

Beyond 2015: Exploring the Future of Global Climate Governance
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Title:

Forests, climate change and law: how REDD+ is shaping international law on forests

Abstract:

A significant portion of emissions of greenhouse gases (GHG) originate from forest-related activities, most notably deforestation and forest degradation. Therefore, REDD+, a mechanism aimed at providing incentives to reduction of GHG emissions from forests, has emerged within the United Nations Framework Convention on Climate Change (UNFCCC) negotiations. Further to this REDD+ lawmaking process taking place within the UNFCCC, other processes have emerged at various levels, such as multilateral, bilateral and domestic levels, not to mention the rulemaking processes performed by non-state actors. This leads to a greater fragmentation and complexity of international law on forests. Based on this context, this paper aims at providing an overview of how international law on REDD+ is being developed, by discussing four lawmaking processes under way at different levels. Thus, it starts by presenting REDD+ and situating it within the broader edifice of international law on forests. Subsequently, the paper proceeds to the presentation of four REDD+ lawmaking cases, which are taking place respectively at the multilateral, bilateral, subnational and private levels. Last, but not least, the paper discusses how these four cases of REDD+ lawmaking affect international law on forests. It concludes with the argument that they are reinforcing the existing trend towards the fragmentation of international law on forests, and their consequent submission to an international pluralistic legal order.

1. Introduction

Forests tend to exert a certain fascination in the human mind. Having shaped to a great extent human life on Earth (for instance, by providing the wood with which many homes are built¹), it could not be different. However, even if forests remain central to the livelihoods of billions of people around the globe², they are under threat and subject to overexploitation in the same way as other global ecological resources.

This menace on forests carries implications which go beyond the threat to the livelihoods of forest-dependent peoples. For instance, forests are essential for the conservation of global biodiversity³, given that they host more species than any other kind of terrestrial ecosystem⁴, many of them endemic⁵. Last, but not least, forests provide a wide range of “ecosystem services”⁶, such as provisioning services (e.g. food, fuel, fibre, fresh water, and genetic resources), regulating services (e.g. water purification and climate regulation), supporting services (e.g. soil formation and production of oxygen), and cultural services (e.g. recreation and spiritual enrichment).⁷

Therefore, deforestation⁸, forest degradation⁹ and, more generally, forest conservation, have made their way into the global political agenda, thus being the subject of various initiatives of all sorts, public and private, local and global.

¹ Further to providing wood, forests provide humanity with all kinds of resources, such as fruits, dyes, rubber, essential oils, as well as molecules which are later replicated by the pharmaceutical industry.

² Between 1.095 and 1.745 billion people are thought to be directly dependent on forests around the world. See Sophie Chao, ‘Forest Peoples: Numbers across the World’ (Forest Peoples Programme 2012) 8 <http://www.forestpeoples.org/sites/fpp/files/publication/2012/05/forest-peoples-numbers-across-world-final_0.pdf> accessed 7 December 2013..

³ Understood as “the diversity among living organisms in terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part”. See Millennium Ecosystem Assessment, *Ecosystems and Human Well-Being: Current State and Trends: Findings of the Condition and Trends Working Group of the Millennium Ecosystem Assessment* (Island Press 2005) 80.

⁴ Emily Matthews and others, *Pilot Analysis of Global Ecosystems: Forest Ecosystems* (World Resources Institute 2000) 45.

⁵ Norman Myers and others, ‘Biodiversity Hotspots for Conservation Priorities’ (2000) 403 *Nature* 853 <<http://dx.doi.org/10.1038/35002501>>; CMP Ozanne, ‘Biodiversity Meets the Atmosphere: A Global View of Forest Canopies’ (2003) 301 *Science* 183, 183 <<http://www.sciencemag.org/cgi/doi/10.1126/science.1084507>> accessed 31 January 2014.

⁶ Millennium Ecosystem Assessment (n 3) 27.

⁷ Ibid 29.

⁸ Understood as the conversion of forest areas into another kind of land cover. See R. Houghton, ‘Carbon Emissions and the Drivers of Deforestation and Forest Degradation in the Tropics’ (2012) 4 *Current*

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Global initiatives on forests may be traced at least to the 1950s, when the Food and Agriculture Organization began to register the land under forests¹⁰. Nevertheless, in terms of international law, the landscape tends to be fragmented, which is reflected in the absence of a global multilateral environmental agreement on forests¹¹. Globally, the basis for international law on forests is to be found in a set of key treaties, most notably: the 1971 Ramsar Convention on Wetlands of International Importance¹²; the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage¹³; the 1973 Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES)¹⁴; the International Tropical Timber Agreements (1983, 1994 and

Opinion in Environmental Sustainability 597, 597
 <<http://linkinghub.elsevier.com/retrieve/pii/S1877343512000723>> accessed 22 January 2014..

⁹ Understood as “a lowering of biomass density within a forest cover” Ibid..

¹⁰ Joyeeta Gupta, Nicolien van der Grijp and Onno Kuik (eds), *Climate Change, Forests and REDD: Lessons for Institutional Design* (Routledge 2012) 9..

¹¹ At the 1992 United Nations Conference on Environment and Development (UNCED), the parties failed to agree on a multilateral forest treaty, having adopted only the “Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests” (also known as “Forest Principles”). Subsequently, efforts at concluding a multilateral convention on forests continued fruitlessly, first under the auspices of the Intergovernmental Panel on Forests (IPF) and its successor Intergovernmental Forum on Forests (IFF). In 2000, the United Nations Forum on Forests (UNFF) was established with a mandate to develop parameters for a legal framework on all types of forests by 2005, having UNFF yielded, in 2007, the Non-Legally Binding Instrument on All Types of Forests (NLBI), which added little to global forest use and management. See Jerome K Vancley and J Doland Nichols, ‘What Would a Global Forest Convention Mean for Tropical Forests and for Timber Consumers?’ (2005) 103 *Journal of Forestry* 120, 120; Rowena Maguire, *Global Forest Governance: Legal Concepts and Policy Trends* (Edward Elgar 2013) 109.

¹² The Ramsar Convention relies on a list containing sites indicated by its parties which are to be subject to special protection. Several forest areas were included in the list, thus meaning that specific forest areas around the globe, such as the *Mamirauá* reserve (an area of over 1.1 million hectares in the Brazilian Amazon) fall under its provisions. See Ramsar Secretariat, ‘The Convention on Wetlands Text, as Amended in 1982 and 1987’ (1994) <http://www.ramsar.org/cda/en/ramsar-documents-texts-convention-on/main/ramsar/1-31-38%5E20671_4000_0_> accessed 11 September 2014.

¹³ This convention provides for the preservation, as part of the world heritage of mankind as a whole, of parts of the natural and cultural heritage of “outstanding interest”. The Convention works based on a “world heritage list”, based on submissions by States, and the inclusion of sites in the list confers duties of protection to the implied States, but also provides access to funding and assistance. See UNESCO, *Convention Concerning the Protection of the World Cultural and Natural Heritage* 1972.

¹⁴ CITES is a convention aimed at protecting certain species of wild fauna and flora through the regulation of their import and export, based on the premise that the control of international markets will help to protect endangered species. Therefore, forests are regulated under CITES essentially through restrictions on trade on certain species of fauna and flora, such as is the case of big leaf mahogany (*Swietenia macrophylla*). See Barbara MGS Ruis, ‘No Forest Convention but Ten Tree Treaties’ (2001) 52 *UNASYLVA-FAO* <http://www.fao.org/docrep/003/Y1237e/y1237e03.htm#P0_0> accessed 9 September 2014; Arthur G Blundell, ‘A Review of the CITES Listing of Big-Leaf Mahogany’ (2004) 38 *Oryx* 84 <http://www.journals.cambridge.org/abstract_S0030605304000134> accessed 10 September 2014.

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2006)¹⁵; the 1992 Convention on Biological Diversity (CBD)¹⁶; the 1992 United Nations Framework Convention on Climate Change (UNFCCC).

It is within the UNFCCC that the most recent multilateral initiative on forests has emerged¹⁷, named REDD+ (acronym for “Reduction of Emissions from Deforestation and Forest Degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks”). Being tied to the climate change negotiations, REDD+ is envisioned as a system of performance-based positive incentives through which the adoption of better forest management practices by developing countries would be financed by developed ones in order to reduce GHG emissions from deforestation and forest degradation¹⁸. This multilateral lawmaking process on REDD+ within the UNFCCC was soon complemented by various other lawmaking processes taking place at the bilateral, national, subnational and even private levels.

