

# 1. Introduction

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## 1. OBJECTIVES OF THE BOOK

The objective of this book is to examine the doctrinal concepts that underpin international forestry regulation, and then trace the application of these concepts to a range of public and non-state international institutional forest policies and measures. By examining these concepts it becomes possible to understand the nature and requirements of the international law that governs sustainable forest management and use. Most of the existing literature on international forest regulation comes from scientific and political science authors. This book builds on existing literature discussing sustainable forest management, international forest regulation and politics, the role of international law, governance arrangements, land tenure, property rights, environmental justice and environmental markets.

Legal analysis of the concept of sustainable forest management has been limited to date. Most of it has been narrow in focus and has tended to focus on a particular instrument associated with sustainable forest management, such as National Forest Policies or, more recently, Reduced Emissions from Deforestation and Degradation (REDD+). There is a distinct lack of legal analysis exploring the nature and requirements of international law concerning sustainable forest management. This is probably explained in part by the lack of clarity surrounding the legal status of sustainable forest management obligations. The analysis in this book will be of relevance to those undertaking an examination of a particular issue or forest regulation challenge. The book identifies and explains the underlying legal issues in forest regulation, analyses the dominant regulatory approaches at the international level, and makes some recommendations on how to improve global forest governance.

This book deals with the concept of ‘sustainable forest management’ as distinct from the concept of ‘forests’ and deals with the legal principles associated with the concept of sustainable forest management. The purpose of this is to provide an analytical model for legal forest analysis. The concept and meaning of ‘sustainable forest management’ is further explored in Chapter 4, though for present purposes it can be stated that

sustainable forest management is an ever-evolving concept which attempts to incorporate and recognize all forest values (ecological, social and economic). The concept of sustainable forest management is therefore applicable to all forest ecosystems.

Guidance on the definition of 'forest' can be drawn from the Intergovernmental Panel on Climate Change, 4th Assessment Report. The Annex to this report states that a forest may consist either of closed forest formations, where trees of various storey and undergrowth cover a high proportion of the ground, or of open forest. This book adopts a wide definition of 'forest ecosystem' and includes all areas with substantial tree cover, including all types of forest compositions in any geographical range and with any species structure. This broad definition of forest means that rainforests, tropical, boreal, temperate, wetland, grassland and any other areas with reasonably dense tree coverage are within the scope of the definition.

This book uses the terms 'developed' and 'developing' countries to describe the two main categories of membership of international environmental instruments. These terms are used throughout the book to demonstrate the different interests and perspectives of these two groups. Such terms are used in the absence of the availability of better and more precise terms. It is to be noted that there is great diversity among countries in the 'developed' category as there is in the 'developing country' category and that these labels do not accurately reflect the broad range of economic, social and political conditions of all countries within these categories. Despite these limitations, for convenience, this book will use these well-established but out-dated terms to describe the different international legal obligations and policy interests of these two groups.

## 2. CURRENT TRENDS IN FOREST REGULATION

There are a number of factors currently influencing the development and direction of international forestry policy. It is important to understand these factors, as they will influence the nature of future global forest governance arrangements. The international climate change regime has started to play a dominant role in all forms of international environmental regulation. This is attributable to the high political priority given to climate change negotiations. The climate change regime has significantly influenced global forest governance through the development of the (REDD+) initiative. A second big driver of international forest regulation is the emergence of a series of global networks that are working on the issue of trade in illegal timber. And the third recent trend is the increas-

ing presence of market-based regulatory models being applied over forest areas. These trends indicate a change in the approaches used to regulate forest use and management. These approaches have evolved in response to the long-standing challenges associated with forest regulation. Such major challenges include: the negotiation of international forest instruments; the associated implementation of and compliance with these instruments; the lack of capacity both financial and technical; and the lack of political will to support the adoption of legally binding international forest commitments.

### **A. The Influence of Climate Change Regime on Forest Policy**

The influence of the international climate change regime can be seen within the policies and measures of most international environmental institutions. Variations in the earth's temperature arising from climate change will impact the earth's ecosystems, having significant flow-on effects for communities and the economy. The climate change regime has been able to capture a higher level of political interest in its policies and goals given the potentially significant environmental, societal and economic impacts of climate change, itself. The climate change regime attempts to address all sources and sinks of global greenhouse gas emissions and is interested in forest regulation as it is estimated that deforestation accounts for approximately 20 per cent of global greenhouse gas emissions. The regime has considerably more international political and financial support when compared to other international forest bodies. This support provides the regime with the ability to channel international funds towards projects that lower forest emissions.

