Timber Organization (ITTO), established by ITTA 1983 and consolidated by ITTA 1994. The specific operational policy objectives are set out in the ITTO's Yokohama Action Plan 2002-2006. The ITTO considers itself to be a rather unusual intergovernmental commodity organization as it seeks to reconcile trade and industry with sustainable management of natural resources as if it were also

35 UNFF, *Recent Developments*, *supra* note 12, at 13.

36 See CBD, 'Forest Biodiversity: Introduction', *supra* note 33.

37 See also www.itto.or.jp; International Tropical Timber Organization and International Trade Centre UNCTAD/WTO, *Tropical Timber Products: Development of further processing in ITTO producer countries* (Geneva, 2002); UNFF, *Recent Developments*, *supra* note 12, at 17 and 46-47; Schramm Stokke and Oystein B. Thommessen (eds.), *Yearbook of International Co-operation*, supra note 12, at 224-227; Alexandre Kiss and Jean-Pierre Beurier, *Droit international de l'environnement* (3rd ed., Les éditions Pedone: Paris, 2004) at 170; van Hoorick, *Natuurbehoudsrecht*, *supra* note 23, at 177 and 179-182; Mohamed Ali Mekouar, 'Rio et les forêts: de la déclaration à la convention?', in Michel Prieur and Stéphane Dounbe-Bille (eds.), *Droit, Forêts et Développement durable* (Bruylant : Brussels, 1996), 483-513 at 493-494.

38 Negotiations are taking place for a successor to this Agreement under the auspices of UNCTAD. The second session took place on 14-18 February 2005. ITTA 1994 contains a provision for two three-year extensions, which has been applied in practice.

39 For more information see ITTO, 'About ITTO', www.itto.or.jp/live/PageDisplayHandler?pageId=225.

40 Belgium and Luxembourg have joint membership.

an environmental organization.[41] The main tasks of ITTO relate to collecting and analyzing data on the production and trade of tropical timber, developing internationally agreed policy documents to promote sustainable forest management and forest conservation, assisting tropical member countries in adapting and implementing policies to local circumstances, and funding projects aimed at developing forest industries.

In November 2001, the ITTO Council launched a range of new activities. They essentially consist of providing resources to assist countries in addressing unsustainable timber harvesting, forest law enforcement and the illegal trade in tropical timber. In a document on new and emerging issues prepared for the 33rd Session of the ITTO Council in November 2003, one of the issues that was identified was the increased political attention to forest governance and law enforcement and commitment to combat illegal logging, associated illegal trade and corruption in the forest sector. The increased interest in monitoring and regulating the international trade of tropical timber species through CITES was also listed as a point of attention.[42]

Several ITTO policy decisions and guidelines[43] have been adopted for the sustainable management of natural tropical forests, for the establishment and sustainable management of planted tropical forests, on the conservation of biological diversity in tropical production forests, and for the restoration, management and rehabilitation of degraded and secondary tropical forests.[44] Criteria and indicators[45] as well as reporting formats for sustainable management of natural tropical forests are additionally set out to allow member countries to assess changes in forest conditions and management systems. ITTO requires its members to report on their estimation

41 See ITTO, 'About ITTO', *supra* note 39.

42 UNFF, *Recent Developments*, *supra* note 12, at 17-18.

43 All policy documents are retrievable from the ITTO website section entitled Policy papers and guidelines, www.itto.or.jp/live/PageDisplayHandler?pageId=201.

44 To further its objectives, ITTO also signed a co-operation agreement with the African Timber Organization (ATO) on the implementation of principles, criteria, and indicators for the sustainable management of African forests. In particular, this agreement set up a co-operation mechanism to promote sustainable forest management in Africa, and to enhance co-operation on the implementation of the ATO/ITTO principles, criteria, and indicators. ATO was formed in 1976 by 13 African countries, accounting for over 80 percent of total African forests, to manage the tropical forests of Africa. For this ATO set up a regional sustainable forest management process, a Criteria and Indicator Process, in 1996. See UNFF, *Recent Developments*, *supra* note 12, at 30.

45 At the 37th session of ITTO, which took place in Yokohama, Japan from 13-18 December 2004, a revised set of criteria and indicators for sustainable management of natural tropical forests was agreed on. These tools for monitoring, assessing and reporting on tropical forest management were simplified and shortened by reducing the number of conditions for forest managers to monitor and report, and by simplifying the instructions for doing so, which will help the practical application of sustainable forest management.

of the sustainable harvest level for each main wood and non-wood forest product and the actual annual harvest of these for each forest type.[46]

At the 37th Session of ITTO in December 2004, a Decision on Enhanced Co-operation between ITTO and CITES for Ramin and Mahogany[47] was agreed on. As ramin was listed in CITES Appendix II at CITES COP-13, highlighting the increased involvement of CITES with timber species, the ITTO Council decided to request the ITTO Executive Director to provide support to organize a meeting with all concerned parties to assist in the effective implementation of the CITES decision to list ramin on Appendix II, and to undertake further activities to assist range countries and major trading partners in implementing the CITES listings of ramin and mahogany. This would be done by strengthening capacity of customs authorities and enforcement agencies at national and regional levels to effectively implement the CITES Appendix II listing, by enhancing information and knowledge exchange on CITES procedures with regard to trade and implementation of the CITES Appendix II listing among producer and consumer countries and by enhancing co-operation and networking amongst producer and consumer countries, including civil society and the private sector, to improve mechanisms for CITES implementations and enforcement at both national and regional levels.

Although in recent years the ITTO has increasingly paid attention to issues of sustainable forest management and, most recently, to the problem of forest law enforcement, its primary objective remains the promotion and facilitation of international trade in tropical timber. This is reflected, *inter alia*, in the non-discrimination provision in Article 36 of ITTA 1994: 'Nothing in this Agreement authorizes the use of measures to restrict or ban international trade in, and in particular as they concern imports of and utilization of, timber and timber products.' This provision effectively excludes any reliance on ITTA (in its current form) or any decisions of the ITTO as a basis for the adoption by ITTO members of unilateral measures to ban or restrict imports of illegally harvested timber and timber products. Although this clause was inserted in ITTA 1994 in response to concerns of producing member states about certain measures concerning mandatory sustainability labelling or certification envisaged at the time by some importing countries, rather than in response to the current debate focusing on illegal timber trade, it would no doubt be invoked against any unilateral measures that may be contemplated to regulate this trade.

46 United Nations Environment Programme, Progress in the implementation of the thematic programmes of work. Forest biological diversity: integration of non timber forest resources in forest inventory and management, UNEP/CBD/SBSTTA/9/INF/14, 11 October 2003, www.biodiv.org/doc/meeting.aspx?mtg=sbstta-09&tab=1.

47 Decision 2(XXXVII), Enhanced co-operation between ITTO and CITES for Ramin and Mahogany, 18 December 2004, www.itto.or.jp.

Overview of Other Multilateral Environmental Agreements with Trade-related Provisions

Stockholm Convention[48]

The Stockholm Convention aims at protecting human health and the environment from persistent organic pollutants (POPs), by prescribing measures to phase out the intentional production and use of these chemicals, and to minimize their unintentional production and emission into the environment. It applies to 12 chemicals listed in three annexes and provides criteria and an intergovernmental decision-making procedure for including additional POPs within its scope. The chemicals covered at this time are all persistent chlorinated organic compounds, most of them produced intentionally for various agricultural, public health and industrial uses, and others which arise and are released into the environment as unintentional by-products of certain industrial processes. These POPs are considered to be of global concern due to their long-range transport and dispersion across international boundaries.

As the aim of the Stockholm Convention is to eliminate or minimize releases of POPs, it provides for regulatory measures targeting all stages in the life-cycle of those chemicals. International trade is just one of the many activities regulated by the instrument. The regulation of trade is in fact incidental to the regulation of other activities, such as the prohibition of intentional production and use. Each party is to take measures to eliminate the import and export of the chemicals listed in Annex A to the Convention. Import is to be permitted only 'for the purpose of environmentally sound disposal' or for certain specific uses or purposes which remain permitted for the importing party under a particular exemption provided for in the provisions of the Convention. Conversely, chemicals for which any production or use-specific exemption or acceptable purpose is in effect, may be exported by parties simply 'taking into account any relevant provisions in existing international prior informed consent instruments', a clause which implicitly refers to the Rotterdam Convention, either for the purpose of environmentally sound disposal, or to a party which is permitted to use that chemical under a particular exemption. Exports to non-parties to the Convention are not altogether banned but may be permitted only to states that provide an annual certification to the exporting party, specifying the intended use of the chemical and including 'a statement that, with respect to that chemical, the importing State is committed to […] protect human health and the environment by taking the necessary measures to minimize or prevent releases' and by complying with certain substantive provisions of the Convention.

48 Stockholm Convention, *supra* note 7. See also www.pops.int.

To enable the Conference of the Parties to monitor the implementation of the Convention, parties have a number of reporting obligations, including the duty to provide data on quantities of exported or imported POPs and the countries with which such trade takes place. The Stockholm Convention does not, however, contain any specific provisions on enforcement measures to prevent illegal trade.

Rotterdam Convention[49]

The scope of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade covers two categories of chemicals: banned or severely restricted chemicals and severely hazardous pesticide formulations. Chemicals are considered to be banned when 'all uses […] within one or more [use] categories have been prohibited by final regulatory action, in order to protect human health or the environment', and are regarded as 'severely restricted' when 'virtually all use […] within one or more [use] categories ha[ve] been prohibited by final regulatory action in order to protect human health or the environment, but […] certain specific uses remain allowed.' The regulatory actions referred to are actions taken by parties under their domestic law. A severely hazardous pesticide formulation is defined as 'a chemical formulated for pesticidal use that produces severe health or environmental effects observable within a short period of time after single or multiple exposure, under conditions of use.'[50] This definition does not refer to specific regulatory actions but to risks associated with certain conditions of use in developing countries or countries with economies in transition.

