IVM Institute for Environmental Studies

A Graphical Overview of the Architecture of Global Forest Governance

REDD ALERT - Reducing Emissions from Deforestation and Degradation through Alternative Landuses in Rainforests of the Tropics (contract number 226310)

Deliverable D.4.1

Constanze Haug

Harro van Asselt

Joyeeta Gupta







This report was commissioned by: EU (contract number 226310) It was reviewed by: Philipp Pattberg and Robin Matthews

IVM

Institute for Environmental Studies VU University Amsterdam De Boelelaan 1087 1081 HV Amsterdam T +31-20-598 9555 F +31-20-598 9553 E info@ivm.vu.nl

Copyright © 2010, Institute for Environmental Studies

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the copyright holder

Contents

1	Introduction	1
1.1 1.2	The REDD Alert project Work Package 4 in relation to the Project	1
1.3	Purpose of Deliverable 4.1 in Work Package 4	2
1.4	Structure of this document	3
2	Graphical Overviews	5
2.1	Introduction	5
2.2	Classifying forestry governance efforts in terms of public and private at global and regional levels	5
2.3	Classifying forestry governance arrangements in terms of forestry functions	7
2.4	Inferences	8
3	Profiles of institutions and actors in the global governance of	
	forests	9
3.1	Global institutions and actors	9
3.2	Regional institutions and actors	26
4	Conclusions	33
4.1	Conclusions from this research	33
4.2	Implications for the rest of the project	34
4.3	Implications for the country case studies	35
Refer	ences	36

1 Introduction

1.1 The REDD Alert project

The European Union financed REDD ALERT project (contract number 226310) aims: to contribute to the development and evaluation of market and non-market mechanisms and the institutions needed at multiple levels for changing stakeholder behaviour to slow deforestation rates of tropical landscapes and hence reduce GHG emissions.

Its specific objectives are to:

- Document the diversity in social, cultural, economic and ecological drivers of forest transition and conservation, and the consequences, in the contexts of selected case study areas in Indonesia, Vietnam, Cameroon, and Peru as representative of different stages of forest transition in Southeast Asia, Africa and South America.
- 2. Quantify rates of forest conversion and change in forest carbon stocks using improved methods.
- 3. Improve accounting (methods, default values) of the consequences of land use change for GHG emissions in tropical forest margins including peat lands.
- 4. Identify and assess viable policy options addressing the drivers of deforestation and their consistency with policy approaches on avoided deforestation currently being discussed in UNFCCC and other relevant international processes.
- 5. Analyze scenarios in selected case study areas of the local impacts of potential international climate change policies on GHG emission reductions, land use and livelihoods.
- 6. Develop new negotiation support tools and using these with stakeholders at international, national and local scales to explore a basket of options for incorporating REDD into post-2012 climate agreements.

1.2 Work Package 4 in relation to the Project

A number of work packages are envisaged as part of the research work for this project. Work Package 4 on "policy and governance" aims to:

Assess the options to reduce emissions from deforestation in developing countries (REDD) under the international climate regime in the context of other forest policies, as well as the incentives flowing from them at the national and sub national level, to analyse how these policy levers change human behaviour, and how they interface with the local drivers and pressures of land use change in tropical forest margins. The work in his Work Package will draw on the work on drivers conducted in order to achieve Objective 1 of the Project. The key research question is: What combination of norms, principles and instruments (regulatory, market and suasive) will ensure that the climate change regime provides a policy framework to effectively and equitably govern the transition towards a carbon-extensive future (e.g. through carbon sequestration and bio fuels) while at the same time safeguarding sustainable forestry at a global scale? The objective is thus to analyse the trade-offs between certain forestry related policies within the current climate regime and the larger goal of sustainable forestry.

For details about the Work Package, see Working Document 1.

1.3 Purpose of Deliverable 4.1 in Work Package 4

Within this work package a number of deliverables are envisaged. Deliverable 4.1 maps the complex web of the global architecture of forest governance as it has evolved over the last decades. Our point of departure for this exercise is the landscape of global and regional governance arrangements relating to forests. Governance arrangements, as we define them, encompass both institutions based on formalised set of rules ("sets of rules that stipulate the ways in which states should cooperate and compete with each other", according to Mearsheimer, 1994/95), and actors exerting agency without necessarily being driven by legal agreements or conventions structures. Institutions are defined as "systems of rules, decision-making procedures, and programs that give rise to social practices, assign roles to the participants in these practices, and guide interactions among the occupants of the relevant roles" (Young et al., 1999, 14; cf. Young et al., 2005,). Agency examines the role of governments, bureaucracies and non-state actors in global governance. It looks at actors (those participating in international governance) and agents (those who possess the ability to prescribe behaviour) and addresses the issues of who governs and how (Biermann et al., 2009, 38).

Our interest in this exercise is twofold: First, we seek to assess to what extent these governance arrangements relating to forests partially or fully cover the key functions of forests, such as biological diversity, flora and fauna, climate-related functions and forests as livelihoods. This, we hope, allows us to point out the areas where there is a lot of activity internationally against those where potential gaps remain. Taking the classification of Ruis (2001) as a starting point for this endeavour, we distinguish between nine 'forest functions':

- 1. Conservation of biological diversity and habitat protection of flora and fauna.
- 2. Forests as carbon sinks.
- 3. Human settlements, habitat for people, rural livelihoods.
- 4. Natural heritage, cultural and spiritual values.
- 5. Commercial industrial wood and wood products, non-wood forest products, agriculture.
- 6. Wood fuels, energy security.
- 7. Ecotourism, recreation.
- 8. Watershed protection, water cycle regulation.
- 9. Soil conservation and erosion control.

The Millennium Ecosystem Assessment (2005) identifies four categories of ecosystem services. These include *provisioning* services that refer to the production of food and wood; *regulating* service that include the role of ecosystems in controlling the climate and the watershed; *supporting* functions such as contributing to nutrient cycles and crop pollination; and *cultural* functions such as meeting spiritual and recreational needs.

By combining these two frameworks – one that specifically looks at forest functions and the other that looks at ecosystem functions we can get a matrix that looks as follows. However, it should be noted upfront that this matrix is open to discussion and for improvement.

Second, given the overarching aim of REDD-ALERT work package 4 to examine the incentives and disincentives that institutions at multiple levels of governance provide for the sustainable management of forests, we look at the potential incentives and disincentives provided by the various governance arrangements, by mapping the instruments used. Whereas incentives provided by some instruments will tend to be

rather weak (e.g. reporting duties), in others they may provide more concrete incentives (e.g. trade bans; debt for nature swaps).

Table 1.1 Forest functions in relation to ecosystem services.

	Provisioning	Regulatory	Support	Spiritual and recreational
Conservation of biological diversity			Υ	
and habitat protection of flora and				
fauna				
Carbon sink		Υ		
Habitat for humans			Υ	
Heritage and values				Υ
Wood & non-woods products	Υ			
Wood fuels	Υ			
Ecotourism/ recreation				Υ
Watershed protection		Υ		
Soil conservation		Υ		

International rule-making on forest issues has over the past years increasingly shifted to private actors, with the rise of private certification schemes being a prime example (e.g. Chan and Pattberg, 2008). Thus, in this overview, we also distinguish between public arrangements, purely private institutions and actors, and hybrid forms of governance. While our inventory aims to be at least somewhat exhaustive with regard to global public governance arrangements, we limit ourselves to a more illustrative list of examples in the case of regional and private institutions and actors. Moreover, the distinction between governance arrangements that are 'forest-related' and others that we consider to fall outside of the scope is to some extent arbitrary. Last, but not least, while non-governmental and business organizations and actors are clearly an important part of the 'landscape' of global forest governance and have been driving policy development in a number of cases, they are not analysed in more detail here.

The REDD-ALERT project as a whole is centred around policy analysis and fieldwork in four case countries in the tropics – Cameroon, Indonesia, Peru and Vietnam. Therefore, for the purpose of this deliverable, we have also been interested in how far these countries are involved in and engage with the various governance arrangements that make up the global forest architecture. For the purpose of this overview document, we have taken a simplistic approach to determining the level of activity (e.g. ratification of agreements and conventions) and we have tried to draw up specific research questions for the detailed case studies in the concluding section.

1.4 Structure of this document

The report is structured as follows. The following section summarises the main findings of our analysis through two graphical depictions of global forest governance, organized according to forest functions covered by the arrangements and the instruments/incentives they provide. Section 3 consists of short profiles of the various institutions and actors, examining their membership, objectives and activities. Section 4 concludes with an assessment of the current state of global forest governance.

2 Graphical Overviews

2.1 Introduction

This chapter provides graphical overviews of the global forestry 'regime'. Regimes are "sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations. Principles are beliefs of fact, causation and rectitude. Norms are standards of behaviour defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice" (Krasner 1982: 186). A regime has a substantive element (principles, rights and obligations and rules) and a procedural element (procedures for decision making, enforcement and dispute settlement). Regimes "may also serve as important vehicles for international learning that produce convergent state policies" (Haas 1989: 377). No international arrangement can be called a regime unless it passes two tests: first, it should be an arrangement with explicit rules and principles, and second, these explicit rules should give rise to some degree of rule-consistent behaviour by the parties to the agreement (Rittberger 1993: 11).

The global forestry 'regime' does not, as the rest of this document shows, give rise to explicit rules on forests which lead to rule-consistent behaviour and perhaps it would thus be inappropriate to discuss this as a regime. Hence, this section focuses on global forestry governance efforts. It does so in terms of classifying the forestry governance efforts in terms of public and private at global and regional levels (see 2.2); by classifying forests in terms of forestry functions (see 2.3) and by classifying forests in terms of ecosystem services (see 2.4).