In light of this context, this paper aims to provide an overview of how international law on REDD+ is being developed, by discussing four different lawmaking processes on REDD+ under way at different levels. The first part of this paper discusses briefly the concept of REDD+ and some of its issues, followed by the situation of REDD+ within the broader edifice of international law. Subsequently, four

¹⁵ The ITTAs are aimed to address the interests both of producer and consuming countries, focusing on timber trade but also providing for its sustainable exploitation. The 1983 ITTA led to the creation of the International Tropical Timber Organization (ITTO). The main critique relates to the ITTAs and to the ITTO relates to their focus on trade. Given that the ITTO contains a voting structure in which the voting weights is determined by the respective members' shares of the timber market, there is an incentive to water down environmental regulation which may negatively affect trade. See UNCTAD, International Tropical Timber Agreement, 2006 2006 [TD/TIMBER.3/12]; UNCTAD, International Tropical Timber Agreement, 1994 1994 [TD/TIMBER.2/16]; UNCTAD, International Tropical Timber Agreement, 1983 1983 [TD/TIMBER/11/Rev.1]; Ruis (n 14); Constanze Haug and Joyeeta Gupta, 'Global Forest Governance' in Joyeeta Gupta, Onno Kuik and Nicolien Van der Grijp (eds), *Climate Change, Forests and REDD: Lessons for Institutional Design* (Routledge 2013) 54.

¹⁶ The CBD does not contain specific provisions on forests, but covers forests through its provisions on biological diversity, such as in the case of its provisions on *in-situ* and *ex-situ* conservation of biological diversity, and on the role of indigenous and local communities in the conservation and sustainable use of biological diversity. See Harro Van Asselt, 'Managing the Fragmentation of International Environmental Law: Forests at the Intersection of the Climate and Biodiversity Regimes' (2011) 44 NYUJ Int'l L. & Pol. 1205, 1224–1225.

¹⁷ UNFCCC, United Nations Framework Convention on Climate Change 1992 Art. 4.

¹⁸ UNFCCC, Agreed Outcome pursuant to the Bali Action Plan 2012 [Decision 1/CP.18] para 25.

REDD+ lawmaking cases are presented. In the end, the effect of these four cases on the development of international law on forests is discussed.

2. What is REDD+?

REDD+ (acronym for “Reduction of Emissions from Deforestation and Forest Degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks”) has emerged in the UNFCCC and, more broadly, in environmental discourse and actions of various States, as a mechanism to cope with deforestation in developing nations. It would be a way to enhance forest conservation in the tropics and, as a result, ensure that GHG emissions arising from deforestation and forest degradation are avoided, through a system of performance-based payments from developed countries to developing countries.

Despite its conceptual simplicity, several issues are to be addressed during the design and implementation of REDD. First, in order for emission reductions to be achieved, measures need to be established to ensure that such reductions actually occur, such as the establishment of measurement, reporting and verification procedures for emission reductions, of reference levels for compensating efforts, and of mechanisms to ensure that reductions are permanent (i.e. making sure that forests remain standing over the course of time)¹⁹. Also, social and environmental safeguards are essential, given the often overlapping rights and uses related to forests, as well as the possible distortions that could arise if the focus of REDD+ remained solely on carbon²⁰. Last, but not least, it is important to consider that many States have low institutional capacities to deal with deforestation drivers²¹, or may simply be unable to effectively implement the rule of law within their respective jurisdictions²².

¹⁹ Haug and Gupta, "REDD on the Global Policy Agenda", 86.

²⁰ Ibid 87–88.

²¹ Addressing deforestation drivers may be a challenge even to developed countries, as exemplified in Australia's deforestation reduction efforts mixed results. See Macintosh, *Reducing Emissions from Deforestation*, 7–12.

²² Alain Karsenty and Symphorien Ongolo, 'Can “fragile States” Decide to Reduce Their Deforestation? The Inappropriate Use of the Theory of Incentives with Respect to the REDD Mechanism' (2012) 18 *Forest Policy and Economics* 38, 39–43
<http://linkinghub.elsevier.com/retrieve/pii/S1389934111000748> accessed 22 May 2013.

Nevertheless, REDD+ has been considered a possible way to reduce deforestation and, simultaneously, improve livelihoods²³, thus with the potential to lead to societal changes within and beyond forestry²⁴. As evidence of this potentially important role, attention may be called to the expectations that have been generated around REDD+ both in developing and in developed countries. REDD+ has been presented, for example, as a means to reduce poverty²⁵ and as one of many possible mechanisms of payment for environmental services (resulting in the conservation of ecosystem services)²⁶. It has also been promoted as a way to reduce GHG emissions at a lower price²⁷ (although subject to controversy²⁸), and even as a way to enhance the competitiveness of agricultural products from developed countries *vis-à-vis* those from the developing world²⁹.

Ultimately, REDD+ is expected to be implemented through a three-phased approach³⁰:

- readiness, including capacity-building and the preparation of a REDD+ strategy, a REDD+ legal and institutional framework, the establishment of forest reference levels, and the implementation of a forest monitoring system which includes GHG measurement;

²³ Hall, *Forests and Climate Change*, 47.

²⁴ Angelsen *et al.*, *Analysing REDD+ Challenges and Choices* xiii.

²⁵ Hall (n 23) 47..

²⁶ Sven Wunder and others, *Pagamentos Por Serviços Ambientais: Perspectivas Para a Amazônia Legal* (2nd edn, Ministério do Meio Ambiente 2009) 52–56; Sven Wunder, 'The Efficiency of Payments for Environmental Services in Tropical Conservation' (2007) 21 *Conservation Biology* 48, 50 <<http://doi.wiley.com/10.1111/j.1523-1739.2006.00559.x>> accessed 24 January 2014.

²⁷ NH Stern, 'The Economics of Climate Change: The Stern Review' (2006) ix <http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/stern_review_report.htm> accessed 13 August 2013; McKinsey and Company, 'Pathways to a Low-Carbon Economy: Version 2 of the Global Greenhouse Gas Abatement Cost Curve' (2009) 7 <http://www.mckinsey.com/client_service/sustainability/latest_thinking/pathways_to_a_low_carbon_economy> accessed 13 August 2013..

²⁸ Kesicki and Strachan, "Marginal Abatement Cost Curves"; Dyer and Counsell, *How McKinsey 'cost-Curves' Are Distorting REDD*; McKinsey and Company (n 27) 7; Stern (n 27) ix..

²⁹ Shari Friedman, 'Farms Here, Forests There' (2011) <<http://assets.usw.org/our-union/pulp-paper-forestry/farms-here-forests-there-report-5-26-10.pdf>> accessed 21 March 2013..

³⁰ D Maniatis and others, 'Financing and Current Capacity for REDD+ Readiness and Monitoring, Measurement, Reporting and Verification in the Congo Basin' (2013) 368 *Philosophical Transactions of the Royal Society B: Biological Sciences* 20120310, 2 <<http://rspb.royalsocietypublishing.org/cgi/doi/10.1098/rspb.2012.0310>> accessed 8 October 2014.

- demonstration activities and implementation of policies;
- the provision of results-based incentives.

In light of this phased approach for its implementation, REDD+ is not currently in operation within the UNFCCC. Nevertheless, various REDD+ readiness and pilot initiatives out of the UNFCCC umbrella have been taking shape at various levels. In the next section, a broad picture of the various REDD+ lawmaking processes is presented, and four are discussed in greater depth.

3. REDD+ lawmaking processes

At the multilateral level, there are several lawmaking processes under way besides the UNFCCC. For example, the United Nations has established the UN-REDD program, aimed at supporting national REDD+ processes in selected countries, focusing particularly in the development of institutional frameworks for REDD+, i.e., the first phase of REDD+. Moreover, the World Bank³¹ has been promoting REDD+ by providing countries with technical and financial assistance, as well as by making efforts towards piloting performance-based payment schemes for REDD+, thus providing support for phases one and two. Through the development of institutional frameworks for REDD+, as well as of demonstration activities, these initiatives contribute to REDD+ lawmaking.