All chemicals subject to the trade-related provisions of the Convention are individually listed in Annex III, as a result of an intergovernmental decision-making process triggered by notifications of regulatory actions or risks under conditions of use made by parties and subject to detailed criteria spelled out in the Convention and its Annexes. The procedure and criteria for listing banned or severely restricted chemicals and severely hazardous pesticide formulations are different but once listed both categories of chemicals are treated in the same way and subject to the same trade regime.

The objective of the Rotterdam Convention is to promote shared responsibility and co-operative efforts amongst the parties in international trade of certain hazardous chemicals, in order to reduce risks to human health and the environment. The mechanisms used to this end are essentially aimed at ensuring information exchange about these chemicals and at providing for a national decision-making process on their import and export. The core mechanism instituted by the Convention is the so-called prior informed consent (PIC) procedure. It is important to

49 Rotterdam Convention, *supra* note 8. See also www.pic.int; UNFF, *Recent Developments*, *supra* note 12, at 46-47.

50 Article 2(d), Rotterdam Convention.

stress that under the Rotterdam Convention, international trade in PIC chemicals is not per se regarded as illicit. In fact, the Convention does not even refer to any such notion as illicit or illegal trade. However, it regulates trade in the chemicals within its scope by making it subject to the PIC system, under which both importing and exporting countries have specific obligations.

The main obligation of parties in relation to the import of listed chemicals is to take and notify to the Convention secretariat, within a certain period following receipt of a decision guidance document from the secretariat, a decision concerning the future import of the chemical concerned. This decision is entirely at the discretion of each party and may be a final or interim decision to consent to import, not to consent to import or to consent to import only subject to specified conditions. Any such decision is to be transmitted to the secretariat which shall communicate it to all other parties. With respect to the obligations of importing countries, the Convention also contains a provision translating the most-favoured nation and national treatment principles of GATT 1994 in the specific context of the PIC procedure, which stipulates that:

> A Party that […] takes a decision not to consent to importation of a chemical or to consent to its importation only under specified conditions shall, if it has not already done so, simultaneously prohibit, or make subject to the same conditions,
> (a) Importation of the chemical concerned from any source; and
> (b) Domestic production of the chemical for domestic use.[51]

The obligations of exporting parties with respect to exports of PIC chemicals are spelled out in Article 11 of the Convention. Each exporting party has a duty to 'take appropriate legislative or administrative measures to ensure that exporters within its jurisdiction comply with [PIC] decisions' of importing countries no later than six months after these decisions are communicated to all parties by the convention secretariat.[52] Thus, the onus of enforcement is shared between importing and exporting countries.

Basel Convention[53]

The scope of the Basel Convention on the Control of the Transboundary Movement of Hazardous Wastes and their Disposal is defined in Article 1, which in turn refers to several technical annexes. The Convention applies to wastes which are either defined as hazardous wastes under its own provisions, based on technical criteria in the relevant annexes, or which are 'defined as, or are considered to be, hazardous wastes by the domestic legislation of the Party of export, import or

51 Article 10(10), Rotterdam Convention.

52 Article 11(1)(b), Rotterdam Convention.

53 Basel Convention, *supra* note 9. See also www.basel.int.

transit.'[54] In addition, the Convention also applies to certain other wastes which it does not explicitly qualify as hazardous but nevertheless subjects to the same regime as hazardous wastes.

The regulation of transboundary movements of wastes under the Basel Convention is essentially based on a system of prior notification and consent, where such movements are not altogether prohibited under specific provisions. Thus, for example, the Convention prohibits the export of hazardous wastes and other wastes to parties which have prohibited the import of such wastes and have notified this prohibition to the Convention secretariat pursuant to a particular procedure. It also requires parties not to permit hazardous wastes or other wastes to be exported to a non-party or to be imported from a non-party, unless a special bilateral or regional agreement has been concluded between the parties concerned. In 1995, the Conference of the Parties to the Basel Convention adopted an amendment, which provides for a total ban on exports of hazardous wastes from parties which are member states of the OECD to any other states, whether parties to the Convention or not. However, this amendment, which is intended to prohibit the export of hazardous wastes from industrialized countries to developing countries has not yet entered into force, ten years after its adoption, due to an insufficient number of ratifications.[55]

In those cases where the transboundary movement of wastes is not banned in principle, it is subject to an administrative control procedure of prior notification and consent involving the competent authorities of importing and exporting parties. In essence, the state of export shall ensure notification of proposed exports to the competent authority of the state of import and shall not allow the generator or exporter to commence the transboundary movement unless the notifier has received the written consent of the state of import, as well as 'confirmation of the existence of a contract between the exporter and the disposer specifying environmentally sound management of the wastes in question.'

The Basel Convention contains rather detailed provisions on the illegal traffic in wastes subject to its regime. Illegal traffic is defined as

> any transboundary movement of hazardous wastes or other wastes:
> a) without notification pursuant to the provisions of this Convention to all States concerned; or
> b) without the consent pursuant to the provisions of this Convention of a State concerned; or

54 Article 1(1)(b), Basel Convention.

55 Nevertheless, the EC has already transposed it into EC law through an amendment to Regulation 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community.

> c) with consent obtained from States concerned through falsification, misrepresentation or fraud; or
> d) that does not conform in a material way with the documents; or
> e) that results in deliberate disposal (e.g. dumping) of hazardous wastes or other wastes in contravention of this Convention and of general principles of international law.[56]

Such illegal traffic is explicitly qualified as criminal in the Convention and each party is required to 'introduce appropriate national/domestic legislation to prevent and punish illegal traffic.'

Montreal Protocol[57]

The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer, as amended in 1990, 1991 and 1992 aims to phase out the production and consumption of specific ozone-depleting substances (ODS). It is virtually a universal treaty, since only seven States have not ratified it. The Protocol presently applies to 96 chemicals, referred to as "controlled substances". They include halocarbons, notably chlorofluorocarbons (CFCs) and halons, carbon tetrachloride, methyl chloroform, hydrobromofluorocarbons (HBFCs), hydrochlorofluorocarbons (HCFCs), methyl bromide and bromochloromethane. The inclusion of any substance in the list of controlled substances is the result of an intergovernmental decision-making process, which also determines the specific control measures to be applied by parties, which are laid down in annexes to the Protocol. These annexes are quite frequently updated through amendments and adjustments. Amendments require formal ratification by the parties, whereas adjustments enter into force through a simplified procedure.

The Montreal Protocol is not primarily concerned with international trade, but nevertheless contains some trade-related provisions. The main such provision is Article 4 on control of trade with non-parties. As a general rule, there is an obligation on parties to ban imports of controlled substances[58] from any state that is not a party to the Montreal Protocol, taking effect one year after the entry into force of the controls for the substance concerned. The same applies to exports of controlled substances to non-parties.[59] The trade restrictions laid down in the Montreal Protocol do not apply only to the controlled substances themselves, but also potentially to products containing controlled substances and even to 'products produced with, but not containing, controlled substances.' Imports of such products

56 Article 9, Basel Convention.

57 Montreal Protocol, *supra* note 10. See also ozone.unep.org/index.asp.

58 Some controlled substances are not yet subject to this measure, but the Meeting of the Parties is to consider extending the ban to them. See Article 4(10), Montreal Protocol.

59 There is, however, a provision that allows for the Meeting of the Parties to the Montreal Protocol to authorize derogations from these import and export bans if the non-Party concerned 'is determined, by a meeting of the Parties, to be in full compliance with' the substantive control measures laid down by the Protocol. See Article 4(8), Montreal Protocol.

from non-parties are also, in principle, to be banned by the parties. However, this obligation does not become effective automatically, but requires the adoption of a list of such products in the form of an annex to the Protocol. So far, the Meeting of the Parties to the Protocol has been rather reluctant to make these provisions effective by adopting the annexes provided for in various paragraphs of Article 4 of the Protocol. The only annex adopted thus far relates to the first generation of controlled substances: CFCs, carbon tetrachloride and methyl chloroform.

Finally, the Protocol provides for the establishment and implementation by the parties of a system for licensing the import and export of new, used, recycled and reclaimed controlled substances as a measure to control trade between parties and combat illegal trade. In practice, this control mechanism is faced with enforcement difficulties, as there are many cases of mislabelled containers and licenses being absent. The lack of adequate monitoring by customs means that such substances are often traded without licenses and controls.[60]

Cartagena Protocol[61]

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity seeks to protect biological diversity from the potential risks posed by living modified organisms (LMOs) resulting from modern biotechnology. It applies to 'the transboundary movement, transit, handling and use of all living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health.'[62] It is also potentially relevant for the conservation of forest biodiversity as it addresses the biosafety of genetically modified forest species in a similar way as that of any other LMOs.

The Cartagena Protocol aims at reconciling the needs of trade (in products of biotechnology) and protection of the environment with development interests which may be affected by biosafety. To this end, it introduces an advanced informed agreement procedure to control the trade in LMOs. This must ensure that importing countries can take informed decisions before agreeing to the import of LMOs. The entrenchment of the precautionary approach in the Protocol provides importing states with a second important policy instrument. On this basis, importing parties can review their decisions at any time in the light of new scientific information, which demonstrates the potential adverse effects on the conservation and sustainable use of biological diversity. This key provision is understood as a unilateral

60 Tacconi, Boscolo and Brack, *National and International Policies*, *supra* note 12, at 38.

61 Cartagena Protocol, *supra* note 11. See also www.biodiv.org/biosafety/default.aspx; Christoph Bail, Robert Falkner and Helen Marquard (eds.), *The Cartagena Protocol on Biosafety: Reconciling Trade in Biotechnology with Environment and Development?*, (Royal Institute of International Affairs: London, 2002); Secretariat of the CBD, *Handbook of the Convention on Biological Diversity*, *supra* note 25, at 27-50; Schramm Stokke and Oystein B. Thommessen (eds.), *Yearbook of International Co-operation*, *supra* note 12, at 196-200.