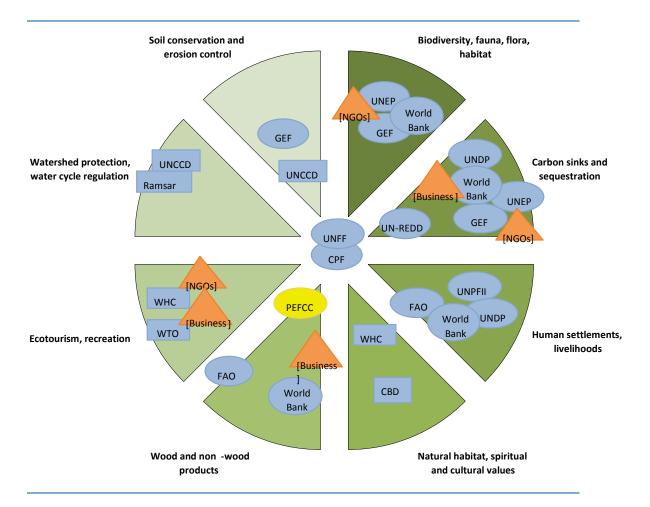
2.2 Classifying forestry governance efforts in terms of public and private at global and regional levels

In the 19th and 20th century, forests were seen as a source of resources and vast tracts of forests were deforested both for the wood and in order to make the land underlying the forest available for other uses - notably agriculture. In post-colonial times, such land conversions concluded. It was in the 1960s that the issue of deforestation hit the global agenda and the Food and Agriculture Organization adopted a number of policies on this issue. The International Tropical Timber Agreement (1983) and the Tropical Forestry Action Plan (1985) were two such early agreements. Although expectations of a global forest convention were quite high in the run-up to the United Nations Conference on Environment and Development at Rio de Janeiro in 1992, the conference ended only with a document of common principles and a chapter on policy approaches. Since then a number of initiatives have been taken by public and private actors, at global through to local levels and the most important of these are elaborated upon in Chapter 3. Forests have once more reached the global agenda as a means of addressing the climate change problem in a relatively cost-effective manner through the discussions in REDD. The Figure below aims to classify the existing forest governance arrangements in terms of whether action is initiated by public or private actors and whether action is taken at global or regional level. This is a first effort at mapping the actors in the field.

Figure 2-1 Forest governance arrangements in terms of public vs. private.

2.3 Classifying forestry governance arrangements in terms of forestry functions

The different forestry governance arrangements can also be classified in terms of the way in which they cover forest functions. As can be seen from the figure below, some governance arrangements aim at dealing with a number of forest functions, while others focus exclusively on specific functions.



Figuur 2-2 Forest governance arrangements and forest functions.

Similarly, the forestry governance efforts can be classified in terms of the nature of the ecosystem services they cover.

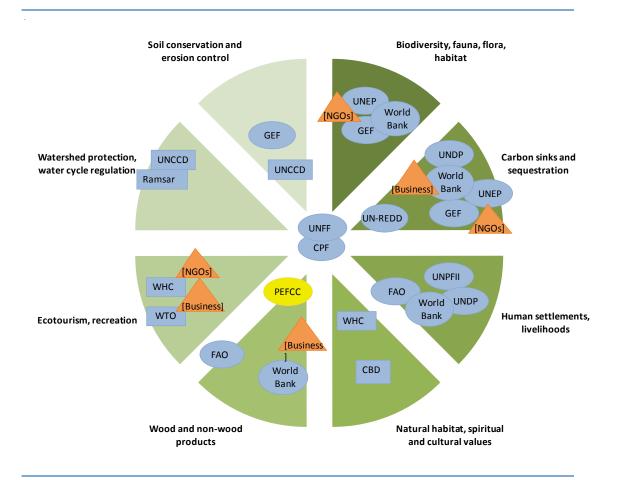


Figure 2-3 Forest governance arrangements and ecoystem services.

2.4 Inferences

The graphical overviews provide a bird's eye view of the forestry governance framework at global level. As can be seen, these appear to be less a mobius web in the sense that Rosenau uses the term, and more as attempts by different actors at the global and regional level to deal with forestry related issues. The following chapter provides more details on each of these governance efforts.

Profiles of institutions and actors in the global governance of forests

3.1 Global institutions and actors

This chapter attempts at providing a brief profile of the global institutions and actors. Institutions are described in terms of adoption, entry into force, number of parties, key policy documents, primary mandate, type of arrangement and the involvement of the REDD-ALERT case study countries.

3.1.1 United Nations Conference on Environment and Development (UNCED) - Forestry principles and policy on forestry

Adoption/Entry into force:	1992; the nature of the documents did not require entry into force
Number of Parties (Sept. 2009):	All countries participating at UNCED
Key policy documents:	 - UNCED Statement of principles on forest management, conservation, and sustainable development - Combating Deforestation, Chapter 11, Agenda 21
Primary mandate with regard to forests:	Principles and policy approaches to manage forests
Type of arrangement	Public
Involvement of REDD-ALERT case countries	All four countries participated in this process.

Although there were high expectations of a forestry convention emerging from Rio, Parties were only able to agree on a Statement of Principles. This statement is revealing in that it tries to find a compromise between the different priorities of the different participating countries. The Preamble focuses on the central importance of forests in environmental and development issues, "including the right to socioeconomic development on a sustainable basis". The Principles include the sovereign right to exploit national resources without causing harm to others and that "the agreed full incremental cost of achieving benefits associated with forest conservation and sustainable development requires increased international cooperation and should be equitably shared by the international community." The principles call for sustainable management but also recognize the need for conversion of such forest areas for other uses. They call for the development of accurate information, stakeholder participation, management at the most appropriate level and the development of an appropriate institutional framework.

Chapter 11 of Agenda 21 established four programmes focused on maintaining the multiple roles and functions of forests; enhancing the protection, sustainable management and conservation of all forests, and the greening of degraded areas; promoting efficient utilization and assessment to recover te full valuation of the goods and services provided by forests, forest lands and woodlands; and establishing and/or strengthening capacities for the planning, assessment and systematic observations of forests. National governments were supposed to accordingly take action and the international community was expected to make a financial contribution. These documents are not hard law documents but reveal the complexities of the interests involved in protecting the forests. The follow-up has been slow, if at all.

3.1.2 Convention for Biological Diversity (CBD)

Adoption/Entry into force:	1992/1993
Number of Parties	191
(Sept. 2009):	
Key policy documents:	CBD Strategic Plan (2002-2010) 2010 Biodiversity Target (COP 7 Decision VII/30) Ecosystem approach (COP 5 Decision V/6) Expanded Programme of Work on Forest Biodiversity (COP 6 Decision VI/22)
	In-Depth Review of Implementation of the Programme of Work on Forest Biological Diversity (UNEP/CBD/SBSTTA/13/3)
Primary mandate with regard to forests:	Conservation of biological diversity and habitat protection of flora and fauna
Type of arrangement	Public
Involvement of REDD- ALERT case countries	Ratified by all four

The 1993 *Convention on Biological Diversity* (CBD), one of the three 'Rio Conventions' agreed upon at the United Nations Conference on Environment and Development, has a threefold objective, prompting "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources" (CBD, Article 1).

The CBD is considered to be the most important 'hard law' instrument on forests at the global level (Humphreys, 2006: 191). The focus of the CBD's work on forests is its Expanded Programme of Work on Forest Biodiversity, which succeeded a 1996 programme of work on forest biological diversity. Compared to its predecessor, the Expanded Programme is more action-oriented, rather than limiting itself to rather abstract statements of intention focusing on the national and international level (Humphreys, 2006).

The CBD provides a number of incentives for Parties to protect biological diversity. These include the general provisions requiring Parties to develop or adapt national strategies, plans and programmes and to integrate the objectives of the Convention into relevant sectoral and cross-sectoral policies. Parties are to integrate the conservation and sustainable use of biological diversity into national decision-making and to adopt measures aimed at avoiding or minimising any adverse impacts on biological diversity (CBD, Art. 6 and 10). The CBD also includes more detailed obligations with regard to in situ and ex situ conservation of biodiversity, with an emphasis on the former (Tarasofsky, 1999: 40) . In situ conservation measures include establishing a system of protected areas or areas where special measures are needed (CBD, Art. 8). Developed countries are to provide financial resources to enable developing country Parties to meet the agreed full incremental costs of implementing the Convention (CBD, Art. 20). To this end, the CBD establishes a financial mechanism to support developing countries in implementing the Convention (CBD, Art. 21). The financial mechanism is operated by the Global Environment Facility (GEF) under guidance of the Conference of the Parties (COP) of the CBD (see below). According to the latest report of the GEF to the CBD COP. "the GEF has provided about \$2.3 billion in grants and leveraged about \$5.36 billion in co-financing in support of about 790 biodiversity projects in more than 155 countries" (CBD, 2009: 1). Finally, the CBD contains a requirement to regularly report on measures taken to implement the treaty (CBD, Art. 26). In addition to national reports, Parties are also invited to submit thematic reports, including reports on forest ecosystems.

The CBD promotes an ecosystem approach to promote conservation and sustainable use in an equitable way. Among others, the ecosystem approach embraces community-based approaches by encouraging decentralisation of management to the lowest appropriate level (Humphreys, 2006). Other general incentives are provided through the 2010 Biodiversity Target, which has establishes a various sub-targets relevant to forest biological diversity, including the effective conservation of at least 10% of the world's ecological regions (target 1.1); restoring or maintaining species diversity (target 2.1); promoting genetic diversity (target 3.1); promoting the use of products derived from sources that are sustainably managed (target 4.1); and maintaining and enhancing resilience of biological diversity to adapt to climate change (target 7.1).