An array of country-led initiatives have also taken place, such as Norway's International Climate and Forest Initiative and Germany's REDD Early Movers program, both of which rely on providing assistance to developing countries in the establishment of REDD+. By engaging with selected countries, such programs may give rise to lawmaking activities, as it is discussed later in this paper.

Furthermore, there are subnational lawmaking processes on REDD+, some of which involve international cooperation among subnational jurisdictions, such as is the case of the lawmaking process involving the states of Acre (Brazil), California (USA) and Chiapas (Mexico), aimed at linking REDD+ programs under development in Acre and Chiapas with the Californian cap-and-trade program.

³¹ Particularly through its Forest Carbon Partnership Facility (FCPF), the Forest Investment Program (FIP), and the BioCarbon Fund Initiative for Sustainable Forest Landscapes.

Last, but not least, the emergence of voluntary, private REDD+ arrangements may be observed, most notably in the form of projects (e.g. the Juma Project in the Brazilian Amazon)³², but also in the form of jurisdiction-wide programs, based on standards developed by private certification bodies, such as the “Verified Carbon Standard” (VCS) and the “Climate, Community and Biodiversity Alliance”³³.

These various processes point to the emergence of an international legal pluralism with regards to REDD+, similarly to what happens more broadly with forestry regulation, which is “a multi-centered private/public one, which operates in a loosely coordinated and sometimes disjointed fashion”³⁴. This international legal pluralism of REDD+ may be fully apprehended only if the assumption that law emerges solely from state processes is abandoned³⁵.

In order to provide a glimpse of this pluralistic legal architecture for REDD+, this paper presents a few lawmaking processes as examples of this trend:

- 1) the multilateral development of REDD+ through the UNFCCC;
- 2) the bilateral engagement between Norway and Brazil on REDD+;
- 3) the bilateral development of REDD+, through subnational jurisdictions, involving the US State of California and the Brazilian State of Acre;
- 4) private REDD+ lawmaking through the Verified Carbon Standard (VCS).

This selection, albeit imperfect, provides a sample containing different levels of lawmaking processes: multilateral, bilateral, national, subnational, private. Therefore, even if the case selection is restricted and does not address all of the lawmaking

³² Virgílio Viana and others, ‘Juma Sustainable Development Reserve: The First REDD Project In the Brazilian Amazon. Fundação Amazonas Sustentável’ <http://fas-amazonas.org/versao/2012/wordpress/wp-content/uploads/2013/06/FAS_Juma-REDD-Project-summary.pdf> accessed 24 January 2014..

³³ Adam G Bumpus and Diana M Liverman, ‘Accumulation by Decarbonization and the Governance of Carbon Offsets’ (2008) 84 *Economic Geography* 127, 146 <<http://doi.wiley.com/10.1111/j.1944-8287.2008.tb00401.x>> accessed 4 September 2014; Eduard Merger, Michael Dutschke and Louis Verchot, ‘Options for REDD+ Voluntary Certification to Ensure Net GHG Benefits, Poverty Alleviation, Sustainable Management of Forests and Biodiversity Conservation’ (2011) 2 *Forests* 550, 550; 554; 556 <<http://www.mdpi.com/1999-4907/2/2/550/>> accessed 17 September 2014.

³⁴ E Meidinger, ‘The Administrative Law of Global Private-Public Regulation: The Case of Forestry’ (2006) 17 *European Journal of International Law* 47, 48 <<http://ejil.oxfordjournals.org/cgi/doi/10.1093/ejil/chi168>> accessed 10 April 2014.

³⁵ For more on the issue of law emerging from non-state processes, see Gunther Teubner and Andreas Fischer-Lescano, ‘Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law’ (2004) 25 *Michigan Journal of International Law* 999, 1010.

processes aimed at establishing REDD+, it contributes to understanding the international legal pluralism underlying REDD+.

3.1. Multilateral REDD+ lawmaking through the UNFCCC

International law has traditionally been viewed as law developed by and for sovereign States. In terms of international environmental law, treaties tend to be the format *par excellence* through which it is multilaterally developed, most notably through framework and umbrella treaties³⁶

In the case of climate change, the main global treaties on the subject are the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and its 1997 Kyoto Protocol, and it is within the UNFCCC that REDD+ emerged. The parties to the Convention meet yearly through a Conference of the Parties (COP), as do the parties to the Kyoto Protocol through its Meeting of the Parties (MOP).

The MOP and the COP usually meet simultaneously, with such gatherings being known as COP/MOP. The COP/MOPs have the power to adopt decisions regarding the implementation of the Convention and of the Kyoto Protocol³⁷, which means that, in essence, COP and MOP decisions are a significant source of legal obligations, even if their legal nature is still subject to discussion³⁸.

The origins of REDD+ within the UNFCCC can be traced to 2005, when a proposal for Reducing Emissions from Deforestation (RED) was presented at the 11th Conference of the Parties to the UNFCCC³⁹. Two years later, its scope was broadened to

³⁶ Guido Fernando Silva Soares, *Direito Internacional do Meio Ambiente: emergência, obrigações e responsabilidades* (Atlas 2001) 173–175; Patricia W Birnie, Alan E Boyle and Catherine Redgwell, *International Law and the Environment* (3rd ed, Oxford University Press 2009) 17.

³⁷ UNFCCC United Nations Framework Convention on Climate Change (n 17), Art. 7.2; UNFCCC, Kyoto Protocol to the United Nations Framework Convention on Climate Change 1997, Art. 2.

³⁸ Jutta Brunnée, 'COPing with Consent: Law-Making Under Multilateral Environmental Agreements' (2002) 15 Leiden Journal of International Law 1, 51 <http://www.journals.cambridge.org/abstract_S0922156502000018> accessed 1 July 2013; Annecoos Wiersema, 'New International Law-Makers-Conferences of the Parties to Multilateral Environmental Agreements, The' (2009) 31 Michigan Journal of International Law 231, 286–287.

³⁹ Till Pistorius, 'From RED to REDD+: The Evolution of a Forest-Based Mitigation Approach for Developing Countries' (2012) 4 4/6 Climate systems 638, 640 <<http://www.sciencedirect.com/science/article/pii/S1877343512000899>>.

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include forest degradation (REDD)⁴⁰, and, two more years on, the “role of conservation, sustainable management of forests and enhancement of carbon stocks” (the “+” in REDD+) was added through COP Decision 1/CP.13 (known as the “Bali Action Plan”)⁴¹.

The “Bali Action Plan” had laid the basis for a new climate agreement to be adopted by 2009. Even if the Parties ultimately failed to adopt a new global climate agreement in 2009 in Copenhagen, negotiations on REDD+ continued, eventually leading to the adoption of 14 decisions on the issue, seven of which adopted as a package in 2013 (known as the “Warsaw Framework for REDD+”)⁴².

The Warsaw Framework for REDD+ provided the pathway for the development of REDD+ in several areas: finance, coordination of financial arrangements, national forest monitoring systems, transparency and safeguards, forest reference emission levels, verification, and drivers of deforestation and forest degradation⁴³. Nevertheless, significant progress remains necessary in all of these areas, particularly in what relates to the definition of the sources of funding for REDD+⁴⁴.

In 2015, a new multilateral legal instrument on the climate is expected to be adopted, succeeding the Kyoto Protocol within the UNFCCC architecture⁴⁵. This new instrument is likely to be based on a pledge-and-review approach, with nationally determined contributions being internationally assessed⁴⁶. In light of the adoption of the Warsaw Framework for REDD+ in 2013, it is likely that REDD+ will be a component

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² The seven decisions containing provisions on REDD+ adopted before 2013 were: Decision 1/CP.13 (Bali Action Plan); Decision 2/CP.13; Decision 4/CP.15; Decision 1/CP.16; Decision 2/CP.17; Decision 12/CP.17; Decision 1/CP.18. The seven decisions known collectively as the “Warsaw Framework for REDD+” are: Decision 9/CP.19; Decision 10/CP.19; Decision 11/CP.19; Decision 12/CP.19; Decision 13/CP.19; Decision 14/CP.19; Decision 15/CP.19.