62 Article 4, Cartagena Protocol.

measure, applicable without multilateral approval or monitoring mechanisms.[63] The Protocol thus emphasizes the sovereignty of importing countries, and leaves unrestricted the possibility for countries to take more stringent action to protect the conservation and use of biological diversity

The trade mechanisms are further supported by provisions on co-operation, handling, transport, packaging and identification, information and transparency, and measures regarding public awareness and participation. The Protocol also contains a provision on illegal transboundary movements of LMOs. To prevent illegal transboundary movements each state party needs to adopt the appropriate domestic measures, including, where appropriate, the penalizing of transboundary movements of LMOs carried out in contravention of its domestic measures implementing the Protocol. Such movements shall be deemed illegal. In the case of an illegal transboundary movement, the affected party may also request the party of origin of the LMOs to dispose of the LMOs at its own expense. This can be done by repatriation or destruction, as appropriate.

Relevance of the regulatory mechanisms under these MEAs as a model for the regulation of illegal trade in timber

Many MEAs already provide for specific trade control measures to be taken by their parties as one instrument to help achieve internationally agreed environmental policy objectives. The above review of the trade measures contained in the Stockholm Convention, the Rotterdam Convention, the Basel Convention, the Montreal Protocol and the Cartagena Protocol, however, indicates that these do not provide a ready-made model that could easily be applied to the regulation of the illegal timber trade. The trade control procedures they contain are mostly aimed at the protection of environmental interests in the territories of importing countries. Though some trade restrictions are also justified by environmental concerns of a transboundary or even global nature, none are specifically aimed at the protection of environmental values within the territorial jurisdiction of countries exporting the products subject to regulation, as would be the purpose of any regulation of trade in illegally harvested timber.

Thus, the PIC procedure set out in the Rotterdam and Basel Conventions is not relevant as a model for the regulation of illegal timber trade, because its main purpose is to protect the environmental and health interests of importing rather than exporting countries. The Rotterdam Convention deliberately avoids qualifying any form of trade as illegal and applies only to a very limited list of products which are identified at the international level through an intergovernmental decision-making procedure, rather than by reference to what is considered legal or

63 Thomas Cottier, 'Implications for Trade Law and Policy: Towards convergence and integration', in Bail, Falkner and Marquard (eds.), *The Cartagena Protocol on Biosafety*. *Supra* note 61, 467-481, at 468.

illegal under the domestic law of any state. The Basel Convention's detailed provisions on illegal transboundary movements of waste might have some relevance as a precedent for regulation of illegal trade in timber. However, the administrative modalities for implementing the PIC procedures under both Conventions would be much too cumbersome in this context given the specific nature and volume of the timber trade.

Similar observations can be made on the advanced informed agreement procedure as laid down in the Cartagena Protocol. Like those of the Basel Convention, the Protocol's provisions on illegal transboundary movements are an interesting precedent as regards the qualification of some forms of international trade as illicit on environmental grounds. The Stockholm Convention and the Montreal Protocol are also significant in that they specifically outlaw certain trade transactions involving chemical products which cause global environmental risks of concern to the international community as a whole. However, these trade-related provisions are incidental to measures designed to phase out all production and consumption of the chemicals concerned.

Some Relevant Precedents and Experiences in Other Fields of International Law and Policy

Trade in illegally harvested timber is in essence comparable to trade in other illegally produced or acquired goods. Examples of illegally acquired or produced goods, which are traded in legal and illegal circuits and which are spread worldwide and are worth billions of dollars, are illicit art and antiquities, illegal drugs and narcotics, small arms and light weapons, and diamonds from areas of armed conflict, so called conflict diamonds.

The trade in illicit art and antiquities

The trade in stolen artwork and antiquities accounts for billions of dollars. It is the second largest clandestine industry after drugs and is used as a front for money laundering.[64] Goods are smuggled from nations with rich archaeological heritages to countries where there is a high demand and market for art.[65] The looting of archaeological sites all over the world causes mass destruction of archaeological heritage.[66] Specific problems encountered in practice are: high demand for art and

64 Reported by Interpol officers. See Sara Marani, 'Italy art crime booms in borderless Europe', 19 May 1999, museum-security.org.

65 Gaia, Regazzoni, 'The beginning of the end?', *The Art Newspaper*, 8 February 2005, www.theartnewspaper.com.

66 Neil Brodie and Jennifer Doole, 'Illicit antiquities', in Neil Brodie, Jennifer Doole and Colin Renfrew (eds.), *Trade in Illicit Antiquities: The Destruction of the world's archaeological heritage* (McDonald Institute Monographs: Cambridge, 2001) at 1.

antiquities; the practice of acquiring antiquities outside of scholarly excavation, (synonym to looted or plundered antiquities(and smuggling them to other countries; the high amount of smuggling as a consequence of strict laws curbing (legal) trade; countries where trade in smuggled as opposed to stolen works of art is not criminalized, and where the national legal systems thus do not recognize illicit export as a crime; works of art which can be exported without specific export requirements and controls; difficulties in determining the origin of antiquities and ownership history (so-called indeterminate provenance); the ease of hiding the origins of antiquities by stating, for example, that the artefact was dug up on a farm of a local family; wartime situations in an archeologically rich country resulting in inadequate policing of archaeological sites or protection of heritage; and auction sales used as clearing houses for illicit art.[67]

Several national laws[68] have been introduced in the 20th Century either claiming cultural property as state property or restricting export to multiple artefacts and/or declined items, while at the same time requiring registration of collectors and/or dealers.[69] Other countries, such as Switzerland, however, have until today had no antiquities control legislation at all,[70] which explains why this country is the major market for stolen and smuggled archaeological goods and works of art.[71]

At the international level the problem of trade in illicit art and antiquities has been addressed in two major conventions, known as the 1970 UNESCO Convention and the 1995 UNIDROIT Convention. These conventions define the concept of cultural property and cultural objects, respectively, in a comprehensive but exhaustive manner, and employ almost exactly the same definition.[72] The UNIDROIT Convention is a complement to the UNESCO Convention and the link between the two is especially evident in the definition employed.[73] There is, however, one noticeable difference illustrating the different philosophy of each convention, insofar as the UNESCO Convention explicitly states that each party needs to specifically

67 Extracted from Sara Marani, 'Italy art crime booms', *supra* note 64, and Kareem Fahim, 'The Whistle-Blower at the Art Party. A Curator Takes on His Museum', *The Village Voice*, 6-12 August 2003, www1.villagevoice.com/news/0332,fahim,46047,1.html.

68 Examples include El Salvador (1903), Greece (1932), Italy (1939) and Turkey (1983).

69 Alexi Shannon Baker, 'Selling the Past: *United States v. Frederick Schultz*. International Antiquities Law Since 1900', *Archaeology*, 22 April 2002, www.archaeology.org/online/features/schultz/intllaw.html.

70 Switzerland has recently introduced a bill on the international transfer of cultural property that should, once in effect, finally make the transfer of art and artefacts into Switzerland become more transparent. See Regazzoni, 'The beginning of the end?' *supra* note 65.

71 Baker, 'Selling the Past', *supra* note 69.

72 The latter would allow the two conventions to be complementary and work together, and offer the possibility to states to join both conventions. See Lyndel V. Prott, 'Unesco and Unidroit: a Partnership against Trafficking in Cultural Objects', 1 *Revue de droit uniforme* (1996) 59-71 at 62.

73 Lyndel V. Prott, *Commentary on the UNIDROIT Convention* (Institute of Art and Law: Leicester, 1997) at 15.

designate a property for it to fall under the definition of the Convention, which is not the case for the UNIDROIT Convention.

The UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property[74] declares as illicit 'the import, export or transfer of ownership of cultural property contrary to provisions adopted under this Convention by the States Parties.'[75] It is important to stress that under this Convention the emphasis is put on national law to determine what constitutes illicit trade. The problem of illicit traffic is dealt with through administrative procedures and state actions.[76] The parties to the Convention are obliged to prohibit the export of cultural property without certification, to prohibit the import of stolen goods, to prevent the import of illegally exported goods and to assist in the return of stolen goods. Parties have the right to recover stolen antiquities subject to certain conditions to be fulfilled. As the philosophy of the UNESCO Convention is to require government action, the state of origin needs to have designated the objects which it is requesting to be returned as cultural property.[77] The state of origin also needs to request the importing state to undertake the appropriate steps to recover and return any such cultural property imported. It has to deliver, at its own expense, the documentation and other evidence necessary to establish its claim for recovery and return. Finally, the state of origin needs to pay just compensation to the innocent purchaser or the person with a valid title to that property. Yet, the Convention largely limits the return of stolen property to property stolen from a museum or a religious or secular public monument or similar institutions, provided that such property is documented as appertaining to the inventory of that institution.[78]

The parties to the UNESCO Convention need to take the necessary measures to prohibit the import of stolen goods and to prevent museums and similar institutions from acquiring such illegally exported cultural property. To prevent illicit export, the Convention provides for an administrative certification system to control the art trade. Switzerland, which as mentioned above is a major transfer country for smuggled illegal art and antiquities due to its lack of antiquities control legislation has recently been moving towards ratification of the 1970 UNESCO Conven-

74 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transport of Ownership of Cultural Property, Paris, 14 November 1970, in force 24 April 1972, portal.unesco.org/en/ev.php-URL_ID=13039&URL_DO=DO_TOPIC&URL_SECTION=201.html (hereinafter UNESCO Convention). See also www.unesco.org; Prott, 'Unesco and Unidroit', *supra* note 72, at 59-71; Regazzoni, 'The beginning of the end?', *supra* note 65.