Incentives aimed more specifically on forest biological diversity include the activities undertaken under the Expanded Work Programme. While the programme does not include quantified, time-bound targets, it lists 3 overarching elements, 12 goals, 27 objectives, and around 130 activities aimed at the conservation of forest biodiversity.

3.1.3 United Nations Framework Convention on Climate Change (UNFCCC)

Adoption/Entry into force:	Convention: 1992/1994
	Kyoto Protocol: 1997/2005
Number of Parties	Convention: 194
(Sept. 2009):	Kyoto Protocol: 188
Key policy documents:	Decision 16/CMP.1 (Land-Use, Land-Use Change and Forestry)
	Decision 15/CMP.1 (Modalities and procedures for
	afforestation and reforestation project activities under
	the clean development mechanism)
	Decision 2/CP.13 (Reducing emissions from
	deforestation in developing countries: approaches to
	stimulate action)
Primary mandate with	Carbon sinks
regard to forests:	
Type of arrangement	Public
Involvement of REDD-ALERT	Ratified by all four
case countries	

The *United Nations Framework Convention on Climate Change* (UNFCCC), another one of the 'Rio Conventions', and the Kyoto Protocol are the key international legal instruments addressing climate change. The ultimate objective of the UNFCCC is "the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (UNFCCC, Art. 2).

The UNFCCC and the Kyoto Protocol recognise forests for their significance as sinks or reserves for carbon storage, or as sources of carbon. The treaties include several provisions to induce forest conservation, primarily with a view to enhancing the function of forests as carbon sinks. Under the Convention, Parties are committed to "promote and cooperate in the conservation and enhancement ... of sinks and reservoirs ..., including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems" (UNFCCC, Art. 4.1.d). Parties are also required to submit reports on national carbon inventories, sources of emissions, removal of sinks, as well as on the policies implemented to mitigate climate change. In this context, one issue that has remained unresolved as of yet concerns the reporting of harvested wood products.

The Kyoto Protocol states that Annex I Parties (those countries that have taken on quantified emission limitation and reduction commitments under the Protocol) shall "implement and/or further elaborate policies and measures... such as ... promotion of sustainable forest management practices, afforestation and reforestation" (Kyoto Protocol, Art. 2). It also provides that they can use 'direct human-induced' net changes in greenhouse gases and removals by sinks since 1990 to meet part of their commitments (Kyoto Protocol, Art. 3.7). For those countries in which forests were a net source of emissions in 1990, this has allowed efforts to reduce deforestation to be counted towards achievement of the Kyoto targets (Hunt, 2009). Furthermore, afforestation and reforestation - but not deforestation - project activities were to a limited extent admitted under the Protocol's Clean Development Mechanism (CDM). Specific rules for forestry projects were developed at the ninth COP of the UNFCCC in Milan in 2003. These include the distinction between temporary credits for carbon sinks (tCERs), which need to be replaced after 5 years, and long-term credits (ICERs), which remain valid for a maximum of 60 years. While the CDM could in principle provide incentives for enhancing carbon sinks through afforestation and reforestation, it is notable that few projects in this sector have been implemented to date (Hunt, 2009), partly because of public concerns related to the environmental integrity of forest projects and partly because the private sector has been reluctant to implement these projects given the associated complexities (Streck and Scholz, 2006; see also Haupt and von Lüpke, 2007).

In the context of the negotiations on a post-2012 climate regime, the question on how to address emissions from deforestation has gained new momentum under the acronym 'REDD' (Reducing emissions from deforestation and forest degradation), potentially turning the UNFCCC into the most dynamic forum for international debate on tropical deforestation at the moment. While its contours are still unclear, it seems likely that a REDD 'mechanism' of some sort that compensates developing countries for their efforts to combat deforestation will be part of a future international climate agreement. The inclusion of a REDD mechanism – be it in the form of an international fund, a market-based mechanism or some kind of hybrid format – could provide important incentives for forest protection, particularly in those regions where deforestation is a dominant problem.

Soil conservation and erosion control

Type of arrangement:
Primary mandate with

ALERT case countries

regard to forests:
Involvement of REDD-

Adoption/Entry into force:	1994/1996
Number of Parties	194
(Sept. 2009):	
Key policy documents:	

3.1.4 United Nations Convention to Combat Desertification (UNCCD)

Ratified by all four

Public

The main objective of the *United Nations Convention to Combat Desertification* (UNCCD), the third of the 'Rio Conventions', is to combat desertification, to mitigate the effect of drought and to contribute to sustainable development. Although the Convention is scope is in principle global, Africa is singled out as a region of particular concern. There is an intimate relationship between efforts to reduce desertification and to minimize forest loss in the arid, semi-arid and dry sub-humid regions of the world; the UNCCD therefore constitutes a potentially important piece to the mosaic of global forest governance. However, its applicability to forests is limited to those forests close to areas prone to desertification, thereby excluding, for example, tropical rainforests.

The UNCCD takes an integrated, holistic approach to its mandate, focusing on action at all levels. The key means for its implementation is the elaboration of national action programmes by Parties. These programmes need to be in accordance with regional criteria outlined in Annexes to the Convention, and are to be updated at regular intervals and should be closely integrated with other policies promoting sustainable development. However, the implementation of the Convention has been hampered by a severe lack of resources and funding, which has also prevented it from developing a stronger focus on forests and deforestation (Ruis, 2001). Obligations for developed countries include the provision of financial resources and other support to the developing countries affected by drought and desertification.

3.1.5 Convention on the International Trade in Endangered Species (CITES)

Adoption/Entry into force:	1973/1975
Number of Parties	175
(Sept. 2009):	
Key policy documents:	
Primary mandate with	Wood and non-wood forest products
regard to forests:	
Type of arrangement:	Public
Involvement of REDD-ALERT	Ratified by all four
case countries	

The Convention on the International Trade in Endangered Species (CITES) seeks to ensure that international trade does not threaten certain endangered species of wild flora and fauna. CITES operates via inclusion of certain species and sub-species in one of its three appendices which impose different levels of control in international trade. The species listed in Appendix I are most vulnerable and the trade controls for these species are very strict, amounting to a ban in international trade. For the species in Appendix II, which are less vulnerable, limited trade is possible provided the species

are accompanied with an export permit. Appendix III contains the species unilaterally listed by the parties that consider these species as threatened in their territories.

Various tree species are currently included in one of the CITES Appendices, 1 often due to unsustainable timber use, but also for other reasons, such as overexploitation of species for medicinal purposes. Listing timber species has been shrouded in increasing controversy over the past years as it is seen by some as potentially resulting in unfair trade restrictions (Ruis, 2001). Within CITES, he key bodies responsible for its implementation in relation to forest-related products are the Plants Committee, the Timber Working Group and the Bigleaf Mahogany Working Group. The Plants Committee provides scientific advice and can give recommendations about species which are being traded in an unsustainable fashion. The Timber Working Group was created in 1995, and includes representatives of the International Tropical Timber Organization (ITTO; see below). The CITES Secretariat and ITTO also cooperate in the Program for Implementing CITES Listings of Tropical Timber Species. The Bigleaf Mahogany Group was established at the eleventh COP in 2000, primarily to discuss the controversial issue of listing species of mahogany in Appendix II. Finally, CITES also plays a role in the protection of certain non-wood forest products, such as bushmeat (Humphreys, 2006).

In terms of incentives for forest protection, CITES contains potentially strong measures, namely restrictions in trade in tree species (CITES, Art. II.4). For species listed in Appendix I, obligations concerning the granting of permits are divided between importing and exporting countries, whereas for species listed in Appendix II an import permit is not required as long as export of the species will not be detrimental to the survival of that species (CITES, Art. IV.2.a). Parties are also obliged to provide for sanctions for the trade in and possession of endangered species as well as confiscation of the trade products (CITES, Art. VIII.1). While CITES could provide effective protection for certain species, it addresses only one cause of deforestation, namely overexploitation due to consumption.

3.1.6 World Heritage Convention (WHC)

Adoption/Entry into force:	1972/1975
Number of Parties	186
(Sept. 2009):	
Key policy documents:	
Primary mandate with	Natural heritage; (ecotourism and recreation)
regard to forests:	
Type of arrangement:	Public
Involvement of REDD-ALERT	Ratified by all four
case countries	

The 1975 Convention Concerning the Protection of the World Cultural and Natural Heritage (WHC), administered by UNESCO, aims to encourage the identification, protection and preservation of heritage around the world which is considered to be of outstanding value to humanity.

The WHC is of significance to forests due to its mechanism for listing and protecting sites of key cultural and/or 'natural' value. Among the 890 sites on the World Heritage List which the World Heritage Committee has recognised as having outstanding universal value, 97 are forests, covering a total surface are of over 76 million hectares.

-

¹ See http://www.unep-wcmc.org/trees/trade/cites.htm (accessed 2 March 2010).

In 2001, the WHC agreed to make forests a particular focus of its work, resulting in the creation of the World Heritage Forest programme to ensure as that the WHC be "leveraged as much as possible to further forest conservation on a global scale".²

Parties to the WHC are obliged to identify, protect, conserve and transmit to future generations cultural and natural heritage in their territories. The Parties are to integrate the protection of the heritage into planning programmes; to establish services for the protection, conservation and presentation of the heritage; to carry out scientific and technical studies and research; to take legal and other measures for the identification, protection, conservation, presentation and rehabilitation of heritage; to forester training; and to report to the General Conference of UNESCO on their implementation of the Convention (WHC, Art. 4 and 29). The WHC also establishes a World Heritage Fund, where Parties requesting international assistance can request funding for their activities under the Convention (WHC, Art. 15, 19 and 20).

While the WHC can be a powerful tool for protecting sites with forest resources, the protection is limited to the selected sites. Furthermore, the WHC's Operational Guidelines for selecting sites may result in a bias of selecting only large sites where ecosystems are still intact, rather than sites where ecosystems are degrading (McDermott et al., 2007).