⁴³ William D Sunderlin and others, ‘The Challenge of Establishing REDD+ on the Ground: Insights from 23 Subnational Initiatives in Six Countries.’ (CIFOR 2014) 104 18 <http://www.cifor.org/publications/pdf_files/occpapers/op-104.pdf> accessed 7 August 2014.

⁴⁴ Ibid.

⁴⁵ UNFCCC, Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action 2011 [Decision 1/CP.17] para 2; 4.

⁴⁶ Jennifer Morgan and others, ‘Race to the Top: Driving Ambition in the Post-2020 International Climate Agreement’ (Agreement for Climate Transformation 2015 (ACT 2015) 2014) Working Paper 3–4 <<http://www.wri.org/our-work/project/act-2015/publications>> accessed 12 November 2014.

of this new approach. Therefore, despite important issues still needing clarification, it seems that REDD+ is on track to become an important part of the post-Kyoto climate change regime.

3.2. Bilateral – State to State: the case of Norway and Brazil

Further to the multilateral lawmaking process on REDD+, performed essentially through decisions of the parties to the UNFCCC, there are State to State initiatives which result in the development of international law on REDD+. In this sense, a country in particular, Norway, has been engaging into bilateral understandings with various States, such as Brazil, Guyana and Indonesia, to provide assistance in the design and implementation of REDD+⁴⁷.

It may be common for international lawyers to look for bilateral treaties when trying to assess the existence of bilateral international law between sovereign States. But, it may often be the case that law is developed through the direct engagement between State organs, through organ-to-organ agreements established within the broader framework provided by a bilateral treaty, even if the “legal bindness” of such agreements is not always clear⁴⁸.

In the case of the Norwegian cooperation with Brazil on REDD+, the lawmaking process is taking place not between the States as legal persons under international law, but through government institutions in the two countries. Building on a Memorandum of Understanding concluded by representatives of both States⁴⁹, several agreements were concluded between the Norwegian Ministry of Foreign Affairs and the Brazilian National Development Bank (BNDES). In essence, mutual rights and obligations are being established between the two countries, including, most prominently, Norwegian donations amounting to over 4.5 billion Norwegian Crowns between 2009 and 2013, as

⁴⁷ Angelsen, *REDD+ as Performance-Based Aid*, 13.

⁴⁸ Ward Ferdinandusse, ‘Out of the Black-Box-The International Obligation of State Organs’ (2003) 29 *Brook Journal of International Law* 45, 53–64; JES Fawcett, ‘The Legal Character of International Agreements’ (1953) 30 *British Yearbook of International Law* 381, 385–390.

⁴⁹ This Memorandum of Understanding may be considered an Executive Agreement as provided for in the 1969 Vienna Convention on the Law of Treaties. See VCLT, Vienna Convention on the Law of the Treaties 1969 Art. 12.

well as rules on the use of these funds and on results to be achieved prior to further funding⁵⁰.

Through these bilateral agreements, Norway is providing Brazil with REDD+ funding directed to support the Brazilian Amazon Fund, which focuses on Phases 1 and 2 of REDD+⁵¹, and may be used to fund projects fitting within one of the following categories⁵²: management of public forests and protected areas; environmental control, monitoring and inspection; sustainable forest management; economic activities from the sustainable use of forests; economic and ecological zoning, territorial planning and land ownership regulation; conservation and sustainable use of biodiversity; recovery of deforested areas.

An international treaty is considered as such when it is concluded between States in written form and is governed by international law, regardless of their particular designation⁵³. In this case, the agreements (subsequent to the MOU) were not concluded by the States and are not clearly governed by international law, thus not being international treaties. Nevertheless, they generate international obligations, as they establish rights and duties, such as conditions for donations, guidelines for the application of the donated funds, reporting, procurement, and auditing.

Given that the conduct of state organs is ultimately attributable to States themselves⁵⁴, it could be argued that, even if the agreements were established between State organs, the obligations are in the end imposable upon the States. Also, it could be argued that, by building on an MOU signed by representatives of both States, the agreements between State organs, in this case, are merely the operationalization of the

⁵⁰ Norwegian Ministry of Foreign Affairs and Banco Nacional de Desenvolvimento Econômico e Social - BNDES, Donation Agreement 2009. This agreement was amended later in 2009, and then in 2010, 2011 and 2012. It was eventually superseded by a new agreement in 2013, which was amended later in the same year.

⁵¹ Arild Angelsen and Arild Vatn, 'Chapter 5 -Options for a National REDD+ Architecture' in Arild Angelsen and others (eds), *Realising REDD+: national strategy and policy options* (Center for International Forestry Research (CIFOR) 2009) 70–71.

⁵² Norwegian Ministry of Foreign Affairs and Banco Nacional de Desenvolvimento Econômico e Social - BNDES Donation Agreement (n 50), Annex I.

⁵³ VCLT Vienna Convention on the Law of the Treaties (n 49) Art. 2.1.a.

⁵⁴ UN General Assembly, Resolution Adopted by the General Assembly. 56/83. Responsibility of States for Internationally Wrongful Acts 2001 [Resolution 56/83] Art. 4.

objectives contained in the MOU (in itself a treaty), in a relation akin to that of COP decisions with the treaties from which they derive.

Nevertheless, regardless of the legal character attributable to these agreements between the Norwegian Ministry of Foreign Affairs and the Brazilian BNDES, it can be stated that lawmaking on REDD+ is also being performed through the international interaction between state organs, complementing the lawmaking procedure performed through the negotiation of a treaty. Given that, contrary to proper international treaties⁵⁵, these agreements are not registered with the United Nations, the development of international law through agreements between State organs may lead to additional difficulties to be overcome by lawyers willing to analyze the international obligations of States.

3.3. Bilateral – Subnational jurisdictions: the case of Acre and California

Further to the development of international law through agreements between state organs, another trend related to REDD+ may pose additional difficulties to international lawyers willing to analyze international law on forests: lawmaking on REDD+ performed through the direct engagement between subnational jurisdictions.

To be fair, participation of subnational, non-sovereign jurisdictions in international law is not new. For instance, India was a founding member of the United Nations, even though, at the time, it was still formally under British rule⁵⁶. Also, Ukraine and Belarus, although part of the Soviet Union, were admitted as members to the United Nations⁵⁷. Contemporarily, Hong Kong, as a Special Administrative Region of the People's Republic of China, is a member in its own right of the World Trade

⁵⁵ UN, Charter of the United Nations 1945 Art. 102.

⁵⁶ Yehuda Z Blum, 'UN Membership of the "New" Yugoslavia: Continuity or Break?' (1992) 86 The American Journal of International Law 830, 831 <<http://www.jstor.org/stable/2203799?origin=crossref>> accessed 13 November 2014.

⁵⁷ Yehuda Z Blum, 'Russia Takes Over the Soviet Union's Seat at the United Nations' (1992) 3 European Journal of International Law 354, 356 <<http://www.ejil.org/issue.php?issue=102>> accessed 13 November 2014.

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Organization⁵⁸. Furthermore, subnational jurisdictions in certain States have been expressly attributed autonomy to conclude international agreements, such as is the case of the Canadian Province of Québec⁵⁹ and of all the Belgian regions⁶⁰.

In this sense, the American state of California, the Brazilian state of Acre, and the Mexican state of Chiapas are engaged in a process which may potentially lead to a linkage between REDD+ programs in Acre and Chiapas and the Californian GHG cap-and-trade program. This process is particularly interesting given the role of these three subnational jurisdictions as environmental trendsetters within the sovereign States they to which they belong. California is well-known as a trendsetter in environmental legislation in the US⁶¹. Acre is one of the birthplaces of Brazil's contemporary environmental movement, as a result of the legacy of Chico Mendes and the rubber tappers movement⁶². In Mexico, Chiapas has been employing carbon-related forest conservation programs since 1995⁶³.

The linkage process is based on the direct international engagement among the three parties, and is complemented by domestic legislation enacted by each of them. The cornerstone of the process was the establishment, in 2008, of the Governors' Climate and Forests Taskforce (GCF), a coalition of subnational jurisdictions aimed at

⁵⁸ Robert C Feenstra and others, 'Discrepancies in International Data: An Application to China-Hong Kong Entrepôt Trade' [1999] *American Economic Review* 338, 339.