75 Article 3, UNESCO Convention.

76 Prott, *Commentary on the UNIDROIT Convention*, *supra* note 73, at 15.

77 Prott, 'Unesco and Unidroit', *supra* note 72, at 62.

78 *Ibid.*.

tion, and has for this purpose introduced a draft bill on the international transfer of cultural property[79] with a view to implementing the Convention.[80]

The UNIDROIT Convention on Stolen or Illegally Exported Cultural Objects[81] is complementary to the UNESCO Convention as it provides direct access to the courts of one state by either the owner of a stolen cultural object or by a state from which a cultural good has been illicitly exported.[82] The implementation of the UNIDROIT Convention is, in contrast to the UNESCO Convention, largely dependent on private action. Goods, whether stolen or illegally exported, can be recovered under this Convention even when the state has not designated or registered them.[83] The Convention requires that the possessor of a cultural object must in all cases restitute stolen goods, whether they were bought in good faith or not. The possessors in good faith of these goods are entitled to compensation. For the purposes of this Convention:

> a cultural object which has been unlawfully excavated or lawfully excavated but unlawfully retained shall be considered stolen, when consistent with the law of the State where the excavation took place.[84]

A contracting state may request the competent authority of another contracting state to order the return of a cultural object illegally exported from the territory of the requesting state. Again, the possessor in good faith is entitled to compensation. Illegally exported goods are defined as:

> cultural objects removed from the territory of a Contracting State contrary to its law regulating the export of cultural objects for the purpose of protecting its cultural heritage.[85]

In analogy with the UNESCO Convention, the emphasis is put on national law to determine what is to be considered as illicit trade. Most European continental civil law systems know the rule of the protection of the *bona fide* buyer, whereby good faith is presumed and possession represents title. This facilitates the passing into licit trade of illegally acquired goods.[86] Many other states, however, protect

79 See *supra* note 70.

80 See Regazzoni, 'The beginning of the end?', *supra* note 65.

81 UNIDROIT Convention on Stolen or Illegally Imported Cultural Objects, Rome, 24 June 1994, in force 1 July 1998, www.unidroit.org/english/conventions/1995culturalproperty/1995culturalproperty-e.htm (hereinafter UNIDROIT Convention). For the status of ratifications of the UNIDROIT Convention see www.unidroit.org/english/implement/i-95.pdf. See also www.unidroit.org; Prott, 'Unesco and Unidroit', *supra* note 72, at 59-71; Prott, *Commentary on the UNIDROIT Convention*, *supra* note 73; Regazzoni, 'The beginning of the end?', *supra* note 65.

82 Prott, *Commentary on the UNIDROIT Convention*, *supra* note 73, at 15.

83 Prott, 'Unesco and Unidroit', *supra* note 72, at 62.

84 Article 3(2), UNIDROIT Convention.

85 Article 1, UNIDROIT Convention.

86 Prott, 'Unesco and Unidroit', *supra* note 72, at 68.

the original owner, rather than the *bona fide* buyer.[87] The UNIDROIT Convention aims at reconciling these different legal approaches and the various interests of all the different actors involved in the trade of art and antiquities. The purpose of the Convention is to force buyers to show diligence and to check whether the goods have come on the market legally. The underlying reason for this requirement is the vast amount of illegally excavated and traded objects from countries all over the world, which forms a substantial part of the art market. This problem is believed to remain unless the buyers themselves demand evidence that goods offered for sale to them have been legally acquired. The UNIDROIT Convention therefore imposes a risk on the buyer's side.

The UNESCO Convention provides for a broad range of measures to prevent and prohibit illegal trade, including the restitution of stolen goods, whereas the UNIDROIT Convention, introducing a scheme under private law, addresses in more detail the restitution of stolen goods and the return of illegally exported goods. Illicit trade is dealt with by the UNESCO Convention by setting up a control system by means of a certification scheme. The exporting state needs to specify in the certification document that export of the cultural property in question is authorized. This document should accompany all items of cultural property, which are exported in accordance with the regulations of this Convention. The exporting state also has to prohibit the exportation of cultural property from its territory when this is not accompanied by the export certification, and it has to publicize this prohibition by appropriate means.

In contrast to these explicit obligations for exporting states, there are no explicit obligations specified for importing states as to enforcing these certification requirements. Importing states need to undertake the necessary measures to prevent museums and similar institutions within their territories from acquiring cultural property originating in another state party, which has been illegally exported from the state concerned. Whenever possible, the importing state needs to inform the state of origin of any offer of cultural property illegally removed from that particular state. Import prevention is thus limited to acquisitions by museums and similar institutions. Importing states also need to prohibit the import of stolen cultural property, but this is limited to goods which are stolen from museums or religious or secular public monuments or similar institutions in another party. Additionally, importing states are obliged to respond to emergency requests from states of origin by taking appropriate steps to recover and return looted cultural goods. In such cases of cultural patrimony in jeopardy from pillage of archaeological or ethnological materials, Article 9 of the UNESCO Convention requires the parties to participate in concerted efforts to determine and carry out the necessary concrete measures, including the control of exports and imports and international

87 *Ibid.*, at 67.

commerce. Other enforcement measures relate to providing an adequate budget, and if necessary a fund for this purpose, and calling for technical assistance from UNESCO and co-operation of any competent non-governmental organization.

The emergency action provided for in Article 9 has been implemented by the United States,[88] for example, in the form of import bans, but the state of origin concerned has to prove that there is a specific danger, in accordance with the requirement of Article 9, which refers to 'cultural patrimony […] in jeopardy from pillage of archaeological or ethnological materials.' The bans are for a limited period of time, and for a particular type of object from a particular area. Such bans have been introduced, as Prott reports, at the request of Bolivia, El Salvador, Guatemala, Mali and Peru.[89] Through import controls the export laws of foreign countries are enforced.[90]

Neither the UNESCO nor UNIDROIT Conventions are directly applicable and both therefore require national legislation to enact the agreed principles. As to the effectiveness of transposing these Conventions' mechanisms, several elements are interesting. A mechanism like that provided under Article 9 of the UNESCO Convention, which requires parties to provide assistance upon request to parties whose cultural patrimony is in jeopardy, could likewise be envisaged to prohibit the import of timber that has been illegally harvested under the laws of the exporting country, where its forest biological resources are under specific threat. It is significant that this multilateral mechanism has been considered by the United States to be sufficient grounds for introducing import bans. Elsewhere, a resource and assistance commitment similar to that incorporated in the UNESCO Convention would help to strengthen enforcement mechanisms which would also be useful in the context of combating illegal timber trade.

The international regulation of trade in narcotics

Trade in illegal or illicit drugs or narcotics counts for nearly 10 percent of total world trade, representing an estimated annual USD 400-500 billion. The trade affects nearly every country on this planet rendering it truly global.[91] This globalization of illicit narcotics is no different from the globalization of licit goods. Both

88 The United States implemented certain parts of the UNESCO Convention in 1983 with the Convention on Cultural Property Information Act, www.culturalpolicycouncil.org/Laws%20and%20Conventions/Convention_on_CulturalPropertyImplementationAct.htm.

89 Prott, 'Unesco and Unidroit', *supra* note 72, at 62-63 and 65.

90 Neil Brodie, 'Lessons from the Illegal Trade in Antiquities', from the seminar Regulation, Enforcement and the International Trade in Wildlife: New Directions for Changing Times, Cambridge, September 2001.

91 Chantal Thomas, 'Disciplining Globalization: International law, illegal trade, and the case of narcotics', 24 *Michigan Journal of International Law* (2003) 1-33 at 4 and at note 12.

have the same causes: advanced communication technology, modern transportation and the expansion through multilateral trade agreements of trade itself.[92]

Notwithstanding the importance of illegal drug trafficking in volume and value, the globalization of trade in narcotics has been largely neglected in international legal literature.[93] The early conventions on narcotics dating from the first half of the 20th Century mainly focused on the medical side of narcotics. Trade was to be controlled in accordance with medical and scientific concerns. In the second half of the 20th Century, focus was gradually shifted from an administrative approach towards a punitive approach.[94] The 1988 UN Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substance[95] visibly marked this trend by expanding the scope of what is considered to be criminal and by reducing the rehabilitative focus.[96] Illicit traffic is defined by reference to a list of offences laid down in Article 3, Paragraphs 1 and 2,[97] which essentially covers 'production, manufacture, extraction, preparation, offering, offering for sale, distribution, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit, transport, importation or exportation of any narcotic drug or any psychotropic substance' contrary to the regulatory provisions of either the 1961 UN Single Convention on Narcotic Drugs or the 1971 UN Convention on Psychotropic Substances.[98]

The 1988 UN Convention is a clear example of an international treaty obliging states to adopt measures at the national level criminalizing certain acts including illegal production, transport, import, and export of specified controlled sub-

92 *Ibid.*, at 4-6.

93 *Ibid.*, 6.

94 *Ibid.*, 10-12.

95 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 20 December 1988, in force 1 November 1990, www.unodc.org/unodc/en/un_treaties_and_resolutions.html.

96 Thomas, 'Disciplining globalization', *supra* note 91, at 12.

97 Article 3, UN Narcotic Drugs Convention, Offences and Sanctions:
1. Each Party shall adopt such measures as may be necessary to establish as criminal offences under its domestic law, when committed intentionally:
(a)(i) The production, manufacture, extraction, preparation, offering, offering for sale, distribution, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit, transport, importation or exportation of any narcotic drug or any psychotropic substance contrary to the provisions of the 1961 Convention, the 1961 Convention as amended or the 1971 Convention; […]
2. Subject to its constitutional principles and the basic concepts of its legal system, each Party shall adopt such measures as may be necessary to establish as a criminal offence under its domestic law, when committed intentionally, the possession, purchase or cultivation of narcotic drugs or psychotropic substances for personal consumption contrary to the provisions of the 1961 Convention, the 1961 Convention as amended or the 1971 Convention.