3.1.7 World Trade Organization (WTO)

Adoption/Entry into force:	1995
Number of Parties (Sept. 2009):	153
Key policy documents:	 No specific policy documents in relation to forests, although various agreements and discussion fora are relevant
Type of arrangement:	Public
Primary mandate with regard to forests	Wood and non-wood forest products
Involvement of REDD-ALERT case countries	All members

The World Trade Organization (WTO) is currently the only global organization that deals with the rules of trade between nations. It came into being on 1 January 1995, as a result of the Uruguay Round of trade negotiations. The main objectives of the WTO can be found in the preamble to the Agreement establishing the WTO: "Raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development".

The WTO provides for various international agreements, which concern multiple issues of trade relations. These WTO agreements, which are signed by many trading nations, are at the heart of the organization. The WTO not only intends to further the implementation, administration and operation of the WTO Agreements, but it also serves as a forum for further negotiations and seeks to resolve disputes between WTO members through its dispute settlement mechanism. Throughout the WTO

² http://www.worldheritagesite.org/tags/tag355.html

Agreements, a number of fundamental principles can be identified that run throughout the trading system. These include principles such as non-discrimination, predictability and stability, transparency, and the promotion of fair trade. Non-discrimination basically means that a country should not discriminate between producers from other member countries and domestic producers, (the 'national treatment' principle) and that a country should not discriminate between its trading partners (the 'most-favoured nation' principle).

The Uruguay Round resulted in significant reductions of tariffs for traded forest products. At the same time, several other non-tariff barriers to trade in forest products were addressed in the WTO agreements (Zhu et al., 2001). In the late 1990s, work was initiated on a WTO forest products agreement, with the objective of promoting trade by reducing tariffs in forest products. The project was abandoned later, following widespread opposition by NGOs and, according to Humphreys (2006), possibly also as a consequence of the street protests in Seattle at the occasion of the 1999 WTO Ministerial Conference. Although there is thus no forest product agreement, two of the WTO agreements are of particular relevance for forest governance: the 1994 General Agreement on Tariffs and Trade (GATT), and the Agreement on Technical Barriers to Trade (TBT Agreement). Furthermore, discussions taking place in the WTO's Committee on Trade and Environment (CTE) are of importance. GATT rules are aimed at liberalising trade of products including forest products. This means that in principle no discrimination is allowed between 'like' forest products that are produced in a sustainable fashion and products from unsustainable sources. However, the treaty includes exceptions that allow for trade-restrictive measures on environmental grounds (GATT, Art. XX) under conditions that have been elaborated in case law over the last few decades. The TBT Agreement deals with the international harmonization of technical regulations and standards. Its relevance in the case of forests stems from its potential to limit forest certification activities (McDermott et al., 2007), although like the GATT the TBT Agreement also includes an exception on environmental grounds. Finally, the discussions in the CTE are of relevance. The CTE discusses all sorts of issues related to trade and environment. In addition, there are Special Sessions of the CTE (CTE-SS), which form the discussion forum for most environmental aspects of the Doha Round of trade negotiations, which was launched at the end of 2001. However, the CTE has so far not made any recommendations addressing the relation between and environment (including forest) issues, while the CTE-SS discussions have not yet concluded. On forestry, WTO Members have argued that other fora are more appropriate to discuss this issue.

3.1.8 Ramsar Convention on Wetlands

Adoption/Entry into force:	1971/1975
Number of Parties	159
(Sept. 2009):	
Key policy documents:	Ramsar Strategic Plan 2009-2015
Type of arrangement:	Public
Primary mandate with	Conservation of biological diversity and habitat
regard to forests:	protection of flora and fauna
Involvement of REDD-ALERT	Ratified by all four
case countries	

The mission of the Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention) is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a

contribution towards achieving sustainable development throughout the world" (Ramsar Convention, Art. 3.1).

In the context of forest governance, it is primarily of relevance since the increasingly threatened mangrove forests around the world fall under its scope. In particular, the protection from conversion of forested wetlands under the Ramsar Convention contributes to avoiding deforestation (McDermott et al., 2007).

In order to accede to the Convention, a Party must designate at least one wetland site on their territory as a nature preserve which then becomes subject to Ramsar's standard of 'wise use', which is defined as 'sustainable utilization'. The Ramsar COP has adopted two groups of criteria for designating sites as wetlands: 1) criteria for sites containing representative, rare or unique wetland types; and 2) criteria for sites of international importance for conserving biological diversity. To date, 1886 sites around the globe have been added to the Ramsar List of Wetlands of International Importance, covering a total surface area of 185,156,612 hectares. Commitments under the Ramsar Convention include notably the establishment of nature reserves to protect wetlands (Ramsar Convention, Art. 4.1).

3.1.9 International Tropical Timber Organisation (ITTO)

Adoption/Entry into force:	1986 ITTA 1994: 1994/1997 ITTA 2006: 2006/-
Number of Parties (Sept. 2009):	59 (membership in ITTO)
Key policy documents:	ITTO Action Plan 2008-2011 ITTO Objective 2000 Policy guidance documents on various topics
Type of arrangement:	Public
Primary mandate with regard to forests:	Wood products (timber)
Involvement of REDD-ALERT case countries	Indonesia, Cameroon, Peru

The International Tropical Timber Organization (ITTO) is in the first place a commodity organization, whose mandate is to facilitate and regulate the international trade in tropical timber between producer and consumer countries. Its membership covers countries holding about 80% of the world's tropical forests and accounting for 90% of the global tropical timber trade. The International Tropical Timber Agreement (ITTA), the foundational document of the ITTA was first adopted in 1983 and later subsided by a newly negotiated agreement, the ITTA 1994. More recently, negotiations to a successor led to the ITTA 2006, which is yet to enter into force.

The ITTA 1994 aims at industrial tropic timber reforestation and forest management activities. The objective of the ITTA 2006 is "to promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests and to promote the sustainable management of tropical timber producing forests" (ITTA 2006, Art. 1). The ITTA 2006 is thought to represent an improvement compared to its predecessors in that it provides for a more comprehensive coverage including also controversial issues such as illegal logging, certification and the concept of sustainable forest management. However, Nagtzaam (2008)has argued that the ITTO is still primarily dominated by the norm of exploitation

_

³ http://www.itto.int/en/about_itto/.

rather than conservation, partly because of its voting structure which rewards states exploiting – and not those conserving – forest resources. In terms of incentives, the ITTA produces various policy guidance documents focusing on the promotion of forest conservation and sustainable forest management, but also funds a range of projects at various scales in developing countries. One of the objectives the ITTO formulated for itself, the 'Year 2000 Objective' aiming at sustainable forest management in all ITTO member states, proved to be too ambitious, and was since then renamed the 'ITTO Objective 2000', which should be regarded as a more procedural objective of working towards sustainable forest management (Nagtzaam, 2008).

3.1.10 International Labour Organization (ILO)

Adoption/Entry into force:	Indigenous and Tribal Populations Convention No. 107: 1957 Indigenous and Tribal Peoples Convention No. 169: 1991
Number of Parties (Sept. 2009):	Convention No. 107: 18 (only in force for those countries that have not ratified Convention No. 169)
(Sept. 2009).	Convention No. 169: 20
Key policy documents:	
Type of arrangement:	Public
Primary mandate with regard to forests:	Human settlements, habitat, rural livelihoods
Involvement of REDD-ALERT case countries	All four are ILO members. Convention 169 (and previously 107) ratified only by Peru.

The *International Labour Organization* (ILO) is the home to Conventions No. 107 and No. 169, the only two legally binding international instruments focusing exclusively on the rights of indigenous and tribal people. Given that many if not most of these groups depend on forests for their livelihoods, both Conventions are of high relevance for global forest governance.

The new Convention No. 169, which revises and strengthens ILO Convention No.107 (1957) (Tarasofsky, 1999), endorses the right of indigenous and tribal peoples to freely participate at all levels of decision-making in their country (Art. 6), to decide on their own development priorities and to exercise control over their economic, social and cultural development (Art. 7). Art. 7 further stipulates that they "shall participate in the formulation, implementation and evaluation of plans and programmes for national and regional development which may affect them directly". The Convention also explicitly endorses the rights of these peoples to the land they have traditionally occupied as well as the natural resources pertaining to this land (Art. 14 and 15).

Parties to the Convention are required to submit five-yearly reports on their compliance, which are subject to review and comments by the ILO Committee of Experts on the Application of Conventions and Recommendations.

3.1.11 United Nations Permanent Forum on Indigenous Issues (UNPFII)

Year of Establishment:	2000 (UN Working Group on Indigenous Populations in 1982)
Membership (Sept. 2009):	16 members, 8 nominated by governments, 8 by the President of ECOSOC, on the basis of broad consultation with indigenous groups
Key policy documents:	2007 UN Declaration on the Rights of Indigenous Peoples Programme of Action for the Second International Decade of the World's Indigenous People
Type of arrangement:	Public
Primary mandate with regard to forests:	Human settlements, habitat, rural livelihoods
Involvement of REDD-ALERT case countries	A Peruvian was member of the forum from 2002-2004; otherwise, none visible

Activities on indigenous rights within the United Nations have taken place in various fora. For a long time, the UN Working Group on Indigenous Populations, established by the UN Economic and Social Council was the focal point of action. This is where the first draft of the UN Declaration on the Rights of Indigenous Peoples originated. After more than a decade of negotiations, the Declaration was finally adopted by the UN General Assembly in 2007. While not binding in international law, the Declaration has been widely celebrated as an important step forward in the protection of indigenous rights. In relation to land issues, Article 26 of the Declaration upholds Indigenous Peoples' claims to their territories and the resources they contain, stipulating their right to "own, use, develop, and control the lands, territories, and resources that they possess."