Forest practices can be modified to reduce the 'source value' of their greenhouse gas emissions. This occurs when parties adopt more sustainable harvesting and silvicultural practices. Forests are also regulated by the regime for their 'sink values' – that is, their ability to absorb carbon. Forest activities that act as sinks of carbon include afforestation, reforestation, and avoided deforestation. Chapter 6 of the book discusses the mechanisms used by the climate change regime in regulating forest sink and source activities. Such mechanisms include the Land Use, Land-Use Change and Forestry guidelines (LULUCFG), the afforestation and reforestation guidelines of the Clean Development Mechanism (CDM), and the REDD+ initiative.

REDD+ is an initiative that uses donor funds to improve forest management in developing countries. This particular tool has been developed by the climate change regime to try and reduce the emissions arising from deforestation and forest degradation. The initiative is presently funded

by voluntary contributions made by parties to the Climate Change Convention. Requests for REDD+ funding have received considerable support, allowing for the implementation of a range of REDD+ capacity building programmes.<sup>1</sup> The financial and political support for REDD+ means that this policy has the potential to significantly influence global forest governance.

REDD+ is a positive mechanism for two reasons. First, the mechanism provides funding for forest conservation as well as providing funding to improve capacity to manage forest areas (to address issues connected with land tenure, monitoring and resource-based shortages). Secondly, involvement in the REDD+ initiative occurs on a voluntary basis (both for the host and the donor of the project), which has allowed REDD+ to avoid dealing with the contentious issue of unfettered sovereign jurisdiction over natural resource products. The REDD+ mechanism, therefore, is the first international forest initiative to emerge that provides finance and high-level political support. The international forestry community is very much hoping that the REDD+ mechanism can succeed in improving forest conservation and management in developing countries.

The international climate change regime encourages the use and development of renewable and sustainable energy production. Forests are now also being valued for their ability to provide a source of renewable energy through bio-energy production. There is, however, some concern that demand for bio-energy from forest products will become a further driver of deforestation as the world's energy demands increase. The Food and Agricultural Organization predicts that the global demand for wood will increase in the future. The drivers of this demand are linked to bio-fuel policies in the European Union, and an increase in per capita consumption of wood products in Asia (though per capita consumption levels are predicted to remain higher in Europe and North America).<sup>2</sup> Furthermore, it is anticipated that by 2060 there will be a six-fold increase in world demand for fuel wood. This will result in an increase of wood prices, and will mean that forest areas previously used to manufacture sawn wood,

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<sup>1</sup> For example, one of the REDD+ demonstrating institutions, the Forest Carbon Partnership Facility has had \$US225.4 million deposited in the REDD Readiness Fund and \$US204.3 million invested in the Carbon Fund 'Climate Funds Update' (2012), 'Forest Carbon Partnership Facility', available at <http://www.climatefundsupdate.org/listing/forest-carbon-partnership-facility> (accessed 27 February 2012).

<sup>2</sup> Food and Agricultural Organization of the United Nations, *State of the World's Forest 2009* (2009) ix.

panels and pulp will, instead, be used for energy production.<sup>3</sup> The production of energy from timber products will create even more competition for forest use, and it has been suggested that the high wood prices attributed to forest products for bio-fuel production will place further stress on forest health.<sup>4</sup> Such concerns should be addressed through the introduction of regulations that require bio-fuel production to occur from purpose-created timber stocks, managed in accordance with the concept of sustainable forest management.

The impacts of climate change are predicted to have serious repercussions for forest ecosystem functionality. A global study measured the impact of heat stress and drought on forest areas and found that an increase in the frequency, duration and severity of drought associated with climate change has the potential to fundamentally alter the composition, structure, and biogeography of forests in many regions.<sup>5</sup> Of particular concern are increases in tree mortality associated with climate-related changes, such as insect outbreaks and wildfire. The study found 88 examples of forest mortality driven by climatic water or heat stress since 1970. This suggests that climate change adaptation techniques and methodologies will become necessary in future forest governance regimes. Forest adaptation methodologies are still at the developmental stage, but it is anticipated that research in this area will increase as forest ecosystem vitality starts to deteriorate.<sup>6</sup>

Some sectors of the timber industry have already felt the impacts of climate change. Increases in the forest temperature in British Columbia, Canada, have led to a mountain pine beetle epidemic. This beetle infestation has arisen from the unusually warm temperatures of the forests

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<sup>3</sup> Raunika, Ronald, Joseph Buongiorno, James A. Turner and Shushuai Zhu (2010), 'Global Outlook for Wood and Forests with the Bioenergy Demand Implied By Scenarios of the Intergovernmental Panel on Climate Change', *Forest Policy and Economics*, 12 (1) 48–56, 55.