98 Single Convention on Narcotic Drugs, New York, 30 March 1961, in force 8 August 1975, www.unodc.org/pdf/convention_1961_en.pdf (hereinafter UN Single Convention); Convention on Psychotropic Substances, Vienna, 21 February 1971, in force 16 August 1976, www.unodc.org/pdf/convention_1971_en.pdf.

stances.[99] The illicit acts in question are determined by the earlier UN Conventions which, in relation to production and trade, essentially provide for three kinds of regulatory measures. First, manufacture controls are called for:

> 1. The Parties shall require that the manufacture of drugs be under licence except where such manufacture is carried out by a State enterprise or State enterprises.
> 2. The Parties shall:
> a) Control all persons and enterprises carrying on or engaged in the manufacture of drugs;
> b) Control under licence the establishments and premises in which such manufacture may take place; and
> c) Require that licensed manufacturers of drugs obtain periodical permits specifying the kinds and amounts of drugs which they shall be entitled to manufacture. A periodical permit, however, need not be required for preparations.[100]

Second, export controls must be set up:

> The Parties shall not knowingly permit the export of drugs to any country or territory except:
> a) In accordance with the laws and regulations of that country or territory; and
> b) Within the limits of the total of the estimates for that country or territory, […] with the addition of the amounts intended to be re-exported.[101]

Third, enforcement action against illicit traffic must be undertaken:

> Having due regard to their constitutional, legal and administrative systems, the Parties shall:
> a) Make arrangements at the national level for co-ordination of preventive and repressive action against the illicit traffic; to this end they may usefully designate an appropriate agency responsible for such co-ordination;
> b) Assist each other in the campaign against the illicit traffic in narcotic drugs;
> c) Co-operate closely with each other and with the competent international organizations of which they are members with a view to maintaining a co-ordinated campaign against the illicit traffic;
> d) Ensure that international co-operation between the appropriate agencies be conducted in an expeditious manner[102]

The 2000 UN Convention against Transnational Organized Crime[103] confirms the trend of criminalizing certain acts related to illegal drug trafficking by also focus-

99 Steve Charnovitz, 'The World Trade Organization and Law Enforcement', Paper prepared for the Round Table on 'Old Rules, New Threats' co-sponsored by the American Society of International Law and the Council on Foreign Relations, Original presentation 6 March 2003, manuscript revised 15 April 2003; Thomas, 'Disciplining Globalization', *supra* note 91, at 11-12.

100 Article 29, UN Single Convention.

101 Article 31(1), UN Single Convention.

102 Article 35, UN Single Convention.

103 The United Nations Convention against Transnational Organized Crime, GA Res. 55/25, 15 November 2000, in force 29 September 2003, www.unodc.org/unodc/en/crime_cicp_convention.html.

ing on organized group participation and laundering of criminal profits.[104] This Convention requires states parties to the Convention to establish in their domestic laws four criminal offences, namely: participation in an organized criminal group, money laundering, corruption and obstruction of justice. Alongside enlarging the scope of criminal acts, these conventions have also gradually moved forward to a more formal and uniform structure for enforcement. Departing from an administrative approach to the definition of legal trade, additional enforcement mechanisms, such as confiscation of narcotic materials, instruments and proceeds and eradication of illicit crops, have been introduced by the latest conventions.[105] As trade in narcotics has globalized, new mechanisms to deal with this have become necessary.[106] The international legal conventions regulating trade in narcotics have established a multilateral basis for the uniform punishment of private individuals.[107] However, the enforcement costs related to the prohibition of illegal drugs are extremely high.

The experience gained from international efforts to control illegal trade in narcotics is relevant to the problem of illegal logging in a number of respects. The analogy between both problems of illicit trade consists in the high profits and low risks related to illegal logging and the international trade in illegal timber and timber products, leading to corruption and violence, and the sustaining of internal conflicts in producing countries alongside the great environmental damage caused. The experience in the field of narcotics indicates that implementing a prohibition regime, such as for international trade in illegal narcotics, implies a very high administrative cost of control and enforcement. The implementation of a prohibition regime also necessitates a multilateral agreement for uniform criminalization and action. This implies reaching consensus on issues such as what exactly is to be defined as illegal logging.

Illicit trade in small arms and light weapons

Small arms and light weapons (SALW) are categorized as conventional weapons. For arms control purposes they are differentiated from other conventional, nuclear, chemical and biological weapons.[108] They are part of every-day use by legitimate forces and as such are legally traded.[109] However, the lack of international

104 Thomas, 'Disciplining Globalization', *supra* note 91, at 12.

105 *Ibid*., at 20-22.

106 *Ibid*., at 25.

107 *Ibid*., at 24.

108 Andre Stemmet, 'Learning from Field Experience', in Erwin Dahinden, Julie Dahlitz and Nadia Fischer (eds.), *Small Arms and Light Weapons: Legal Aspects of National and International Regulations* (United Nations Publication: New York, 2002) 17-28 at 18.

109 *Ibid*., at 18.

regulation has contributed to the widespread proliferation of SALW.[110] About 500-700 million SALW are estimated to be in circulation, although the exact number is still not well known.[111] The illicit proliferation of small arms and light weapons outside the state system has become a problematic issue. The spread of these weapons has caused international concern and interest in dealing with illicit trade in SALW. Especially the use of SALW in internal conflicts is seen as problematic as these weapons cause lethal injuries and suffering among civilian populations.[112] There is, however, no internationally agreed definition of the concept of SALW and all fora dealing with SALW have a different understanding.[113] As a consequence, different applications by states of the principles contained in the relevant documents and conventions cannot be excluded.[114] Relevant conventions dealing with illicit trade in SALW are the Firearms Protocol[115] to the UN Convention against Transnational Organized Crime and the OAS Convention against Illicit Trafficking in Firearms.[116]

The Firearms Protocol is a legally binding international instrument promoting harmonization and co-operation to 'prevent, combat and eradicate the illicit manufacturing of and trafficking in firearms, their parts and components and ammunition.'[117] It is meant to control weapons that have been trafficked or produced illicitly by any organized criminal group that acts transnationally.[118] The Protocol commits parties to setting controls on the illicit manufacture and sale of firearms, which have been playing an increasing role in civilian violence, terrorism and organized crime. To control illicit trade in SALW, Article 10 of the Protocol provides for an export and import licensing or authorization system as a trade mechanism. Exporting states must verify that importing states have issued import licences or authorizations and that transit states have not objected to transit, before issuing export licences or authorizations for shipments of firearms, their parts and com-

110 Erwin Dahinden, 'Meeting the Challenges of Small Arms Proliferation: Example of the OSCE Document', in Dahinden, Dahlitz and Fischer, *Small Arms and Light Weapons*, supra note 108, 1-15, at 2.

111 *Ibid.*, at 1.

112 *Ibid.*, at 1-2.

113 *Ibid.*, at 10.

114 *Ibid.*, 15.

115 Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, supplementing the United Nations Convention against Transnational Organized Crime, GA Res. 55/255, 31 May 2001, in force 3 July 2005, www.unodc.org/pdf/crime/a_res_55/255e.pdf (hereinafter Firearms Protocol). See also Wade Boese, 'UN General Assembly Adopts Illicit Firearms Protocol', *Arms Control Association*, July/August 2001, www.armscontrol.org/act/2001_07-08/armsjul_aug01.asp.

116 Inter-American Convention against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials, 14 November 1997, in force on 7 January 1998, www.oas.org/juridico/English/treaties/a-63.html (hereinafter OAS Convention).

117 Article 2, Firearms Protocol.

118 Erwin Dahinden, 'Small Arms Proliferation', *supra* note 110, at 11.

ponents and ammunition.[119] The accompanying documentation to the export and import licence or authorization must contain certain descriptive and transportation data, which must be provided in advance to the transit states.[120]

The OAS Convention is a legally binding regional multilateral instrument aimed to 'prevent, combat, and eradicate the illicit manufacturing of and trafficking in firearms, ammunition, explosives, and other related materials' and to 'promote and facilitate co-peration and exchange of information and experience among States Parties.'[121] The Convention was the first international treaty designed to prevent, combat, and eradicate illegal transnational trafficking in firearms, ammunition, and explosives.[122] Article IX requires the parties to the Convention to establish or maintain an effective licensing or authorization system as a specific trade mechanism to control illegal trade of firearms to help ensure that firearms are transferred only to legitimate users. Parties may not permit firearms to be exported or transited across their borders without proper licensing from receiving and transit countries.[123] Exporting states must thus ensure that the importing and transit countries have issued the necessary licenses or authorizations before permitting transit and releasing shipments of firearms, ammunition, explosives and other related materials for export.[124]

The Firearms Protocol control system shows some limitations as to its applicability. The scope of the Protocol is limited as it is not applicable to state-to-state transactions or to state transfers in cases where the application of the Protocol would prejudice the right of a state party to take action in the interest of national security consistent with the Charter of the United Nations.[125] There is also no provision on mandatory destruction of SALW. Article 6 requires the destruction of illicitly manufactured and trafficked firearms, their parts and components and ammunition only in cases when no other disposal method has been officially authorized. This implies that they can be sold or auctioned too.

The OAS Convention system shows some comparable weaknesses.[126] The focus of the Convention is narrow as it only addresses the issues of manufacturing and trafficking and it uses the existing legislation of states parties as tools of implemen-

119 Article 10(2), Firearms Protocol.

120 Article 10(3), Firearms Protocol.

121 Article II, OAS Convention.

122 U.S. Department of State, Bureau of Political-Military Affairs, Fact Sheet, 'The Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials', 1 August 2002, www.fas.org/asmp/campaigns/smallarms/Cifta_FactSheet_DoS.htm.

123 *Ibid.*

124 Article IX(2-3), OAS Convention.

125 Art. 4(2), Firearms Protocol.

126 See also Stemmet, 'Learning from Field Experience', *supra* note 108, at 22.

tation.[127] There is no provision for the destruction of firearms. According to Article VII, parties can undertake to confiscate or forfeit firearms, ammunition, explosives, and other related materials that have been illicitly manufactured or trafficked. The OAS Convention also lacks resource commitment.