The Working Group was superseded in 2007 by the new Expert Mechanism on the Rights of Indigenous Peoples which reports directly to the new UN Human Rights Council. In addition, since 2000, the *United Nations Permanent Forum on Indigenous Issues* (UNPFII) has been established as an advisory body to the Economic and Social Council (ECOSOC). While the forum is to provide expert advice to ECOSOC, and raise awareness of issues regarding indigenous people, its mandate is rather limited.

In a further potentially important development, a Special Rapporteur on the situation of the human rights and fundamental freedoms of indigenous people was appointed in 2001, mandated to gather and receive information and communications from all relevant sources, including governments, indigenous people themselves and their communities and organizations, on violations of their human rights and fundamental freedoms.

3.1.12 United Nations Forum on Forests (UNFF)

Year of establishment:	2000
Number of Members (Sept. 2009):	Universal - all UN members (192)
Key policy documents:	ECOSOC Resolution 2000/35 ECOSOC Resolution 2006/49 (outcomes of UNFF6) Multi-Year Programme of Work 2007-2015 Non-legally binding instrument on all types of forests (UNGA Resolution 62/98)
Type of arrangement:	Public
Primary mandate with regard to forests:	Multiple, potentially covering all forest functions
Involvement of REDD-ALERT case countries	Indonesia was Chair at last UNFF session; no particular activities from the others

The United Nations Forum on Forests (UNFF), created in 2001, is the successor to the Intergovernmental Panel on Forests (IPF) and the Intergovernmental Forum on Forests (IFF), the two discussion venues that were established for forest-related issues in the United Nations following the Rio Earth Summit in 1992. Initially established for a timeframe of 5 years, the UNFF mandate now extends until 2015. According to the ECOSOC Resolution through which it was established, its mandate is "to promote the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end" (ECOSOC Resolution 2000/35: para. 1). Compared to its predecessors, the UNFF has a higher standing in that it reports directly to ECOSOC. Its range of activities is also broader; previous sessions have included ministerial high-level segments, multi-stakeholder dialogues and expert panels, with the latter having very little substantive impact on the intergovernmental deliberations, however (Humphreys 2006). Rather than providing direct incentives aimed at sustainable forest management, the UNFF's function is to facilitate the implementation of forest-related international agreements in a mutually supportive fashion. However, the UNFF's activities also include assisting countries in preparing and implementing national forest programmes.

Substantive progress within the UNFF was limited during the first five years of its existence, although the adoption of a 'Non-legally binding Instrument on All Types of Forests' and of a new Multi-Year Programme of Work at its 7th Session in 2007 provided a breakthrough of sorts. However, the added value of the former remains doubtful (see e.g. Kunzmann, 2008). While it sets out a number of 'global objectives' to be achieved by 2015, and identifies a range of policies and measures that could be taken at the national level, it is of an explicit voluntary nature. Progress has somewhat stalled since 2007, with discussions on the establishment of a global forest fund proving particularly divisive at the UNFF's latest session in May 2009.

⁴ http://www.iisd.ca/vol13/enb13174e.html.

3.1.13	United	Nations	Development	Programme (UND)	(د

Year of establishment:	1965
Number of Members	Universal – all UN members (192)
(Sept. 2009):	
Key policy documents:	
Type of arrangement:	Public
Primary mandate with regard to forests:	Multiple - human settlements, habitat for people, rural livelihoods; conservation of biological diversity and
	habitat etc.
Involvement of REDD-ALERT	No assessment possible
case countries	

The involvement of the *United Nations Development Programme* (UNDP) in forestry issues mainly manifests itself in the delivery of on-the-ground technical assistance and project implementation in developing countries. UNDP is one of the three implementing agencies of the Global Environment Facility (GEF) and manages a large number of forest-related projects within the GEF's climate change and biodiversity focal areas. As of February 2009, the total of the UNDP's GEF-funded projects amounted to approximately US\$ 8.74 billion, spread over 570 full and medium-size projects as well as more than 370 enabling activities. Furthermore, UNDP also hosts the GEF's Small Grants Programme, with a total budget of around US\$738.7 million, comprising both GEF funds and co-financing.

Beyond these implementation activities, UNDP's Global Biodiversity Programme "assists developing countries and communities to influence national and global policies, benefits from knowledge on biodiversity, and advance their sustainable development and poverty reduction goals". ⁵

Through its Multi-Donor Trust Fund Office, and in cooperation with UNEP and FAO, the UNDP also administers the UN-REDD Programme, a collaborative partnership within the United Nations, which is aimed at supporting countries in developing capacity to reduce emissions from deforestation and forest degradation, as well as assisting in the implementation of a future REDD mechanism under a post-2012 climate agreement. The mandate of UN-REDD is to twofold, on the one hand promoting 'REDD readiness' in potential host countries for REDD activities, and on the other hand contributing to the technical side of REDD, through the development of standardized guidance and methodologies.

_

⁵ http://www.undp.org/biodiversity/programmes.html.

3.1.14 UNEP (United Nations Environment Programment Pr	ogramme	me)
--	---------	-----

Year of establishment:	1972
Number of Members	Universal - all UN members (192)
(Sept. 2009):	
Key policy documents:	UNEP Medium-term Strategy 2010-2013
	UNEP Biennial Programme of Work
Type of arrangement:	Public
Primary mandate with	Multiple, focus on forest biodiversity
regard to forests:	
Involvement of REDD-ALERT	No assessment possible
case countries	

The traditional home of the forest-related activities of the United Nations Environment Programme (UNEP) is its biodiversity programme, which, however, is constrained by limited financial and personnel capacity. As a consequence, it has largely limited itself to a technical advisory and facilitative role (Tarasofsky and Downes, 1999). In addition, UNEP also hosts the UNEP World Conservation Monitoring Centre in cooperation with the UK-based charity WCMC2000, which aims to act as a focal point for the synthesis, analysis and dissemination of global biodiversity knowledge. Furthermore, UNEP supports the administration of several forest-related treaties, including the CBD, CITES and UNCCD. UNEP is also involved in a number of specific forest ecosystem-related projects, including in the Congo Basin and in the Mau Forest Complex in Kenya. More recently, UNEP increased its profile in the forest sector, when it, together with UNDP and FAO, established the UN-REDD Programme in 2007 (see above).

3.1.15 FAO (Food and Agriculture Organisation)

Year of establishment:	1945
Number of Parties	191
(Sept. 2009):	
Key policy documents:	FAO Strategic Plan for Forestry (1999)
	FAO Strategy for Forestry (draft stage)
Type of arrangement:	Public
Primary mandate with	Multiple; focus on livelihoods, wood- and non-wood
regard to forests:	products and forest biodiversity
Involvement of REDD-ALERT	All four are members
case countries	

The Food and Agriculture Organisation (FAO) is a specialized agency of the United Nations. Forestry has been a part of its agenda since it was established. Forestry is addressed by one the FAO's eight departments, as well as by the Committee on Forestry (COFO), six regional commissions, and a number of technical statutory bodies.

According to the FAO's Strategic Plan for Forestry, its mission in forestry is to "enhance human well-being through the sustainable development of the world's trees and forests" (FAO, 2000), thus balancing economic, social and environmental objectives. FAO sees the delivery of direct technical support to countries as its primary mandate in the field of forestry. It further provides a neutral platform for countries to discuss technical and policy discussions related to forestry. Finally, the organization acts as an important catalyst and focal point for the gathering and dissemination of all kinds of

data and information, especially the inventorying of global forest resources (McDermott et al., 2007). While the FAO may have lost some of its political significance over quarrels and controversies in the early 1990s (Tarasofsky & Downes, 1999), it remains a very important actor, not least because of its role in running the National Forest Programme Facility, which seeks to support and coordinate the implementation of national and subnational forest policy (McDermott, O'Carroll, & Wood 2007).

Together with UNDP and UNEP, the FAO is also involved in the UN-REDD programme (see above).

3.1.16 World Bank

Year of establishment:	1944
Number of Parties	International Bank for Reconstruction and
(Sept. 2009):	Development (IBRD): 186
	International Development Association (IDA): 169
Key policy documents:	World Bank Forests Strategy (2002)
	World Bank Forests Operational Policies
Type of arrangement:	Public
Primary mandate with	Multiple; focus on livelihoods, wood- and non-wood
regard to forests:	products and forest biodiversity
Involvement of REDD-ALERT	All four are members
case countries	

The *World Bank* is a key actor in global forestry, because of the large amount of Bank funding dedicated to forest projects, but also because many other World Bank loans, in infrastructure, mining or agriculture, have large impacts on forests in the target countries (Tarasofsky & Downes 1999). In adopting its new Forests Strategy in 2002, the Bank has moved away from its previous strategy, which had prompted a ban on all projects that involved commercial logging in primary tropical moist forests and as a consequence had produced a severe chilling effect on Bank investments in forest projects (Humphreys 2006). While there is still considerable concern to which extent forest and conservation issues have been effectively mainstreamed in Bank business and forest-related safeguards adequately implemented, the 2007 Review of Implementation of the World Bank Strategy does acknowledge the Bank's efforts to this effect (Hermosilla and Simula, 2007). While in the past, the Bank has been accused of addressing emerging forest-related issues too slow, it has become more proactive in addressing emerging forest-related issues, notably in the areas of forest law and governance, and forest as carbon sinks (Hajjar and Innes, 2009).