<sup>4</sup> Ibid.

<sup>5</sup> Allen, Craig D., Alison K. Macalady, Haroun Chenchouni, Dominique Bachelet, Nate McDowell, Michel Vennetier, Thomas Kitzberger, Andreas Rigling, David D. Breshears, E.H. (Ted) Hogg, Patrick Gonzalez, Rod Fensham, Zhen Zhang, Jorge Castro, Natalia Demidova, Jong-Hwan Lim, Gillian Allard, Steven W. Running, Akkin Semerci, Neil Cobb (2009), 'A Global Overview of Drought and Heat-Induced Tree Mortality Reveals Emerging Climate Change Risks for Forests', *Forest Ecology and Management*, 259 (4), 660–684.

<sup>6</sup> Nitschke, Craig R. and John L. Innes (2008), 'Integrating Climate Change into Forest Management in South-Central British Columbia: An Assessment of Landscape Vulnerability and Development of a Climate-Smart Framework', *Forest Ecology and Management*, 256 (3), 313–327.

during all the winters since 1999. Previously, the low winter temperatures killed the beetle, thus regulating the population. Warmer temperatures have allowed the beetle to thrive and the infestation has detrimentally affected 13 million hectares of pine forest in western Canada.<sup>7</sup> The timber industry and Canadian government have invested significant funds in research trying to control and prevent the spread of the infestation to neighbouring forest regions.

## **B. Common Goal of Banning Trade in Illegal Timber**

There are a number of international processes seeking to prevent trade in illegally harvested timber. The oldest body dealing with trade in tropical timber is the United Nations International Tropical Timber Organization (UNITTO). This body was formed in 1986 to deal with concerns surrounding tropical forest conservation from a trade-based focus. The UNITTO is concerned principally with ensuring the existence of sustainably managed tropical forest timber reserves. Its goal is to protect the longevity and the economic viability of the international timber market. In recent years, alternative transnational and market-based frameworks for the forest trade have emerged. These regimes seek to prevent illegally sourced timber from entering global timber markets. The best-known programme of this sort is the European Union's Forest Law Enforcement and Governance Trade (FLEGT) initiative.

The FLEGT process works through the creation of voluntary partnership agreements entered into between consumer and producer timber countries. The terms of these agreements require that all timber supplied under them are legally sourced and comply with sustainable harvesting criteria. Part of the FLEGT process involves capacity building and assistance in implementing legal harvesting practices. The FLEGT initiative, discussed in greater detail in Chapter 7, is another mechanism predicted to have a significant influence on the development of future global forest governance, as it also provides economic and technical assistance for its implementation.

Individual countries are also starting to introduce legislation that prohibits the importation of illegally sourced timber. The United States of

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<sup>7</sup> A number of articles document the impact of the mountain pine beetle on the forests of British Columbia, for example, Wulder, Michael, Stephanie M. Ortlepp, Joanne C. White, Nicholas C. Coops and Sam B. Coggins (2009), 'Monitoring the Impacts of Mountain Pine Beetle Mitigation', *Forest Ecology and Management*, **258** (7), 1181–1187, which discusses methods for mitigating the effects of the beetle.

America has enacted a piece of legislation, referred to as the Lacey Act.<sup>8</sup> This act aims to curb trade in illegally sourced timber by making its import or export a crime. The legislation, which came into effect on 15 December 2008, creates an offence for anyone who imports illegally harvested timber into the United States of America, or who exports products containing illegally sourced timber. An objective standard is applied to determine liability. If the party knows, or should have known, that the timber was illegal, then they will be found guilty of a crime. The act imposes heavy sanctions, ranging from five years imprisonment to a \$US500 000 fine per violation, as well as forfeiture of the merchandise. The legality requirement is enforced by requiring all wood and wood products imported into a country to be accompanied by a customs declaration that provides the scientific name of the wood, its value and quantity, and the name of the country where it was harvested.<sup>9</sup> The reason for the introduction of this law was the contribution to global greenhouse gas emissions of trade in illegally sourced timber. It may be safe to assume that the Act's provisions will impact positively upon the domestic timber industry in the United States of America by making its prices more competitive with timber that is illegally sourced.