The international legal instruments dealing with SALW provide several interesting elements, which could conceivably be transposed to the issue of illegal logging. The strong features of both the Firearms Protocol and the OAS Convention with regard to their relevance for addressing the problem of trade in illegal timber concern the measures to improve border control and enforcement; the recognition of the necessity for states to adopt national legislation; the well-elaborated trade control mechanisms; the provisions on information, co-operation, training and technical assistance; the concept of illicit manufacturing as circumscribed in both conventions; and the recognition of the importance of arms control not only for importing states, but for the wider international community – the region and the world as a whole – in the preambles of both conventions.

Trade in conflict diamonds

In principle, trade in diamonds is a legal transaction. It becomes problematic, however, when it sustains or causes illegal activities.[128] This has been the case in certain African states such as Angola, Sierra Leone and Liberia.[129] The total embargo against Liberian diamonds, for example, is still active today.[130] UN Security Council Resolution 1343[131] directs states to prevent the importation of all rough diamonds from Liberia, making the entire Liberian diamond trade illegal.[132] This was decided also because of the involvement of the Liberian regime in the trade.[133]

In contrast, the Kimberley Process,[134] which was established to control trade in so called blood diamonds or conflict diamonds, and came into operation in January 2003, does not render the trade in rough diamonds entirely illegal. Diamond trade is generally permitted, but the Scheme seeks to stop trade that sup-

127 Art. IV(1), OAS Convention.

128 Charnovitz, 'The World Trade Organization and Law Enforcement', *supra* note 99.

129 Jan Bayart, 'Illegale ontginning, smokkel en plundering van natuurlijke rijkdommen en conflictenfinanciering', in Philip Nauwelaerts (ed.), *Bedrijven in Conflictgebieden* (Roularta Books: Roeselare, 2004) 53-60 at 56.

130 *Ibid.*

131 Security Council Res. 1343 (2001) on the situation in Liberia, 7 March 2001.

132 See Charnovitz, 'The World Trade Organization and Law Enforcement', *supra* note 99; Joost Pauweleyn, 'WTO Compassion or Superiority Complex?: What to make of the WTO waiver for "conflict diamonds"', 24 *Michigan Journal of International Law* (2002-03) 1177-1207 at 1178-1179.

133 Bayart, 'Illegale ontginning', *supra* note 129, at 56.

134 For more information see www.kimberleyprocess.com.

ports rebels. Only conflict diamonds are therefore banned.[135] However, even conflict diamonds from non-participants to the Kimberley Process might possibly be banned on the basis of GATT Article XX(b),[136] although the WTO has recently introduced a four-year (limited) waiver[137] for trade controls in the form of certain import and export restrictions imposed on WTO members who are non-participants to the Kimberley Process.[138]

With the Kimberley Process the link is cut between legitimate trade in diamonds on the one hand, and trade in conflict diamonds that sustain civil conflicts or corrupt governments and/or terrorism, on the other hand.[139] This is achieved through a certification mechanism for internationally traded diamonds. Compliance with certain rules will be acknowledged with import and export certificates on the basis of the Kimberley Process Certification Scheme (KPCS).[140] Rough diamonds that are extracted or imported under government supervision can be certified with exports on this basis as having a legitimate origin. Imports of rough diamonds are only allowed when accompanied by such a certificate. Trade in legitimate rough diamonds can only take place amongst countries adopting the Scheme.[141] One of the problems following the UN General Assembly Resolutions against the aforementioned African countries was the difficulty to determine the exact geographical origin of rough diamonds. The UN embargo as transposed in national laws was not really enforceable.[142]

The control and certification mechanism of the Kimberley Scheme now corresponds to a closed trade group covering a multilateral regime of control and certification.[143] As the (original) 39 participants to the Kimberley Process accounted reportedly for 98 percent of production and global trade, and 37 of them are also WTO members,[144] the regulatory mechanism provided by the Kimberley Process has a truly global character. The group has since then already extended to 52 par-

135 Schroeder-Wildberg and Carius, *Illegal Logging*, *supra* note 12, at 7; Charnovitz, 'The World Trade Organization and Law Enforcement', *supra* note 99; Pauweleyn, 'WTO Compassion or Superiority Complex?', *supra* note 132, at 1179.

136 Article XX(b), General Agreement on Tariffs and Trade, Marrakesh, 15 April 1994, in force 1 January 1995, www.wto.org/English/docs_e/legal_e/legal_e.htm.

137 For a detailed analysis of the WTO waiver, see Pauweleyn, 'WTO Compassion or Superiority Complex?', *supra* note 132, at 1177-1207.

138 Charnovitz, 'The World Trade Organization and Law Enforcement', *supra* note 99.

139 Schroeder-Wildberg and Carius, *Illegal Logging*, *supra* note 12, at 52; Pauweleyn, 'WTO compassion or superiority complex?', *supra* note 132, at 1179.

140 Schroeder-Wildberg and Carius, *Illegal Logging*, *supra* note 12 at 52; and Walter Goode, *Dictionary of Trade Policy Terms* (4th ed., Cambridge University Press, 2003) at 208.

141 Bayart, 'Illegale ontginning', *supra* note 129, at 57.

142 *Ibid*., at 56.

143 *Ibid*., at 56 and 57.

144 Pauweleyn, 'WTO compassion or superiority complex?', *supra* note 132, at 1179-1180.

ticipants.[145] The plenary session held in Johannesburg in April 2003 by the participants in the Kimberley Process led to the establishment of a Participation Committee with the task of determining which of the countries that had adopted the Scheme had also effectively complied with its minimum requirements by having enacted the laws and regulations required under it to ensure proper certification. As of 31 August 2003, only those countries are regarded as being participants to the Scheme, and therefore can trade in rough diamonds. The others are regarded as non-participants and as such are banned from all trade in diamonds. Importantly, 24 countries that had adopted the Scheme did not make it to the list.[146] This regulatory mechanism is, however, not limited to conflict diamonds, which was the original concern. All illegally exploited and/or exported rough diamonds are excluded from legal trade as well. As conflict diamonds were smuggled and infiltrated legal trade elsewhere, they could not be distinguished from other illegal diamonds. Under the Kimberley Scheme, all diamonds that are not certified are regarded as being illegal, and possibly conflict diamonds.[147] Next to this certification mechanism, a system of warranties guarantees the buyer that the acquired diamonds are conflict free.[148]

The Kimberley Process can be called successful because of the number of states taking part. Moreover, the collaboration between states, NGOs and the diamond industry is a positive factor.[149] Nevertheless, there are some important downsides to the system.[150] The success of the Kimberley Process mainly depends on the success of the self-regulatory mechanism, namely the Industry System of Warranties. The smuggling into recognized centres or the bribing of officials authorized for delivering certificates could damage the effectiveness of the whole Scheme. At the international level a problem of supervision and control could also exist as an effective supervision mechanism is lacking. There is no way of knowing whether a country lives up to its obligations. Only in the case of credible indications of significant non-compliance, and when the concerned state gives its permission, can a review commission be sent. For these reasons, the Kimberley Scheme might not be sufficient to limit illegal trade effectively.[151] Suggestions made to improve the Kimberley Scheme include defining what are to be considered illegal actions and abstentions, enumerating possible faults by states and defining the consequences

145 *Ibid*., at 1205.

146 *Ibid*., at 1205; Bayart, 'Illegale ontginning', *supra* note 129, at 58.

147 Bayart, 'Illegale ontginning', *supra* note 129, at 57-58.

148 Marc Botenga et al., 'Juridisch kader om laakbare handelspraktijken in conflictregio's tegen te gaan', in Nauwelaerts (ed.), *Bedrijven in Conflictgebieden*, *supra* note 129, 97-169, at 139.

149 *Ibid*., at 142.

150 *Ibid*., at 142-143.

151 *Ibid*., at 143.

states have to bear for not living up to their obligations and the need for an infrastructure to facilitate compliance and tracing.[152]

The Kimberley process provides for an interesting analogy in relation to logging being illegal or legal. Like diamonds, timber has similar physical characteristics; the main differences relate to the place where these natural resources are found and how they are extracted and used.[153] Another similarity is the sustaining of internal conflicts through illegal timber trade.[154] Like diamonds, exploitation is quite unproblematic and timber is rather valuable and easily marketed.[155] Notwithstanding these similarities, transferring the Kimberley Scheme's procedures to timber products would face several problems.[156] First, compared with the Kimberley Process, not many authorities and independent certification systems are in place for timber products. Second, the size of the industry might also be an obstacle. Trade in diamonds takes place at a smaller scale and in smaller quantities concerning the diversity of types of traded product than is the case for trade in forest products. In addition, diamonds can be sealed in tamper-proof containers. The forest industry is also more diffuse, and the types of revenue-generating possibilities for timber are also more numerous. Third, there is no global forestry organization equivalent to the World Diamond Council,[157] which could bring the problem of illegal logging under worldwide attention. Fourth, there is not the same level of international concern about illegal logging as there is for conflict diamonds and consequently there is a lack of incentive to create a similar agreement on import and export rules. As diamonds have an emotional value, consumers are much more concerned with this issue than is the case for timber. Fearing decreasing profits as a result of NGO action has brought the diamond industry to co-operate and take the problem of conflict diamonds seriously.[158] The applicability of mechanisms similar to those of the Kimberley Process to the timber industry might therefore also be a question of convincing the industry of the advantages of this system.

152 *Ibid*., at 144.

153 Schroeder-Wildberg and Carius, *Illegal Logging*, *supra* note 12, at 52.

154 Marc Botenga et al., 'Juridisch kader om laakbare handelspraktijken', supra note 148, at 164.

155 *Ibid*., at 164.