In 2008, the World Bank had committed a total of US\$ 224.16 million in funds to forestry lending, a significant increase compared to earlier years. In addition, the World Bank is engaged in global forest programmes, such as the World Bank and World Wildlife Fund (WB/WWF) Alliance for Forest Conservation and Sustainable Use, Forest Law Enforcement and Governance (FLEG) and the Program on Forests (PROFOR), which was previously hosted by UNDP. The Review of Implementation, however, deplores their "limited impact" due to the "fragmentation of initiatives and their small size" (Hermosilla and Simula, 2007, ix).

In recent years, the World Bank has established itself as one of the main proponents of carbon finance in the international arena, with the BioCarbon Fund being the first initiative specifically aimed at carbon sequestration through forests. In 2008, the Bank created the REDD-focused Forest Carbon Partnership Facility (FCPF), to build capacity in REDD host countries and to gain experience through the implementation of pilot

projects. Furthermore, under the newly created Strategic Climate Fund, a large-scale Forest Investment Program, which would address REDD, but also fund adaptation-related forest projects, is currently under development.

3.1.17 Global Environment Facility

Year of establishment:	1991
Number of Members	178
(Sept. 2009):	
Key policy documents:	1995 Operational Strategy of the Global Environment
	Facility
	2007 GEF Focal Area Strategies and Strategic
	Programming for GEF-4
	Operational Program on Forest Ecosystems
Type of arrangement:	Public
Primary mandate with	Forest conservation and biodiversity; carbon sinks and
regard to forests:	sequestration; soil protection and erosion control
Involvement of REDD-ALERT	All four are members; since inception of the GEF
case countries	Cameroon has received funding for 13 approved
	national projects (total GEF funding: 32 Mio. USD), Peru
	32 projects (89 Mio. USD), Indonesia 28 projects (111
	Mio. USD) and Vietnam 34 projects (100 Mio. USD)6

The Global Environment Facility (GEF) was founded in 1991 as a pilot programme of the World Bank. Three years later, in 1994, it was moved out of the World Bank system and became a separate, permanent institution. The GEF's mandate is to provide grants and concessional funding to cover the "incremental" cost for projects that yield global environmental benefits. Since its inception, the GEF has implemented more than 2400 projects in more than 165 countries, amounting to a total of 8.61 billion US\$ in funding and leveraging another 36.1 US\$ in co-financing.

The GEF is also the financial mechanism for a number of multilateral environmental agreements, including the CBD, the UNCDD, and the UNFCCC and the Kyoto Protocol. Under its focal areas biodiversity, climate change and, more recently, land degradation, it has provided funding for forestry projects. In the biodiversity focal area, the emphasis has largely been on projects involving protected areas, possibly since it was considered more straightforward to demonstrate their global environmental benefits (Mee et al., 2008).

-

 $^{^{6}\} http://www.gefonline.org/projectListSQL.cfm$

2001 14 forest-related international organisations CPF Policy Document Strategic Framework for Forests and Climate Change
Public
Multiple

3.1.18 Collaborative Partnership on Forests (CPF)

The *Collaborative Partnership on Forests* (CPF), the successor organization of the Interagency Task Force on Forests (ITFF) is a high-level informal mechanism comprising 14 forest-related international organizations and secretariats with substantial programmes on forests.

Indirect

In terms of incentives, the CPF does not have an executive mandate or a budget separate from the collaborating organisations. Instead, its primary mission is to assist the work of the UNFF, and to promote coordination and cooperation related to forest issues. Harmonisation of forest reporting to ease the administrative burden on countries reporting to various forest-related bodies and the development of a sourcebook on funding for sustainable forest management have been among its tasks to date. According to Humphreys (2006), the CPF's work so far has been quite effective and appreciated by its member organizations and countries.

3.1.19 International Monetary Fund (IMF)

Involvement of REDD-ALERT

case countries

Year of establishment:	1944
Number of Members	186
(Sept. 2009):	
Key policy documents:	None relating to forests
Type of arrangement:	Public
Primary mandate with regard	Only indirect impact
to forests:	
Involvement of REDD-ALERT	All four are members
case countries	

The mission of the *International Monetary Fund* (IMF) is to support countries in balance of payments difficulties or to assist with poverty reduction through loans and grants. The IMF is only concerned with issues that impact the macroeconomic situation of a country; however, the prescriptions it makes in its structural adjustment programmes (SAPs) may have an indirect impact on forests and/or a country's forest policy, for instance by promoting lower export taxes for timber or by prompting the reduction of government budgets which impacts forest law enforcement.

3.1.20 Forest Stewardship Council

Year of establishment:	First process started in 2001
Number of Members (Sept. 2009):	Various informal regional processes
Key policy documents:	FSC Principles and Criteria for Forest Stewardship
Type of arrangement:	Private
Primary mandate with regard to forests:	Trade in wood products
Involvement of REDD-ALERT case countries	Certified forest areas in all case countries; very strong growth in Chain of Custody certificates in Vietnam

The Forest Stewardship Council (FSC) is a non-governmental, market-based scheme for timber labelling, borne out of the disappointment of environmental NGOs regarding the failure of the ITTO to successfully promote sustainable forest management practices (Humphreys, 2006). The FSC introduces an international labelling scheme for forest products, which shows that a product comes from a well-managed forest. FSC labelling involves both forest certification and supply chain certification, the verification of both of which are delegated to third party certifying organisations. Over the years, a number of often business-driven competitor schemes to the FSC have sprung up, with the Pan-European Forest Certification scheme (PEFC) garnering the most wide-spread support, also through a policy of mutual recognition of standards among various national schemes (Humphreys, 2006). Humphreys (2006) predicts, however, that global forest labelling has now entered a phase of consolidation, with the FSC and the PEFC remaining the two central players in the global 'certification game'.

3.2 Regional institutions and actors

3.2.1 Forest Law Enforcement and Governance (FLEG) processes

Year of establishment:	First process started in 2001
Number of Members	Four regional processes:
(Sept. 2009):	- FLEG(T): EU
	- ENAFLEG : EU and North Asia
	- East Asia FLEG - AFLEG: Africa
Variable and a second	
Key policy documents:	- 2001 FLEG Bali Ministerial Declaration
	- 2003 EU FLEGT Action Plan
Type of arrangement:	Public
Primary mandate with	Trade in wood products
regard to forests:	
Involvement of REDD-ALERT	Cameroon in AFLEG (hosted first AFLEC meeting)
case countries	Indonesia in East Asia FLEG
	Vietnam in East Asia FLEG

The Forest Law Enforcement and Governance (FLEG) initiatives are a series of regional processes to combat illegal logging, initially conceived because UN institutions were thought to be too rigid, slow and inflexible to address this problem (Humphreys 2006). The first of the interministerial processes, which are co-hosted by producer and consumer governments and the World Bank, was organised in the East Asia and Pacific region in 2001. A further process was initiated in Africa in 2002/2003. The EU, as a key consumer region, equally adopted a Forest Law Enforcement Governance and Trade (FLEGT) Action Plan in 2005, encompassing both supply and demand-side policies and instruments. For Latin America and the Caribbean, scoping activities for a potential FLEG initiative are underway. Efforts to ensure the compatibility of measures such as import controls and licenses with WTO rules have continuously limited the extent of actions taken under the FLEG processes (Humphreys 2006).

3.2.2 Central American Forests Convention

Year of establishment:	1993
Number of Members	8
(Sept. 2009):	
Key policy documents:	Central American Forestry Strategy (EFCA)
Type of arrangement:	Public
Primary mandate with	Multiple
regard to forests:	
Involvement of REDD-ALERT	None present in the region
case countries	

The Regional Convention for the Management and Conservation of Natural Forest Ecosystems and the Development of Forest Plantations, also known as the Central American Forest Convention (CAFC), was adopted in 1993. According to Aguilar and González (1999), the Convention "seeks to shift away from a system predominantly agrarian in focus [...], to one which promotes the conservation and sustainable use of forests" (Aguilar & González, 1999: 116). To this end, it requires Parties to inter alia consolidate national and regional systems of protected areas, to establish dynamic inventories of forest cover, to create mechanisms to control illegal trade in flora and fauna and to promote public participation and recognise the rights of indigenous peoples and other inhabitants of forested areas. Aguilar and González (1999) consider the implementation of the Convention as "satisfactory, although not perfect" (Aguilar and González, 1999, 118).

3.2.3 The Central Africa Forests Commission (COMIFAC)

Year of establishment:	1999
Number of Members (Sept. 2009):	10
Key policy documents:	- Yaoundé Declaration (1999)
	- COMIFAC Convergence Plan (2004)
	- COMIFAC Treaty (2005)
Type of arrangement:	Public
Primary mandate with regard	Multiple
to forests:	
Involvement of REDD-	Cameroon as the only REDD-ALERT country in the region
ALERT case countries	is a member

The Central Africa Forests Commission (COMIFAC) has ten member states, all situated in the Congo Basin. It emerged as the operational structure for regional cooperation on forestry issues from the first Summit of Central African Heads of State on conservation and sustainable management of forests in Yaoundé in 1999. A treaty formally

establishing a legal framework for the Commission was adopted at Brazzaville in February 2005. The states also adopted a convergence plan in 2004, with a view to harmonising forest management policies and practices (Gauer, 2006).

Besides establishing the Commission, the COMIFAC treaty includes a number of commitments for the parties to pursue the conservation and sustainable management of forest ecosystems. While the parties pledge financial support for such activities, external support is recognised as important. In this regard, it is important to acknowledge the link between COMIFAC and the Congo Basin Forest Partnership (CBFP; see below) as one of the instruments to enhance the implementation of the COMIFAC treaty as well as the convergence plan (Gauer 2006).