⁵⁹ Over 700 agreements have been concluded by Québec with foreign governments, related to various issues, such as social security, mutual recognition of drivers' licenses, cultural affairs, higher education etc. See Ministry of International Relations and La Francophonie, Québec, 'Agreements and Commitments' <<http://www.mrif.gouv.qc.ca/en/ententes-et-engagements/presentation>> accessed 28 August 2014.

⁶⁰ Stéphane Paquin, 'Paradiplomatie Identitaire et Diplomatie En Belgique Fédérale: Le Cas de La Flandre' (2003) 36 *Canadian Journal of Political Science / Revue canadienne de science politique* pp. 621, 624 <<http://www.jstor.org/stable/3233087>>.

⁶¹ MA Schreurs, 'From the Bottom Up: Local and Subnational Climate Change Politics' (2008) 17 *The Journal of Environment & Development* 343, 346–347 <<http://jed.sagepub.com/cgi/doi/10.1177/1070496508326432>> accessed 8 August 2013; David A Dana, 'One Green America: Continuities and Discontinuities in Environmental Federalism in the United States' (2013) 24 *Fordham Environmental Law Review* 103, 116–119.

⁶² Margaret E Keck, 'Social Equity and Environmental Politics in Brazil: Lessons from the Rubber Tappers of Acre' (1995) 27 *Comparative Politics* pp. 409 <<http://www.jstor.org/stable/422227>>; Peter Cronkleton and others, *Environmental Governance and the Emergence of Forest-Based Social Movements* (CIFOR 2008) 11–16.

⁶³ K Nelson and B Dejong, 'Making Global Initiatives Local Realities: Carbon Mitigation Projects in Chiapas, Mexico' (2003) 13 *Global Environmental Change* 19, 21 <<http://linkinghub.elsevier.com/retrieve/pii/S0959378002000882>> accessed 9 August 2013.

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working collaboratively to the inclusion of REDD+ in GHG cap-and-trade mechanisms, originally from Brazil, USA and Indonesia, to which jurisdictions from Mexico, Nigeria, Peru and Spain eventually adhered⁶⁴. Two years later, a MOU was concluded among Acre, California and Chiapas (all of which are GCF members), which led to the establishment of a working group to provide recommendations on the potential linkage between REDD+ in Chiapas and Acre and the Californian cap-and-trade program⁶⁵.

This linkage would lead to the establishment of a system of rights and obligations through lawmaking processes in the three jurisdictions, which would lay the ground for legislative harmonization, as well as mutual recognition of rights, institutions and procedures. In essence, this system of rights and obligations would include:

- 1) the right of Acre and Chiapas to issue offset credits based on their respective REDD+ programs and the right of entities in California to buy these credits;
- 2) the right of entities in California to use these credits to meet part of the emissions reductions targets mandated by Californian law, and the corresponding duty of California to recognize such credits as compliance instruments in its cap-and-trade program;
- 3) the duty of Acre and Chiapas to repair losses to Californian entities in case of non-permanence of emissions reductions (such as, for instance, in the case of a forest fire).

The process is so far more advance between Acre and California, given that Acre has enacted, in October 2010, State Law n. 2308/2010, which established its State System of Incentives for Environmental Services (SISA), 'with the aim of promoting the maintenance and expansion of supply of various ecosystem products and services'⁶⁶,

⁶⁴ GCF, 'Joint Action Plan - Appendices' <<http://www.gcftaskforce.org/documents/GCTF-1000-2009-031-AP.pdf>> accessed 9 August 2013.

⁶⁵ California, Acre and Chiapas, 'Memorandum of Understanding on Environmental Cooperation between the State of Acre of the Federative Republic of Brazil, the State of Chiapas of the United Mexican States, and the State of California of the United States of America' <http://www.socioambiental.org/banco_imagens/pdfs/Memorando_Acre_Chiapas_California_REDD_No_v_2010.pdf> accessed 9 August 2013; Evan Johnson and others, 'California, Acre and Chiapas: Partnering to Reduce Emissions from Tropical Deforestation' (2013) <<http://stateredd.org/recommendations/>> accessed 13 August 2013.

⁶⁶ Acre, Lei Estadual N. 2308, de 22 de Outubro de 2010 (Unofficial English Translation) 2010 [2308/2010] Art. 1.

thus providing the framework for REDD+ in Acre⁶⁷. California, on its part, has already enacted administrative regulations allowing for the use of REDD+ offset credits in its program, although these still need to be further regulated by the Californian Air Resources Board (CARB)⁶⁸.

The financing of REDD+ through offsets has been a contentious issue, particularly within the UNFCCC. The first attempt, within the UNFCCC, to address deforestation through emissions offsets was during the discussion of the rules which would govern the Clean Development Mechanism (CDM)⁶⁹, which was ultimately ruled out mostly as the result of Brazilian and European opposition⁷⁰. In this case, Brazil has reaffirmed its position against the use of REDD+ offsets⁷¹, and it remains to be seen how this will play out if the Acre program is linked to the Californian one.

Therefore, in this case, rights and obligations of an international character (given that they involve different legal orders from within different sovereign States) are being established through various political and legal acts by subnational jurisdictions. Furthermore, in the case of Acre, this path diverges from that being pursued by Brazil at the multilateral level, which renders this lawmaking process even more interesting.

3.4. Private REDD+ lawmaking through certification: the case of the VCS

Law on REDD+ has also been developing by means of private rulemaking, through the emergence of voluntary standards and their corresponding certification

⁶⁷ Ibid Art 20-28.

⁶⁸ California, Code of Regulations 2013 s 95821; 95993.

⁶⁹ Markus Lederer, 'From CDM to REDD+ "What Do We Know for Setting up Effective and Legitimate Carbon Governance?" (2011) 70 Ecological Economics 1900, 1900 <<http://www.sciencedirect.com/science/article/pii/S0921800911000577>>.

⁷⁰ Pistorius (n 39) 639; Philip M Fearnside, 'Saving Tropical Forests as a Global Warming Countermeasure: An Issue That Divides the Environmental Movement' (2001) 39 Ecological Economics 167, 171-174 <<http://www.sciencedirect.com/science/article/pii/S0921800901002257>>.

⁷¹ BASIC, 'Joint Statement Issued at the Conclusion of the 16th BASIC Ministerial Meeting on Climate Change' <https://www.environment.gov.za/mediarelease/16thbasic_ministerialmeeting_climatechange> accessed 19 May 2014; Daniela Chiaretti, 'Varsóvia Avança Em Decisão Para Proteger as Florestas' *Valor Econômico* (22 November 2013) <<http://www.valor.com.br/internacional/3348904/varsovia-avanca-em-decisao-para-proteger-florestas>> accessed 19 May 2014; Thelma Krug, Leticia Guimarães and Felipe Ferreira, 'O Marco de Varsóvia Para REDD+' *Blog do Clima* (20 February 2014) <<http://planetasustentavel.abril.com.br/blog/blog-do-clima/2014/02/20/o-marco-de-varsovia-para-redd/>> accessed 19 May 2014.

schemes. An example is the emergence of the Jurisdictional and Nested REDD+ Framework (JNR) of the Verified Carbon Standard (VCS), aimed at providing a pathway for national, state or provincial REDD+ programs to funding from the voluntary market⁷².

Voluntary GHG markets provide a possibility for individuals and businesses to purchase credits related to GHG emissions reductions, instead of pursuing these reductions themselves, and are based on the free will of individuals and businesses, as these emissions reductions are not legally mandatory⁷³. In this regard, the VCS was established as way to provide standards and some form of collective governing structure for the voluntary GHG offset market, in light of the dispersed and non-structured nature of a voluntary market in which proving actual emissions reductions was becoming tricky⁷⁴.

Therefore, in what relates to REDD+, the use of VCS standards is devised essentially to provide an accounting standard for the issuance of REDD+ based offset credits, which may be purchased in the voluntary market by individuals and businesses. This VCS certification may be combined with others, such as that provided by the “Climate, Community and Biodiversity Alliance” (CCBA), focused on attesting that REDD+ activities are delivering social and environmental benefits⁷⁵.

The VCS is developed through a process involving multiple stakeholders, has a governing body comprising members such as industry associations and investors, and is embodied in a non-profit organization headquartered in the United States⁷⁶. It is currently one of the most influential private standards developed in the field of GHG

⁷² VCS, ‘Jurisdictional & Nested REDD+: Scaling Up REDD+ Activities’ <http://www.v-c-s.org/sites/v-c-s.org/files/FactSheet%20JNRI%202013%20-%20MidRes_2.pdf> accessed 24 January 2014.