The Australian government has suggested that it would 'encourage sourcing of forest products from sustainable forest practices and seek to ban the sale of illegally logged timber exports', though this is yet to amount to enforceable legislation. Australia has also explored the possibility of introducing a policy to prevent trade in illegally sourced timber.<sup>10</sup> The discussion paper outlines five main goals

1. Build capacity within regional governments to prevent illegal harvesting
2. Develop and support certification schemes for timber products sold in Australia
3. Identify illegally logged timber, and restrict its import into Australia
4. Require disclosure at point-of-sale of species, country of origin and certification status
5. Promote the use of market-based incentives in reducing emissions from deforestation in future international climate change negotiations.

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<sup>8</sup> 16 USC §§ 3371–3378 (1900).

<sup>9</sup> International Network for Environmental Compliance and Enforcement (2008), 'Recent Amendments to U.S. Lacey Act Should Help Protect Forests', available at [http://www.inece.org/climate/ClimateComplianceAlert\\_LaceyAct.pdf](http://www.inece.org/climate/ClimateComplianceAlert_LaceyAct.pdf) (accessed 16 December 2009).

<sup>10</sup> Centre for International Economics, Canberra and Sydney, 'Proposed New Policy on Illegally Logged Timber: Issues Paper' (2009).

### C. The Increasing Role of Non-State Forestry Regulation

‘Non-state forest regulation’ is a term used in this book to refer to international forest regulation by non-governmental or state bodies.<sup>11</sup> The lack of progress by public international forest institutions in implementing forest policy has allowed a space for non-state regulation to emerge.<sup>12</sup> Non-state forest regulation has developed international forest policy and standards away from the political arena of the United Nations. As such, many of the contentious international forest issues – such as sovereignty, capacity building, and technology transfer have been explored by these bodies and they have been able to avoid the usual political deadlock that arises when these issues are discussed within the United Nations framework. Non-state governance bodies have been able to avoid such deadlock by designing regimes based on voluntary participation. As such, participants engage and comply with the requirements of the body on the basis of the incentive offered by the institution. The incentive may be an eco-label, an economic payment, or the development of green credentials.

Pattberg states that ‘rules made by private multi stakeholder partnerships in the field of environmental politics not only contain prescriptions of behaviour directed toward the environment. They also define who accounts for compliance with management standards, codes of conduct, or labels, and under what rules’.<sup>13</sup> Aligned with this, Falkner states ‘these structuring effects resemble the ‘public’ governing function of states and intergovernmental institutions, and for this reason the notion of governance, and indeed authority, has been applied to private actors.’<sup>14</sup> This sug-

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<sup>11</sup> In support of this see Falkner, Robert (2003), ‘Private Environmental Governance and International Relations: Exploring the Links’, *Global Environmental Politics*, 3 (2), 72–87.

<sup>12</sup> ‘... the result of the State’s failure to produce a binding global forest instrument and inaction on forest products ecolabeling, nonstate forest certification schemes have emerged in the shape of powerful market driven governance and rule making systems.’ See: Gulbrandsen, Lars (2004), ‘Overlapping public and private governance: Can forest certification fill the gaps in the global forest regime?’, *Global Environmental Politics*, 4 (2), 75–99, 75, 76. See also: Chan, Sander, and Philipp Pattberg (2008), ‘Private rule-making and the politics of accountability: Analysing global forest governance’, *Global Environmental Politics*, 8 (3), 103–121; and Murphy, Craig (2009), ‘Privatizing environmental governance’, *Global Environmental Politics*, 9 (3), 134–138.

<sup>13</sup> Pattberg, Philipp (2005), ‘The Forest Stewardship Council: Risk and Potential of Private Forest Governance’ 14 *The Journal of Environment and Development*, 14 (3), 356–374, 359.

<sup>14</sup> Falkner, Robert (2003), ‘Private Environmental Governance and

gests that non-state regulation has been granted political legitimacy and support from a wide range of stakeholders.

Such stakeholders include forest departments, central governmental agencies, local governmental agencies, pro-active companies, national non-government organizations, consumers, academics, researchers, development assistance donors, consultants, international NGOs, community-based organizations, the logging industry and non-progressive forest producers, communities, farmers and the spectators, and policy target groups.<sup>15</sup> It is easier for a broad range of stakeholders to participate in private forest regimes, as parties are able to interact directly with the governing institution. This is rather different from the merely representative input that such stakeholder groups get at public international negotiations.