3.2.4 Alpine Convention

Year of establishment:	1991
Number of Members	8
(Sept. 2009):	
Key policy documents:	8 Protocols
Type of arrangement:	Hybrid
Primary mandate with	Multiple
regard to forests:	
Involvement of REDD-ALERT	None present in the region
case countries	

The 1991 Alpine Convention is a framework convention addressing the comprehensive protection and sustainable development of the Alps and in that context naturally touches on the Alpine forests as well. The Convention has been extended by nine Protocols on more specific issues affecting the natural environment in the Alpine region, such as population and culture, air pollution, soil protection, etc.

3.2.5 Convention on Long-Range Transboundary Air Pollution (LRTAP Convention)

Year of establishment:	1979/1983
Number of Members	51
(Sept. 2009):	
Key policy documents:	
Type of arrangement:	Public
Primary mandate with	Indirect impact
regard to forests:	
Involvement of REDD-ALERT	None present in the region
case countries	

The 1979 Convention on Long-Range Transboundary Air Pollution (LRTAP Convention) was negotiated under the auspices of the United Nations Economic Commission for Europe (UNECE). The primary objective of the LRTAP Convention is to protect the human environment against air pollution by gradually reducing and preventing emissions of air pollutants, including long-range transboundary air pollution. To this end, the Convention stipulates exchanges of information and consultation between Parties, as well as research and monitoring. The Convention has given rise to eight protocols that identify specific policies and measures available to Parties to cut their emissions. The Convention addresses, among others, the impacts of transboundary air pollution on forests (McDermott et al., 2007).

3.2.6 Western Hemisphere Convention

Year of establishment:	1940/1942
Number of Members	19
(Sept. 2009):	
Key policy documents:	
Type of arrangement:	Public
Primary mandate with	Conservation of biological diversity and habitat
regard to forests:	protection of flora and fauna
Involvement of REDD-ALERT	Peru, the only REDD-ALERT country in the region,
case countries	ratified

The Convention On Nature Protection And Wildlife Preservation In The Western Hemisphere (Western Hemisphere Convention), a regional convention under the umbrella of the Organization of American States (OAS), was a "visionary instrument, well ahead of its time" (Lyster, 1985, 97) when it was adopted in 1940. The Convention stipulates the establishment and maintenance of a set of protected areas, including national parks and strict wilderness areas that are to remain inviolate. The Convention also prompts research cooperation between governments, provides for trade controls of protected fauna and flora and includes an annex with species that require special protection. However since the agreement did not provide for any administrative structure or enforcement mechanisms, it is considered today mainly a "sleeping Convention" (Lyster 1985, 98).

3.2.7 African Timber Organization (ATO)

Year of establishment:	1993
Number of Members	13
(Sept. 2009):	
Key policy documents:	
Type of arrangement:	Public
Primary mandate with	Wood products
regard to forests:	
Involvement of REDD-ALERT	Cameroon, the only REDD-ALERT country in the region,
case countries	is a member

The African Timber Association (ATO) is a regional body which deals with the sustainable production and commercialisation of timber. To this end, it has initiated its own regional 'criteria and indicators' (C&I) processes for sustainable forest management – one among nine such regional processes which in total cover more than 150 countries and around 85% of the world's forests (Humphreys, 2006). Humphreys (2006) emphasises the difference between these C&I processes and certification schemes: whereas the former provide a means for assessing the current state of a forest area and its evolution over time, it does not provide normative benchmarks as to what constitutes 'good' forest management.

3.2.8 Ministerial Conference on the Protection of Forests in Europe (MCPFE)

Year of establishment:	1990
Number of Members	46 and EU
(Sept. 2009):	
Key policy documents:	MCPFE Work Programme 2008
Type of arrangement:	Public
Primary mandate with	Multiple
regard to forests:	
Involvement of REDD-ALERT	None present in the region
case countries	

The Ministerial Conference on the Protection of Forests in Europe (MCFPE; now known as 'Forest Europe') is an intergovernmental forum including about 40 European countries. Its mission is to foster collaboration on forestry issues in Europe. The MCFPE launched its own C&I process; its criteria and indicators and Pan-European Operational Level Guidelines were adopted by the business-driven Pan-European Certification Scheme (PEFC) as basis for a framework for the mutual recognition of national certification standards.

3.2.9 Amazon Cooperation Treaty Organization (ACTO)

Year of establishment:	1995 (Treaty adopted in 1978)
Number of Members (Sept. 2009):	8
Key policy documents:	Strategic Plan 2004-2012
Type of arrangement:	Public
Primary mandate with regard to forests:	Multiple
Involvement of REDD-ALERT case countries	Peru, only REDD-ALERT country in the region, is a member

The Amazonian Cooperation Treaty was concluded in 1978 (and amended in 1998) with the mandate to stimulate collaboration and joint actions for the harmonious development of the Amazon. Environmental preservation and the rational use of its resources were the primary objectives at the time. The Amazonian Cooperation Treaty Organization (ACTO) as its operational structure was established in 1995.

3.2.10 ASEAN

Year of establishment:	1967
Number of Members (Sept. 2009):	10
Key policy documents:	 Strategic Plan of Action on the Environment ASEAN Agreement on the Conservation of Nature and Natural Resources (1985)
Type of arrangement:	Public
Primary mandate with regard to forests:	Multiple
Involvement of REDD-ALERT case countries	Vietnam and Indonesia are ASEAN members. Indonesia also ratified the 1985 ASEAN Agreement.

The Association of Southeast Asian Nations (ASEAN) was established in 1967 and now comprises ten Member States. ASEAN is also active in the sphere of the environment although, amid many soft law initiatives, it has only concluded two hard law instruments (Koh, 2003). One of them is the 1985 ASEAN Agreement on the Conservation of Nature and Natural Resources, which, however is yet to enter into force due to a lack of ratification. The agreement aims to protect ecosystems, habitats and endangered species through the conservation of wild flora, fauna and renewable resources.

3.2.11 South-African Development Community (SADC)

Year of establishment:	1992
Number of Members	15
(Sept. 2009):	
Key policy documents:	SADC Protocol on Forestry (2002)
Type of arrangement:	Public
Primary mandate with	Multiple
regard to forests:	
Involvement of REDD-ALERT	No REDD-ALERT country present in the region
case countries	

The Southern African Development Community (SADC) aims to promote socio-economic cooperation and regional integration in Southern Africa. In 2002, it adopted its basic policy framework for forests with the SADC Protocol on Forestry. This document lists the harmonization of approaches for the sustainable management of forest resources, increased efficiency in their utilization, facilitation of trade in forest-related products and stimulation of research, education and training as its primary objectives.

3.2.12 Congo Basin Forest Partnership (CBFP)

Year of establishment:	2002
Number of Members	Around 40 governmental, non-governmental and
(Sept. 2009):	business organisations
Key policy documents:	CBFP Cooperation Framework
Type of arrangement:	Hybrid
Primary mandate with	Multiple; mainly conservation of forest biodiversity and
regard to forests:	livelihoods
Involvement of REDD-ALERT	Cameroon is actively involved
case countries	

The *Congo Basin Forest Partnership* (CBFP) was founded at the World Summit on Sustainable Development in Johannesburg in 2002. It is a so-called "type II" partnership, an informal network of about 40 governmental, nongovernmental and international organisations. The primary role of the CBFP is to work as a "transmission belt between donors and implementing agencies", providing a forum for consultation of all stakeholders, which is not immediately involved in programme implementation or financing. The CBFP works closely with the Central African Forests Commission (COMIFAC; see above).

3.2.13 Asia Forest Partnership

Year of establishment:	2002
Number of Members	42 partners (governments, intergovernmental
(Sept. 2009):	organizations and NGOs, research institutes, etc).
Key policy documents:	
Type of arrangement:	Hybrid
Primary mandate with	Multiple
regard to forests:	
Involvement of REDD-ALERT	No REDD-ALERT country present in the region
case countries	

As the Congo Basin Forest Partnership, the Asia Forest Partnership (AFP) was launched as a "type II" partnership at the World Summit on Sustainable Development in Johannesburg. Its main objectives are information exchange, the facilitation of dialogue among stakeholders and stimulating debate on concepts such as sustainable forest management in the region.

_

⁷ http://www.cbfp.org/objectifs_en.html.

4 Conclusions

4.1 Conclusions from this research

A number of tentative conclusions can be drawn from this research. The first is that forestry is an area where governance is spread among a range of public and private actors and different institutions are springing up at international, regional and national levels. McDermott et al. (2007) explain that in the absence of coordinated forest governance efforts, numerous forest-related instruments have filled the void, each with a unique focus, such as climate change (e.g. UNFCCC), biodiversity (e.g. CBD), timber trade (e.g. ITTO), or a combination of several forest related functions (e.g. UNFF). In some cases forest-related issues are embodied in founding agreements and policy documents. In others, forest-related content has emerged later in the instrument's development, whether through formal decisions made at successive COPs or through informal work programmes or guidelines. Overall, the focus on forests has continued to spread and disperse as part of a general broadening of mandates and growing preference for holistic approaches to sustainable development. Brown (2001) argues that the multiplicity of agreements includes agreements specific to particular regions, often covering a range of sectoral issues (e.g. the Treaty for Amazonian Cooperation), not solely concerned with forestry. International initiatives often represent particular interests or specific aspects of forest governance or are bounded in time to produce a specific recommendation or input into policy. The numerous calls for synergies between the different institutional initiatives have largely gone unheard. The result is "creeping ad hoc incrementalism"; "the international forests regime is disconnected and multicentric; it has developed at different speeds and in different directions rather than strategically and holistically along a common front" (Humphreys, 2006: 213). Humphreys (2006: 192) argues that as a system of global governance, the forest governance efforts represent a mix of public and private, and hard and soft, provisions that provide an embryonic system of rights and obligations for states and other actors and is simultaneously coherent and fragmented. Coherence is achieved through a legal 'spill-over effect'. Any body of law, including soft law, can be precedent-setting, and principles adopted in one legal instrument may subsequently influence others.