⁷³ Michael Gillenwater and others, ‘Policing the Voluntary Carbon Market’ [2007] *Nature Reports Climate Change* 85, 85 <<http://www.nature.com/doi/finder/10.1038/climate.2007.58>> accessed 21 May 2014; Bumpus and Liverman (n 33) 128.

⁷⁴ Bumpus and Liverman (n 33) 145–146.

⁷⁵ Merger, Dutschke and Verchot (n 33) 554; 556.

⁷⁶ Bumpus and Liverman (n 33) 146; Constance L McDermott and others, ‘Operationalizing Social Safeguards in REDD+: Actors, Interests and Ideas’ (2012) 21 *Environmental Science & Policy* 63, 66 <<http://linkinghub.elsevier.com/retrieve/pii/S1462901112000378>> accessed 10 December 2013.

emissions reductions, which is reflected, for instance, in its recognition by the Australian National Carbon Offset Standard⁷⁷.

In what relates to REDD+, VCS may be employed both to certify emissions reductions achieved by individual REDD+ projects and by jurisdiction-wide REDD+ programs. The jurisdiction-wide certification, provided under the VCS JNR, is interesting in the sense that it has the potential to influence the development of REDD+ programs around the globe. As a matter of fact, the Brazilian state of Acre is already developing its statewide REDD+ program to conform to the standards established by the VCS under its JNR initiative⁷⁸. Therefore, the rulemaking activity within the JNR may influence the lawmaking performed by sovereign States and subnational jurisdictions around the world. More tellingly, the development of the JNR is being partially funded by the Norwegian government⁷⁹, thus increasing the potential for the influence of JNR in public lawmaking processes through the bilateral REDD+ engagements of Norway around the world.

4. REDD+: between fragmentation and centralization

The four cases presented in this paper help to provide a perspective on the influence that lawmaking on REDD+ is having on the development of international law on forests. REDD+ has been taking shape through various processes of various kinds. Naturally, if REDD+ is understood merely in the terms it is being negotiated within the UNFCCC, its birthplace, all other processes could be ignored. But, if REDD+ is framed as a set of actions aimed at achieving GHG emission reductions from forests, then a broader picture is revealed. In the words of Boyd, REDD+ may be considered “an emerging global assemblage of people, practices, organizations, laws, technologies, and

⁷⁷ Jessica F Green, ‘Order out of Chaos: Public and Private Rules for Managing Carbon’ (2013) 13 *Global Environmental Politics* 1, 19–20 <http://www.mitpressjournals.org/doi/abs/10.1162/GLEP_a_00164> accessed 14 November 2014; Australian Government - Department of the Environment, ‘NCOS Eligible Offsets’ <<http://www.environment.gov.au/node/35887>> accessed 14 November 2014.

⁷⁸ Anthony Anderson and others, ‘O Sistema de Incentivos Por Serviços Ambientais Do Estado Do Acre, Brasil: Lições Para Políticas, Programas E Estratégias de REDD Jurisdicional’ (WWF-Brasil 2013) 56 <http://d3nehc6yl9qzo4.cloudfront.net/downloads/wwf_sisa.pdf> accessed 17 August 2013.

⁷⁹ VCS (n 72).

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territories that is taking shape at multiple sites around the world”⁸⁰, which will only accomplish its goal if it “can be translated into the vernacular institutions of communities who live in and near tropical forests”⁸¹.

This may be just a reenactment of the tension between fragmentation and centralization that permeates global forest governance. In the past, the overall trend in developing countries has been towards the decentralization of forest management, through the involvement and empowerment of local actors⁸², amid a context of budgetary constraints faced by central governments, increased availability of international support, and domestic demands for greater recognition of the needs of local communities and of their central role in the management of forests⁸³.

With REDD+, national governments could feel pressured to revert this decentralization trend, in face of the risk of non-payment resulting from failure at the local level⁸⁴, with potentially negative impacts on local livelihoods by means of excessive requirements on local communities, forced evictions, lack of access to benefits, and elite capture⁸⁵. In light of these potentially negative impacts of centralization, safeguards were agreed within the UNFCCC⁸⁶, and are the essence of the CCBA standards⁸⁷.

Centralization may also take place in the form of a networked centralization, that is, with the establishment of more or less formal transnational networks providing the

⁸⁰ William Boyd, ‘Climate Change, Fragmentation, and the Challenges of Global Environmental Law: Elements of a Post-Copenhagen Assemblage’ (2010) 32 University of Pennsylvania Journal of International Law 457, 523 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1739123> accessed 30 April 2013.

⁸¹ Ibid 522.

⁸² Jacob Phelps, Edward L Webb and Arun Agrawal, ‘Does REDD+ Threaten to Recentralize Forest Governance?’ (2010) 328 Science 312, 312 <<http://www.sciencemag.org/content/328/5976/312.short>>.

⁸³ Arun Agrawal, Ashwini Chhatre and Rebecca Hardin, ‘Changing Governance of the World’s Forests’ (2008) 320 Science 1460, 1461 <<http://www.sciencemag.org/content/320/5882/1460.abstract>>.

⁸⁴ Phelps, Webb and Agrawal (n 82) 312–313.

⁸⁵ Ibid 313; Albert Abraham Arhin, ‘Safeguards and Dangers: A Framework for Unpacking the Black Box of Safeguards for REDD+’ (2014) 45 Forest Policy and Economics 24, 24 <<http://linkinghub.elsevier.com/retrieve/pii/S1389934114000719>> accessed 7 August 2014.

⁸⁶ UNFCCC, The Timing and the Frequency of Presentations of the Summary of Information on How All the Safeguards Referred to in Decision 1/CP.16, Appendix I, Are Being Addressed and Respected 2013 [Decision 12/CP.19].

⁸⁷ Merger, Dutschke and Verchot (n 33) 554; 556.

conduits for knowledge, advice and resources⁸⁸. This could happen, for instance, if several key REDD+ organizations were located spatially in the same area, with a large part of REDD+ activities being performed and held together by a small group of key organizations headquartered in the United States and Europe⁸⁹. In this sense, from the cases presented in this paper, the key role of Norway and of the VCS in the development of REDD+ may be observed and considered an example of this networked centralization.

But, going back to the beginning of this section, this centralization, whether networked or within the state bureaucracy, coexists with a trend towards fragmentation. To be fair, international law has been more or less fragmented since its inception, in light of its specialization into fields⁹⁰.

The term “fragmentation” suggests the preexistence of a “whole” which has fragmented or is fragmenting, which means it can be used to describe both a “state” (“international law is fragmented”) or a process (“international law is fragmenting”)⁹¹. The level of fragmentation depends on the reference point: international law may be seen as fragmented into humanitarian law, international environmental law, law of the sea, space law etc.; international environmental law may be seen as fragmented into climate change law, biodiversity law, maritime pollution law etc.

In the case of REDD+, it may be argued that fragmentation takes place through the diversity of sources of law. By being established through the UNFCCC and various processes at various levels, including bilateral cooperation, subnational lawmaking and cooperation, and non-state lawmaking processes involving multiple stakeholders,

⁸⁸ Caleb Gallemore and Darla K Munroe, ‘Centralization in the Global Avoided Deforestation Collaboration Network’ (2013) 23 *Global Environmental Change* 1199, 1200 <<http://linkinghub.elsevier.com/retrieve/pii/S0959378013000708>> accessed 9 October 2014.

⁸⁹ Ibid 1208.

⁹⁰ A Lindroos, ‘Dispelling the Chimera of “Self-Contained Regimes” International Law and the WTO’ (2005) 16 *European Journal of International Law* 857, 858 <<http://ejil.oxfordjournals.org/cgi/doi/10.1093/ejil/chi148>> accessed 2 September 2014.

⁹¹ Harro van Asselt, *The Fragmentation of Global Climate Governance: Consequences and Management of Regime Interactions* (Edward Elgar 2014) 32.

REDD+ is giving rise to a polycentric governance structure and adding to the legal pluralism that seems to be embedded in the very fabric of a globalized world⁹².