This book explores two non-state regulatory approaches to forest management: forestry certification schemes; and payment for ecosystem service regimes (forest markets). Both of the regimes have the following characteristics common to non-state regulation:

- industry has played a role in creating/ driving the regulation;
- both involve market-based regulation;
- both schemes are largely voluntary; and
- both schemes are transnational in character.

Both forestry certification schemes and markets selling forest ecosystem services have influenced the nature of domestic forest regulation. Forestry certification schemes have significantly contributed to the development of productive domestic forest standards. Areas with forest certification status have been directly influenced by non-state regulation. Likewise forest market mechanisms enforce their requirements by providing an economic incentive once it is established that certain sustainable forest management criteria have been met. A number of schemes have been developed to sell forest ecosystem services and, again, non-state regulation is directly affecting the management and use of these forest areas.

Compliance with non-state sustainable forest management standards is generally considered to be higher than compliance with public international sustainable forest management standards. This is because non-state regulation is voluntary, and parties have elected to participate

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International Relations: Exploring the Links', *Global Environmental Politics*, 3 (2), 72–87, 72–73.

<sup>15</sup> Mayers, James, and Stephen Bass (eds) (1999), *Policy that Works for Forests and People*, London: International Institute for Environment and Development, Ch. 2.

and comply with the regime. As suggested earlier, it is assumed that parties engage with such processes as a result of the incentive offered by the regime. Forest certification provides participants with an eco-label that they can use to differentiate their product in the market, while forest markets provide participants with an economic incentive to manage and use the forest area according to certain criteria. Additionally, the nature of public international environmental law requires states to take the lead in the implementation of international commitments. States have to weigh many factors when considering the implementation of international forest standards. The politics associated with forest regulation often leads to states finding the middle ground in terms of forest regulation, often resulting in voluntary or non-legally binding policies. These factors combined have resulted in stronger compliance with non-state forestry standards than with public international ones.

### 3. BRIEF SYNOPSIS OF CHAPTERS

This book is divided into five main parts. Part One includes the present introductory chapter, which has explained the purpose of the research, and a short summary of the key legal issues in global forest governance. Part Two has three chapters which explore the legal doctrinal concepts related to the regulation of sustainable forest management: Chapter 2 examines the rule of law and the justice issues that arise in forest regulation; Chapter 3 examines the concepts of state sovereignty and property as principles creating rights and responsibilities in relation to forest use and management; and Chapter 4 examines the governance arrangements required for sustainable forest management.

Part Three focuses on three public international bodies that have played a role in creating and implementing international forestry regulation. The public international bodies chosen for analysis were selected for their different perspectives on forest management. Each chapter in this part explores, for each body, the institutional structure, the founding instruments and the progress of implementation, providing a basis for comparison across these institutional arrangements. Chapter 5 examines the modalities of the United Nations Forum on Forestry. This public international body is the platform that discusses all issues concerning sustainable forest management. Its major accomplishment is the creation of National Forest Policies in most countries. Chapter 6 looks at the legal rules concerning forestry within the international climate change regime. The forest value or ecosystem service regulated by the climate change regime is the carbon storage value associated with forest areas. Chapter 7 analyses the

operation of the World Bank forest policy. The World Bank is primarily interested in improving the health and extent of forest areas as a means of alleviating poverty. A strong correlation exists between those experiencing poverty and people living in forest areas, which, again, highlights the need for mutually sustainable practices.

Part Four focuses on non-state forestry regulation. Chapter 8 examines the conditions leading to the creation of markets for forest ecosystem services. This relatively new form of regulation places an economic value upon a particular forest ecosystem service, such as biodiversity, watershed, or scenic amenity. Markets are then established to trade the forest value for economic benefit. Chapter 9 focuses on the operations of forestry certification schemes. These schemes work by creating an eco-label, which is affixed to forest products verifying that the product has complied with the requirements of the certifying body. These schemes work on the basis that consumers will drive the demand for more sustainable forest practices by buying forest products from sustainably managed areas. There are a number of international forestry certification schemes all competing for authority. The original and largest international forest certification scheme is the Forest Stewardship Council. The operational modalities of this body are examined within this chapter.

Part Four also contains Chapter 10, which discusses the overall conclusions and findings of this research. The conclusion makes recommendations for the reform of each of the regulatory bodies examined, followed by some holistic recommendations concerning global forest governance regulation.