156 See Schroeder-Wildberg and Carius, *Illegal Logging*, *supra* note 12, at 52-53.

157 The World Diamond Council (WDC), established by the World Diamond Congress in 2000, has as its task to develop, implement and control the tracking system for import and export of diamonds with the aim of preventing illegal diamonds being traded on the market. See Marc Botenga et al., 'Juridisch kader om laakbare handelspraktijken', supra note 148, at 138 and footnote 83. For more information see www.worlddiamondcouncil.com/.

158 Marc Botenga et al., 'Juridisch kader om laakbare handelspraktijken', supra note 148, at 142 and 164.

Conclusion

The review of relevant provisions of MEAs indicates that while there are as yet no international provisions specifically mandating the introduction of trade restrictions for illegally harvested timber, except in the very specific case of individual timber species which have been listed in one of the appendices of CITES, the existing body of international soft and hard law could arguably be invoked to justify the introduction of such measures. Indeed, this body provides evidence of an emerging consensus in a number of multilateral fora as to the need to address the international environmental problem of deforestation and the resulting loss of biological diversity through all possible measures, including trade-related measures. While from the perspective of WTO law multilateral approaches are always preferable to bilateral or unilateral ones, the rules of the multilateral trading system do not prohibit unilateral action by any WTO member where such action is non-discriminatory and based on genuine environmental concerns that can be effectively addressed through trade-related measures.

Many MEAs already provide for specific trade control measures to be taken by their parties as one instrument to help achieve internationally agreed environmental policy objectives. The review, in this study, of the trade measures contained in the Stockholm (POP) Convention, Rotterdam (PIC) Convention, Basel Convention, Montreal Protocol and Cartagena Protocol, however, indicates that these do not, as such, provide a model that could easily be applied to the regulation of the illegal timber trade. The trade control procedures they contain are mostly aimed at the protection of environmental interests in the importing countries' territories. Though some trade restrictions are also justified by environmental concerns of a transboundary or even global nature, none are specifically aimed at the protection of environmental values within the territorial jurisdiction of countries exporting the products subject to regulation, as would be the purpose of any regulation of trade in illegally harvested timber.

More relevant precedents of international trade control measures can be found in other policy areas, such as the regulation of international trade in illicit cultural goods, narcotics, small firearms and conflict diamonds. With regard to narcotics or firearms, such measures are primarily aimed at protecting certain social interests and values in potential importing countries, whereas with regard to cultural goods or conflict diamonds, the main values and interests to be protected are those of potential exporting countries. In all of these cases, however, the international community has agreed to co-operate to control these forms of international trade because they have been identified as detrimental to the public interest, are linked to organized crime and sometimes even international conflict, and cause or contribute to various social and economic problems which transcend territorial boundaries. The same can be said to apply to international trade in illegally

harvested timber. While the specific trade control measures, instruments and procedures vary according to the particular nature of the problem addressed, it can be inferred from these case studies that overriding public interests continue to be recognized by the international community as a valid justification for trade restrictions, notwithstanding the ongoing movement towards trade liberalization, and that international law has continued to be used to define and combat certain forms of international trade as illegal. There is no intrinsic reason why the same could not be done for trade in illegally harvested timber and timber products.

National Governance in Forest Issues[1]

Anders Portin[2]

Forests and Forest Administration in Finland

Forests cover more than 60 percent of Finland's total land area. Private citizens own 62 percent of forests, while companies own nine percent and the state owns 25 percent. Private forest owners therefore play an important role in the sustainable management of Finland's forests. Finland is also an important producer of forest products; the forest industry accounts for 27 percent of total Finnish exports. The Department of Forestry within the Ministry of Agriculture and Forestry is primarily responsible for forest policy and legislation concerning forestry in Finland. Under the guidance and supervision of the Ministry there are four different types of authorities: Regional Forestry Centres, of which there are 13; the Forestry Development Centre, Tapio; the Forest and Park Service; and the Finnish Forest Research Institute. Major stakeholder groups in forestry include private forest owners, forest industry, non-governmental organizations, local communities and indigenous people.

As in most countries in Europe, Finnish forestry legislation changed during the 1990s and the Finnish forest policy reform was very profound. The broadened concept of sustainable forest management (SFM) was the starting point for this process, and enhancing biodiversity is its key concept. Forest legislation now focuses on promoting the economic, social and ecological aspects of sustainable forestry.

1 This paper is based on a lecture given by the author on 16 August 2005. The author used as sources and suggests as further reading the following resources available on the internet: Ministry of Agriculture and Forestry of Finland, www.mmm.fi/english/; Food and Agricultural Organization of the United Nations, www.fao.org/; United Nations Forum on Forests, www.un.org/esa/forests/; forest.fi, www.forest.fi/.

2 Counsellor of Forestry, Ministry of Agriculture and Forestry of Finland

The implementation of this new forest policy has required large amounts of information, education and extension services to be made available to forest professionals, foresters and forest owners. Luckily, most of the practical instructions and recommendations had already changed prior to the new forest legislation; putting the new legislation into practice has been a relatively smooth process. New forest legislation includes the Forest Act (1997),[3] the Nature Conservation Act (1997),[4] the Environmental Impact Assessment Act (1994),[5] the Act on the Financing of Sustainable Forestry (1996),[6] the Act on Metsähallitus (2005)[7] and the Forest Management Association Act (1999).[8]

The purpose of the new Forest Act is to secure the production of timber, to maintain the biological diversity of the forest environment and to take into account the multiple uses of forests. As in earlier forest legislation, the main obligations placed on a forest owner are to leave a sufficient number of trees with satisfactory growth potential when thinning and to establish new seedling stands after regeneration and felling, i.e. final harvesting. A forest owner has to make an official declaration of intent to the Regional Forestry Centre prior to all commercial cuttings. This declaration is a legal tool used for supervision, also with regard to securing biodiversity. A key element of the Forest Act with regard to safeguarding biodiversity is its definition of certain habitats of special importance and the guidelines it provides as to how these habitats may be managed. The Act lists seven habitat groups where rare and endangered species may occur. Sites covered by the Act include, for example, small water bodies and the forest stands adjacent to them, small swamps, patches of herb-rich forest, small mineral land islets surrounded by virgin mires and forests adjacent to cliffs. If such a site is small with virgin or nearly virgin forest the forest owner may not take any action that might affect the site. Where this restriction causes significant reductions in forest yield or other notable financial losses for the forest owner, he/she can either receive partial or total compensation or obtain a special permit to manage his forest with minimized losses. Three rare forest habitats are also listed and protected under the new Nature Conservation Act. In addition to the new obligation to safeguard biodiversity, the Forest Act also introduces a new instrument for enhancing sustainable forest management,

3 Metsälaki (Forest Act) 1093/1996, www.finlex.fi/en/laki/kaannokset/1996/en19961093.pdf (unofficial translation).

4 Luonnonsuojelulaki (Nature Conservation Act) 1096/1996, www.finlex.fi/en/laki/kaannokset/1996/en19961096.pdf.

5 Laki ympäristövaikutusten arviointimenettelystä (Environmental Impact Assessment Act) 468/1994, www.finlex.fi/fi/laki/smur/1994/19940468 (available only in Finnish and Swedish).

6 Laki kestävän metsätalouden rahoituksesta (Act on the Financing of Sustainable Forestry) 1094/1996, www.finlex.fi/en/laki/kaannokset/1996/en19961094.pdf (unofficial translation).

7 Laki metsähallituksesta (Act on Metsähallitus) 1378/2004, www.finlex.fi/en/laki/kaannokset/2004/en20041378.pdf (unofficial translation). Metsähallitus is the authority responsible for the management of state owned forests and water areas.

8 Laki metsänhoitoyhdistyksistä (Forest Management Association Act) 534/1998, www.finlex.fi/en/laki/kaannokset/1998/en19980534.pdf (unofficial translation).

namely, the regional target programmes for forestry. The 13 Forestry Centres are responsible for drawing up these programmes in co-operation with environmental authorities, forestry organizations and other relevant parties.

Intergovernmental and National Forest Policy Processes and their Implementation in Finland

During the present decade, one of the major starting points for the new objectives in Finland's forest policy has been international agreements and political commitments. Particularly important are those agreed upon in the UNCED conference in Rio de Janeiro, in the subsequent follow-up process (IPF, IFF and UNFF) and in the Ministerial Conferences for the Protection of Forests in Europe, including the follow-up to these conferences as well. The outcome of international co-operation within these processes has been adapted to Finland's circumstances in the country's new forest policy, legislation and management guidelines. Simultaneously, results from forest and environmental research have, of course, been used for redirecting forest policy.

The Global Level

The role of what we call international forest issues, or international forest policy, has changed rapidly during the decade since the Rio Conference. Today, forests are discussed in many various fora and on many different levels. On the global level this discussion takes place in, for instance, the United Nations Forum on Forests (UNFF), the Food and Agriculture Organization (FAO) and in the different bodies of international environmental conventions like the Convention on Biological Diversity (CBD),[9] the UN Framework Convention on Combating Climate Change (UNFCCC)[10] and others.

For Finland, this type of co-operation is an essential part of its policy and it has decided that it will be active in these discussions. There are ethical, economic as well as ecological reasons for this. Already before the Rio Conference and now continuing within the UNFF process, there have been discussions on a possible Forest Convention. Finland has been one of the advocators of such an agreement, for instance in the form of a framework convention. Such a convention should deal with protection and sustainable use of existing forests and should be based on the

9 Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, www.biodiv.org/doc/legal/cbd-en.pdf.

10 United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf.

earlier work of IPF, IFF and UNFF. It should also be based on a holistic and cross-sectoral approach and an essential element would be national forest and land use plans as well as criteria and indicators of SFM. Issues related to trade and environment as well as financing and technology transfer also have to be thoroughly considered in order to get developing countries on board and make the convention effective.