5. Final remarks

The global lawmaking process on REDD+ may be characterized by the simultaneous (and somewhat contradictory) trends of centralization and fragmentation. The former is manifested in the key role performed by various actors in the development of law on REDD+ around the globe; the latter may be observed in the existence of various sources of law concomitantly working towards the global establishment of REDD+.

How are these apparently conflicting trends to be reconciled? This paper does not attempt to provide a definite answer to this question. However, it could be that, in reality, this contradiction is only apparent. It could be that all these processes have emerged as ways to overcome the limitations of the UNFCCC's multilateral process, which relies on consensus and, thus, tends to proceed based on the lowest common denominator⁹³. If this perspective is adopted, processes such as those led by Norway, California and the VCS may be seen as similar to the regulatory acts and the interstate agreements typical of federated States, in which broad policies are agreed upon at the federal level, but are further designed and implemented at lower levels, taking into account the characteristics of each federated member. In this sense, the UNFCCC would be the forum in which the broader characteristics of REDD+ are defined, and further developed by means of domestic and non-state actions.

Regardless of how these trends are reconciled, it seems that REDD+ is reinforcing the existing pluralism in international law. It has been argued that global interdependence in various fields, such as security, development, financial regulation, environmental protection, law enforcement, telecommunications, trade, and intellectual property, has led to the emergence of transnational systems of regulation or regulatory

⁹² Boyd (n 80) 514; 517–533.

⁹³ John S Dryzek and Hayley Stevenson, 'Global Democracy and Earth System Governance' (2011) 70 *Ecological Economics* 1865, 1871 <<http://linkinghub.elsevier.com/retrieve/pii/S0921800911000498>> accessed 14 November 2014.

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cooperation established through treaties or through more informal intergovernmental networks of cooperation, and that much of the regulation of this body of law is implemented through transnational administrative bodies, including informal groups of officials, not subject to control by national governments; this would be complemented by regulation developed by private or public-private actors, and last, but not least, by decisions of domestic governments with extraterritorial effects⁹⁴.

The cases discussed in this paper reinforce the image of a treaty body establishing a broad regulation which is then further developed by various institutions and groups. In this sense, REDD+, through both networked centralization and legal pluralism, provides an interesting example of how international law on forests develops.

⁹⁴ Benedict Kingsbury, Nico Krisch and Richard B Stewart, 'The Emergence of Global Administrative Law' (2005) 68 Law and Contemporary Problems 15+, 16 <<http://go.galegroup.com.ez75.periodicos.capes.gov.br/ps/i.do?id=GALE%7CA141214060&v=2.1&u=capes58&it=r&p=AONE&sw=w&asid=92648385ea7081aa50947d5cd5e0c53d>> accessed 10 March 2014.

References

- Agrawal A, Chhatre A and Hardin R, 'Changing Governance of the World's Forests' (2008) 320 Science 1460 <<http://www.sciencemag.org/content/320/5882/1460.abstract>>
- Anderson A and others, 'O Sistema de Incentivos Por Serviços Ambientais Do Estado Do Acre, Brasil: Lições Para Políticas, Programas E Estratégias de REDD Jurisdicional' (WWF-Brasil 2013)
 <http://d3nehc6yl9qzo4.cloudfront.net/downloads/wwf_sisa.pdf> accessed 17 August 2013
- Angelsen A, 'REDD+ as Performance-Based Aid: General Lessons and Bilateral Agreements of Norway' (WIDER 2013) WIDER Working Paper 2013/135
 <<http://hdl.handle.net/10419/93710>> accessed 10 October 2014
- (eds), *Analysing REDD+ Challenges and Choices* (Center for International Forestry Research 2012)
 <http://www.cifor.org/publications/pdf_files/Books/BAngelsen1201.pdf> accessed 11 June 2014
- Angelsen A and Vatn A, 'Chapter 5 -Options for a National REDD+ Architecture' in Arild Angelsen and others (eds), *Realising REDD+: national strategy and policy options* (Center for International Forestry Research (CIFOR) 2009)
- Arhin AA, 'Safeguards and Danguards: A Framework for Unpacking the Black Box of Safeguards for REDD+' (2014) 45 Forest Policy and Economics 24
 <<http://linkinghub.elsevier.com/retrieve/pii/S1389934114000719>> accessed 7 August 2014
- Asselt H van, *The Fragmentation of Global Climate Governance: Consequences and Management of Regime Interactions* (Edward Elgar 2014)
- Australian Government - Department of the Environment, 'NCOS Eligible Offsets'
 <<http://www.environment.gov.au/node/35887>> accessed 14 November 2014
- BASIC, 'Joint Statement Issued at the Conclusion of the 16th BASIC Ministerial Meeting on Climate Change'
 <https://www.environment.gov.za/mediarelease/16thbasic_ministerialmeeting_climatechange> accessed 19 May 2014
- Birnie PW, Boyle AE and Redgwell C, *International Law and the Environment* (3rd ed, Oxford University Press 2009)
- Blum YZ, 'Russia Takes Over the Soviet Union's Seat at the United Nations' (1992) 3 European Journal of International Law 354 <<http://www.ejil.org/issue.php?issue=102>> accessed 13 November 2014
- , 'UN Membership of the "New" Yugoslavia: Continuity or Break?' (1992) 86 The American Journal of International Law 830
 <<http://www.jstor.org/stable/2203799?origin=crossref>> accessed 13 November 2014

Ernesto Roessing Neto
 CONFERENCE PAPER - WORK IN PROGRESS
 DO NOT CITE OR CIRCULATE WITHOUT AUTHOR'S PERMISSION

Blundell AG, 'A Review of the CITES Listing of Big-Leaf Mahogany' (2004) 38 Oryx
 <http://www.journals.cambridge.org/abstract_S0030605304000134> accessed 10
 September 2014

Boyd W, 'Climate Change, Fragmentation, and the Challenges of Global Environmental
 Law: Elements of a Post-Copenhagen Assemblage' (2010) 32 University of
 Pennsylvania Journal of International Law 457
 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1739123> accessed 30 April 2013

Brunnée J, 'COPing with Consent: Law-Making Under Multilateral Environmental
 Agreements' (2002) 15 Leiden Journal of International Law 1
 <http://www.journals.cambridge.org/abstract_S0922156502000018> accessed 1 July
 2013

Bumpus AG and Liverman DM, 'Accumulation by Decarbonization and the
 Governance of Carbon Offsets' (2008) 84 Economic Geography 127
 <<http://doi.wiley.com/10.1111/j.1944-8287.2008.tb00401.x>> accessed 4 September
 2014

California, Acre and Chiapas, 'Memorandum of Understanding on Environmental
 Cooperation between the State of Acre of the Federative Republic of Brazil, the State of
 Chiapas of the United Mexican States, and the State of California of the United States
 of America'
 <[http://www.socioambiental.org/banco_imagens/pdfs/Memorando_Acre_Chiapas_Calif
 ornia_REDD_Nov_2010.pdf](http://www.socioambiental.org/banco_imagens/pdfs/Memorando_Acre_Chiapas_California_REDD_Nov_2010.pdf)> accessed 9 August 2013

Chao S, 'Forest Peoples: Numbers across the World' (Forest Peoples Programme 2012)
 <[http://www.forestpeoples.org/sites/fpp/files/publication/2012/05/forest-peoples-
 numbers-across-world-final_0.pdf](http://www.forestpeoples.org/sites/fpp/files/publication/2012/05/forest-peoples-numbers-across-world-final_0.pdf)> accessed 7 December 2013

Chiaretti D, 'Varsóvia Avança Em Decisão Para Proteger as Florestas' *Valor
 Econômico* (22 November 2013)
 <[http://www.valor.com.br/internacional/3348904/varsovia-avanca-em-decisao-para-
 proteger-florestas](http://www.valor.com.br/internacional/3348904/varsovia-avanca-em-decisao-para-proteger-florestas)> accessed 19 May 2014

Cronkleton P and others, *Environmental Governance and the Emergence of Forest-
 Based Social Movements* (CIFOR 2008)

Dana DA, 'One Green America: Continuities and Discontinuities in Environmental
 Federalism in the United States' (2013) 24 Fordham Environmental Law Review 103

Dryzek JS and Stevenson H, 'Global Democracy and Earth System Governance' (2011)
 70 Ecological Economics 1865
 <<http://linkinghub.elsevier.com/retrieve/pii/S0921800911000498>> accessed 14
 November 2014