Second, the majority of forest-related legally binding global instruments include very few provisions addressing sustainable forest management. The International Tropical Timber Agreement (ITTA) promotes the sustainable trade of tropical timber, although the interpretation and adherence to this concept by the ITTA has been questioned (Nagtzaam, 2008).

Third, deforestation results from different drivers operating at different levels of governance. Brown (2001) argues that the processes of forest conversion, conventionally referred to as deforestation, should be seen as a result of multiple processes. Numerous studies have identified a range of underlying and direct causes, including population increases, migration, land tenure, forest products, trade and infrastructure development and government policies including subsidies. Agents and causes are regionally differentiated and often act in combination, often with multi-directional relationships. Thus, although processes are occurring differentially in time and space, and although they result from different drivers, deforestation is "often presented simplistically as a global problem requiring a global solution". Smouts (2008) argues that the proliferation of particular governance efforts that pertain more or less specifically to forests leads to an accumulation of a huge number of scattered

and competing aims and principles. At the same time, no governance effort tackles the fundamental cause of forest destruction: the ever-growing consumer thirst for wood, meat and fuel that exerts more and more pressure on the resource to convert land.

Fourth, since most international forest governance efforts have different objectives, they create both synergies and conflicts. These are explored further in Working Document 2.

Like other fields of governance at the global level where governance is spread through a number of agencies, there have been several attempts at coordinating the international efforts, including notably the CPF. A forthcoming report from REDD-ALERT work package 4 explores the agendas and interests of a number of international actors and organisations specifically with regard to REDD (Giannini, forthcoming). However, coordination among international institutions will be difficult when they do not share similar values. A second source of fragmentation is that the governance efforts seeks to secure both the long/term viability of the forest resource base and the continued exploitation of forests. Hence, while the governance efforts promote long-term forest public good enhancement, they also promote continuing private good exploitation, including through new market mechanisms and new intellectual property rights that reflect neoliberal assumptions.

4.2 Implications for the rest of the project

This document raises a number of questions with respect to the rest of the project:

- a. The inability of the international community to address the forestry issue, except through incremental approaches may reveal some of the potential difficulties in developing a future REDD regime. Based on a literature review, Lijklama à Nijeholt (2010) argues in his MSc thesis that the reasons that have stood in the way of a forestry regime so far include (i) issue complexity; (ii) insufficient knowledge on global impacts; (iii) the perception that forestry is not a global problem; (iv) the geographical distribution of resources; (v) economic interests of countries; (vi) the fact that the neo-liberal discourse dominates the forestry discussions; (vii) national perceptions of sovereignty; (viii) limited finance; (ix) growing convention fatigue; (x) decentralization of forestry to lower governance levels; and (xi) lack of leadership. The importance of these criteria in hampering a potential REDD regime will be investigated in subsequent research.
- b. The overview provided in this document aimed to provide a bird's eye view of the discussions at global level. However, a more detailed discussion of the key governance regimes is needed. Four regimes are identified on the basis of specific criteria (1) the existence of global institutions; 2) a mandate that includes addressing deforestation (though not necessarily limited to the carbon emissions resulting there from!); 3) availability of relevant policy documents (we do need to have something to study); 4) the inclusions of incentives; 5) preferably, covering different functions).and these are discussed further in REDD-ALERT deliverable D.4.2.

4.3 Implications for the country case studies

The implications for the case studies could be as follows. Each case study should investigate:

- a. The position of the case study country and actors with respect to each of these governance efforts by selecting the four most significant governance efforts from their perspective; providing reasons for doing so.
- b. The position of the case study country and actors with respect to the other governance efforts and why they are seen as less significant.
- c. The position of the case study country and actors in terms of actually translating and implementing these international governance efforts and their policies into national policy.
- d. The effectiveness of the implementation of such policies into their national policy.
- e. How will the development of REDD ten years from now likely change the landscape of current actors and institutions in the area of forestry?

References

- Aguilar, G. & González, M. 1999, "Regional Legal Arrangements for Forests: the Case of Central America," in *Assessing the International Forest Regime*, R. Tarasofsky, ed., IUCN, Geneva, pp. 113-123.
- Biermann, F., Betsill, M. M., Gupta, J., Kanie, N., Lebel, L., Liverman, D., Schroeder, H. & Siebenhüner, B. 2009, *Earth System Governance. People, Places, and the Planet. Science and Implementation Plan of the Earth System Governance Project. IHDP Report No. 20*, The Earth System Governance Project, Bonn.
- Brown, K. 2001, "Cut and run? Evolving institutions for global forest governance", *Journal of International Development*, vol. 13, no. 7, pp. 893-905.
- Chan, S. & Pattberg, P. 2008, "Private rule-making and the politics of accountability: Analyzing global forest governance", *Global Environmental Politics*, vol. 8, no. 3, p. 103-+.
- Convention of Biological Diversity (CBD) 2009, *Report of the Global Environment Facility*, CBD, Bonn.
- FAO 2000, FAO Strategic Plan for Forestry, Food and Agriculture Organization of the United Nations (FAO), Rome.
- Gauer, D. 2006, "The work of the Central Africa Forests Commission (COMIFAC)", *International Forestry Review*, vol. 8, no. 2, pp. 130-132.
- Giannini, V. 2010, *International organisations and their involvement in REDD: An assessment*, Institutte for Environmental Studies, Amsterdam.
- Haas, P. M. 1989, "Do regimes matter? Epistemic communities and Mediterranean pollution control", *International Organization*, vol. 43, no. 3, pp. 377-403.
- Hajjar, R. & Innes, J. L. 2009, "The evolution of the World Bank's policy towards forestry: push or pull?", *International Forestry Review*, vol. 11, no. 1, pp. 27-37.
- Haupt, F. & von Lnpke, H. 2007, Obstacles and Opportunities for Afforestation and Reforestation Projects under the Clean Development Mechanism of the Kyoto Protocol, FAO, Rome.
- Hermosilla, A. C. & Simula, M. 2007, *Review of Implementation of the World Bank Forest Strategy*, World Bank, Washington D.C.
- Humphreys, D. 2006, Logjam. Deforestation and the crisis of global governance, Earthscan, London.
- Hunt, C. A. G. 2009, Carbon Sinks and Climate Change: Forests in the Fight Against Global Warming, Edward Elgar Publishing, Cheltenham.
- Koh, C.-L. 2003, ASEAN Agreement on the Conservation of Nature and Natural Resources, 1985: A Study in Environmental Governance. Paper presented at the World Parks Congress, Durban, 8-17 September 2003.
- Krasner, S. D. 1982, "Structural Causes and Regime Consequences Regimes As Intervening Variables", *International Organization*, vol. 36, no. 2, pp. 185-205.
- Kunzmann, K. 2008, "The Non-legally Binding Instrument on Sustainable Management of All Types of Forests Towards a Legal Regime for Sustainable Forest Management?", *German Law Journal*, vol. 1, no. 8, pp. 981-1005.
- Lijcklama à Nijeholt, A. 2010, From Rio to REDD. The forest convention debate. MSc thesis, Institute for Environmental Studies, Amsterdam.

- Lyster, S. 1985, *International wildlife law. An analysis of international treaties concerned with the conservation of wildlife*, Grotius, Cambridge.
- McDermott, C. L., O'Carroll, A. & Wood, P. 2007, International forest policy the instruments, agreements and processes that shape it, Department of Economic and Social Affairs, New York.
- Mearsheimer, J. J. 1994, "The false promise of international institutions", *International Security*, vol. 19, no. 3, pp. 5-49.
- Mee, L. D., Dublin, H. T. & Eberhard, A. A. 2008, "Evaluating the Global Environment Facility: A goodwill gesture or a serious attempt to deliver global benefits?", *Global Environmental Change-Human and Policy Dimensions*, vol. 18, no. 4, pp. 800-810.
- Millennium Ecosystem Assessment 2005, *Ecosystems and human well-being: synthesis*, Island Press, Washington, DC.
- Nagtzaam, G. J. 2008, The International Tropical Timber Organization and Conservationist Forestry Norms: A Bridge Too Far?, Monash University, Victoria.
- Rittberger, V. 1993, "Research on international regimes in Germany: the adaptive internalization of an American political science concept," in *Regime theory and international relations*, V. Rittberger & P. Mayer, eds., Oxford University Press, USA, New York, pp. 3-34.
- Ruis, B. 2001, "No forest convention but ten tree treaties", Unasylva, vol. 52, no. 3.
- Smouts, M. C. 2008, "The issue of an International Forest Regime", *International Forestry Review*, vol. 10, no. 3, pp. 429-432.
- Streck, C. & Scholz, S. M. 2006, "The role of forests in global climate change: whence we come and where we go", *International Affairs*, vol. 82, no. 5, pp. 861-879.
- Tarasofsky, R. 1999, "Assessing the International Forest Regime: Gaps, Overlaps, Uncertainties and Opportunities," in *Assessing the International Forest Regime*, R. Tarasofsky, ed., IUCN, Geneva, pp. 3-12.
- Tarasofsky, R. & Downes, D. R. 1999, "Global Cooperation on Forests through International Institutions," in *Assessing the International Forest Regime*, R. Tarasofsky, ed., IUCN, Geneva, pp. 97-112.
- Young, O. R., Agrawal, A., King, L. A. & Sand, P. H. W. M. 1999, *Institutional Dimensions of Global Environmental Change (IDGEC) Science Plan. IHDP Report No. 9.*, IHDP, Bonn.
- Zhu, S., Buongiorno, J. & Brooks, D. J. 2001, "Effects of accelerated tariff liberalization on the forest products sector: a global modeling approach", *Forest Policy and Economics*, vol. 2, no. 1, pp. 57-78.