Criteria and Indicators

In the world there are nine regional processes on criteria and indicators for sustainable forest management. On the European level there is co-operation within the Ministerial Conference on the Protection of the Forests in Europe (MCPFE), under the auspices of which European Ministers have met four times within little more than a decade. In the follow-up process to the second MCPFE, a set of pan-European criteria and indicators for SFM were developed. These have later been endorsed by ministers who agreed on six criteria and 35 quantitative indicators. Based on this European work, Finland developed a national set of criteria and indicators for SFM in 1995, renewing them in 2001 based on the pan-European criteria and indicators. The six pan-European criteria were adopted almost verbatim, with only Criterion 6 being slightly modified to read 'Maintenance of other socio-economic and *cultural* functions and conditions.'[11] All of the pan-European quantitative indicators were adopted but they were further developed to characterize the specific conditions in Finland. They were also complemented by, in particular, indicators concerning biological diversity and the socio-economic functions of forests. The pan-European descriptive indicators (legal/regulatory framework, institutional framework, financial instruments and informational means) were used for identifying the national descriptive indicators. The Finnish Certification System, as well as the Pan-European Forest Certification, have both benefited from the already agreed upon criteria and indicators when developing criteria for forest certification.

Finland's National Forest Programme: A National Strategy in Conformity with International Goals

In 1998, the Government of Finland decided to draft a new forest programme, in order to guarantee the sustainability of timber production but also to guarantee all other important values of sustainability in Finnish forests. The drafting process followed the general recommendations of the National Forest Programmes (NFPs) agreed in Rio as well as the IPF and IFF recommendations. A sort of definition of

11 Emphasis added.

National Forest Programmes was given in the Intergovernmental Panel on Forests:

> The Panel encouraged countries, in accordance with their national sovereignty, specific country conditions and national legislation, to develop, implement, monitor and evaluate national forest programmes, which include a wide range of approaches for sustainable forest management, taking into consideration the following: consistency with national, subnational or local policies and strategies, and – as appropriate – international agreements; partnership and participatory mechanisms to involve interested parties; recognition and respect for customary and traditional rights of, inter alia, indigenous people and local communities; secure land tenure arrangements; holistic, intersectoral and iterative approaches; ecosystem approaches that integrate the conservation of biological diversity and the sustainable use of biological resources; and adequate provision and valuation of forest goods and services.[12]

Based on these international principles the national forest programme in Finland was developed. Finland has in its national forest policy sought long term solutions. In March 1999 the Government approved Finland's National Forest Programme 2010 as the country's forest strategy and action programme for Finland's forest sector policy until 2010. The programme recognizes the economic, ecological, social and cultural aspects of sustainable forest management. The 1994 Environmental Programme for Forestry and the regional forestry target programmes prepared by the Forestry Centres were utilized in the preparation of the programme. The programme was prepared as an open process where different stakeholders were able to participate. It was discussed in public fora with almost 3,000 participants and the public was able to influence the preparatory work via the worldwide web. The basic idea behind the programme is that a competitive forest cluster combined with the fact that forests are a renewable resource makes an excellent foundation for sustainable development.

Several mechanisms have been used in the programme design in order to balance economic, ecological and social demands. These include an open and participatory drafting process, two impact assessments, three government decisions as well as the creation of National and Regional Forest Councils. For example, a new institution in Finnish forest policy, the National Forest Council, was established in 1999 in order to follow up and develop NFP 2010. The National Forest Council is chaired by the Minister of Agriculture and Forestry and all major economic, ecological and social interests are represented in the Council. It discusses all issues relevant to NFP 2010 as well as forest policy in general. There is a corresponding new structure at the sub-national level, the Regional Forest Councils, which have a similar task of following and developing the Regional Forest Programmes. The 13 Regional Forest Programmes are co-ordinated with NFP 2010 and they aim to

12 Proposal 17(a), IPF Proposals for Action, www.un.org/esa/forests/pdf/ipf-iff-proposalsforaction.pdf.

assure that SFM practices are carried out as a balanced entity also at the sub-national and local levels.

With the support of NFP, the Finnish Government has increased its annual financial incentives granted to silviculture by EUR 10 million. At the same time forest owners have increased their own investments in silviculture by EUR 40 million. As a result, the total annual investments in silviculture have increased from EUR 200 to 250 million, which is the NFP target. Industrial use of roundwood, forest sector export value and forest sector employment have also increased. It seems that a common understanding between all stakeholders combined with state incentives has encouraged forest owners' investments in silviculture and forestry. On the other hand, roundwood import has increased at the expense of domestic harvesting.

Since the NFP was approved, there has been evidence of strong political commitment and action in this policy area. These include updating forest legislation and continuous and steady budget funding for the forest sector. The management of such a wide programme is a challenge. So far no major political conflicts have occurred within the forest sector but the balancing of economic and ecological dimensions has been and still remains challenging. Forest conservation areas are mainly in the northern part of Finland and in the South the share of strictly protected forests is only about 1-2 percent. Many forest ecology researchers and environmental NGOs consider that 5-10 percent of forests should be protected to guarantee the existence of endangered species in the southern part of Finland. In 2002, as a part of the NFP, a Forest Biodiversity Protection Programme (METSO) for the southern part of Finland was established to promote forest biodiversity on a voluntary basis with the help of government incentives. So far its results have been promising.

The METSO Programme

The Forest Biodiversity Programme for Southern Finland (METSO)[13] is a biodiversity-related operational element of Finland's National Forest Programme 2010. The METSO Programme was included in the programme of the new Finnish Government which also promised to ensure the additional funding needed for implementation. The METSO Programme for 2003-2007 aims at finding new ways of combining the maintenance and improvement of biodiversity and the commercial use of forests in Finland. The METSO Programme is an integral part of the implementation of various international agreements Finland has entered into. It makes significant contributions to meeting objectives for sustainable development set out in the CBD, UNFF, and MCPFE. The METSO Programme provides a forum for experimenting with new and innovative ways of protecting forests on a vol-

13 The abbreviation METSO means capercaillie in Finnish.

untary basis. The first pilot project dealt with natural values trading. The schemes allow landowners to commit themselves through voluntary contracts to maintain or enhance the natural values of their forests over a certain period. In exchange, the forest owner receives compensation from the purchaser of the natural values – usually the regional forestry centre or regional environment centre. The contracts are typically made for periods of 10-20 years, after which the forest owner is again free to use the site according to his or her own wishes. A pilot project, which proved to be a great success from the very beginning, was launched in Southwestern Finland in summer 2003. By the end of 2003, more than 140 landowners had offered over 1,300 hectares of forests to be protected.

Another project in the METSO Programme is the forest biodiversity co-operation networks. These allow landowners, the local environmental and forest authorities and other local interest groups to share their ideas and experiences related to conservation. The networks operate within specific areas that are important in ecological terms or for their recreational value. They are co-ordinated by forestry centres or forest management associations, and aim to encourage forest owners to preserve biodiversity through various arrangements, including conservation contracts, environmental subsidies, nature management projects and nature values trading. The networks are designed to promote socially and economically sustainable development by actively involving local landowners in conservation measures. Four pilot networks are operative in Southern, Central, Eastern and Coastal Finland. The competitive tendering pilot project was launched in three local areas within Southern Finland in February 2004. In the pilot project the area is either hired for conservation for 20 years or sold permanently to the state for protection.

The third alternative is establishing a private forest conservation area. A total of EUR 1 million was available for competitive tendering in 2004 and 2005. Furthermore, nature management areas as well as training, forest planning and advisory services are available for private forests and their owners in order to enhance biodiversity. The METSO Programme is operative also in state forests, which cover about one-fourth of Finland. During 2003, Metsähallitus evaluated the nature values of 160,000 hectares of state-owned commercial forests in Southern Finland, of which 33,000 hectares were inventoried in the field.[14] The inventory was carried out applying the criteria of high biodiversity value, as defined in the METSO Programme. During 2003, Metsähallitus also carried out restoration measures on 916 hectares of forest and 707 hectares of peatland in nature conservation areas in Southern Finland. Restoration and management of nature conservation areas on private lands have just begun. The METSO Programme also comprises a comprehensive Biodiversity Research Programme: MOSSE.

14 In total, Metsähallitus administers roughly 13 million hectares of land and water, including protected areas. Managed state owned forests amount to roughly 3.5 million hectares. For more information on Metsähallitus see www.metsa.fi/default.asp?Section=6.

The METSO Programme provides a forum for experimenting with new, innovative ways of protecting forests on a voluntary basis. The decisions on the means to be applied in the protection of forest biodiversity after 2007 will be decided on the basis of the results of these experiments. The whole forest sector is strongly committed to the programme, which opens up new possibilities to harmonize the protection and commercial utilization of forests, helping to maintain the rural population in a sparsely populated country. It has met with a very positive response among all forest-related organizations. The basic idea behind the programme is that a competitive forest cluster combined with the fact that forests are a renewable resource makes an excellent foundation for sustainable development.

Same Issues at All Levels

It should be noted that in this paper Finland has only been used as an example. The important issue to be retained is how international discussions and national measures go hand in hand. International deliberations affect national decision-making and vice versa. Moreover, the issues discussed on all the different levels – global, regional, national and sub-national – are often the same. For instance, the expression sustainable forest management is known all over the world. Wherever you are, when asking a forester in the field what it means you will get more or less the same answer: it consists of economic, social and ecological aspects. This kind of work on terminology as well as a common understanding would not be possible without international co-operation. National forest programmes are another example. They are mentioned in the Rio outcomes, which have been further elaborated and decided on in IPF decisions and discussed and adapted in the MCPFE process. Finally, NFPs have been turned into reality on the national level in a large number of countries. In some countries, like in Finland, sub-national programmes also exist. Other issues that are common on all levels are criteria and indicators, statistics and the participation of stakeholders. International discussions are many times also useful if you want to predict which issues will be discussed on the national level in the future. Such emerging issues include poverty alleviation and the role of forests, clean water and the role of forests in watershed areas, illegal logging, ethical issues (some kind of broadening of environmental as well as social concerns) as well as quantifiable targets in forestry and policy processes. These and other issues will be discussed in different fora during coming years.