Dyer N and Counsell S, 'McREDD: How McKinsey "cost-Curves" Are Distorting
 REDD' <<http://www.rainforestfoundationuk.org/McREDD>> accessed 13 August 2013

Ernesto Roessing Neto
 CONFERENCE PAPER - WORK IN PROGRESS
 DO NOT CITE OR CIRCULATE WITHOUT AUTHOR'S PERMISSION

- Fawcett J, 'The Legal Character of International Agreements' (1953) 30 British Yearbook of International Law 381
- Fearnside PM, 'Saving Tropical Forests as a Global Warming Countermeasure: An Issue That Divides the Environmental Movement' (2001) 39 Ecological Economics 167
 <<http://www.sciencedirect.com/science/article/pii/S0921800901002257>>
- Feenstra RC and others, 'Discrepancies in International Data: An Application to China-Hong Kong Entrepôt Trade' [1999] American Economic Review 338
- Ferdinandusse W, 'Out of the Black-Box-The International Obligation of State Organs' (2003) 29 Brook Journal of International Law 45
- Friedman S, 'Farms Here, Forests There' (2011) <<http://assets.usw.org/our-union/pulp-paper-forestry/farms-here-forests-there-report-5-26-10.pdf>> accessed 21 March 2013
- Gallemore C and Munroe DK, 'Centralization in the Global Avoided Deforestation Collaboration Network' (2013) 23 Global Environmental Change 1199
 <<http://linkinghub.elsevier.com/retrieve/pii/S0959378013000708>> accessed 9 October 2014
- GCF, 'Joint Action Plan - Appendices'
 <<http://www.gcftaskforce.org/documents/GCTF-1000-2009-031-AP.pdf>> accessed 9 August 2013
- Gillenwater M and others, 'Policing the Voluntary Carbon Market' [2007] Nature Reports Climate Change 85
 <<http://www.nature.com/doi/10.1038/climate.2007.58>> accessed 21 May 2014
- Green JF, 'Order out of Chaos: Public and Private Rules for Managing Carbon' (2013) 13 Global Environmental Politics 1
 <http://www.mitpressjournals.org/doi/abs/10.1162/GLEP_a_00164> accessed 14 November 2014
- Gupta J, van der Grijp N and Kuik O (eds), *Climate Change, Forests and REDD: Lessons for Institutional Design* (Routledge 2012)
- Hall A, *Forests and Climate Change: The Social Dimensions of REDD in Latin America* (Edward Elgar 2012)
- Haug C and Gupta J, 'The Emergence of REDD on the Global Policy Agenda' in Joyeeta Gupta, Onno Kuik and Nicolien Van der Grijp (eds), *Climate Change, Forests and REDD: Lessons for Institutional Design* (Routledge 2012)
- Haug C and Gupta J, 'Global Forest Governance' in Joyeeta Gupta, Onno Kuik and Nicolien Van der Grijp (eds), *Climate Change, Forests and REDD: Lessons for Institutional Design* (Routledge 2013)
- Houghton R., 'Carbon Emissions and the Drivers of Deforestation and Forest Degradation in the Tropics' (2012) 4 Current Opinion in Environmental Sustainability

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 CONFERENCE PAPER - WORK IN PROGRESS
 DO NOT CITE OR CIRCULATE WITHOUT AUTHOR'S PERMISSION

597 <<http://linkinghub.elsevier.com/retrieve/pii/S1877343512000723>> accessed 22 January 2014

Johnson E and others, 'California, Acre and Chiapas: Partnering to Reduce Emissions from Tropical Deforestation' (2013) <<http://stateredd.org/recommendations/>> accessed 13 August 2013

Karsenty A and Ongolo S, 'Can "fragile States" Decide to Reduce Their Deforestation? The Inappropriate Use of the Theory of Incentives with Respect to the REDD Mechanism' (2012) 18 Forest Policy and Economics 38
 <<http://linkinghub.elsevier.com/retrieve/pii/S1389934111000748>> accessed 22 May 2013

Keck ME, 'Social Equity and Environmental Politics in Brazil: Lessons from the Rubber Tappers of Acre' (1995) 27 Comparative Politics pp. 409
 <<http://www.jstor.org/stable/422227>>

Kesicki F and Strachan N, 'Marginal Abatement Cost (MAC) Curves: Confronting Theory and Practice' (2011) 14 Environmental Science & Policy 1195
 <<http://www.sciencedirect.com/science/article/pii/S1462901111001377>>

Kingsbury B, Krisch N and Stewart RB, 'The Emergence of Global Administrative Law' (2005) 68 Law and Contemporary Problems 15+
 <<http://go.galegroup.com.ez75.periodicos.capes.gov.br/ps/i.do?id=GALE%7CA141214060&v=2.1&u=capes58&it=r&p=AONE&sw=w&asid=92648385ea7081aa50947d5cd5e0c53d>> accessed 10 March 2014

Krug T, Guimarães L and Ferreira F, 'O Marco de Varsóvia Para REDD+' *Blog do Clima* (20 February 2014) <<http://planetasustentavel.abril.com.br/blog/blog-do-clima/2014/02/20/o-marco-de-varsovia-para-redd/>> accessed 19 May 2014

Lederer M, 'From CDM to REDD+ "What Do We Know for Setting up Effective and Legitimate Carbon Governance?" (2011) 70 Ecological Economics 1900
 <<http://www.sciencedirect.com/science/article/pii/S0921800911000577>>

Lindroos A, 'Dispelling the Chimera of "Self-Contained Regimes" International Law and the WTO' (2005) 16 European Journal of International Law 857
 <<http://ejil.oxfordjournals.org/cgi/doi/10.1093/ejil/chi148>> accessed 2 September 2014

Macintosh A, 'Reducing Emissions from Deforestation and Forest Degradation in Developing Countries: A Cautionary Tale from Australia' (The Australia Institute 2010) 12 <<http://www.tai.org.au/node/1628>> accessed 13 August 2014

Maguire R, *Global Forest Governance: Legal Concepts and Policy Trends* (Edward Elgar 2013)

Maniatis D and others, 'Financing and Current Capacity for REDD+ Readiness and Monitoring, Measurement, Reporting and Verification in the Congo Basin' (2013) 368 Philosophical Transactions of the Royal Society B: Biological Sciences 20120310

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 CONFERENCE PAPER - WORK IN PROGRESS
 DO NOT CITE OR CIRCULATE WITHOUT AUTHOR'S PERMISSION

<<http://rstb.royalsocietypublishing.org/cgi/doi/10.1098/rstb.2012.0310>> accessed 8 October 2014

Matthews E and others, *Pilot Analysis of Global Ecosystems: Forest Ecosystems* (World Resources Institute 2000)

McDermott CL and others, 'Operationalizing Social Safeguards in REDD+: Actors, Interests and Ideas' (2012) 21 *Environmental Science & Policy* 63
 <<http://linkinghub.elsevier.com/retrieve/pii/S1462901112000378>> accessed 10 December 2013

McKinsey and Company, 'Pathways to a Low-Carbon Economy: Version 2 of the Global Greenhouse Gas Abatement Cost Curve' (2009)
 <http://www.mckinsey.com/client_service/sustainability/latest_thinking/pathways_to_a_low_carbon_economy> accessed 13 August 2013

Meidinger E, 'The Administrative Law of Global Private-Public Regulation: The Case of Forestry' (2006) 17 *European Journal of International Law* 47
 <<http://ejil.oxfordjournals.org/cgi/doi/10.1093/ejil/chi168>> accessed 10 April 2014

Merger E, Dutschke M and Verchot L, 'Options for REDD+ Voluntary Certification to Ensure Net GHG Benefits, Poverty Alleviation, Sustainable Management of Forests and Biodiversity Conservation' (2011) 2 *Forests* 550 <<http://www.mdpi.com/1999-4907/2/2/550/>> accessed 17 September 2014

Millennium Ecosystem Assessment, *Ecosystems and Human Well-Being: Current State and Trends: Findings of the Condition and Trends Working Group of the Millennium Ecosystem Assessment* (Island Press 2005)

Ministry of International Relations and La Francophonie, Québec, 'Agreements and Commitments' <<http://www.mrif.gouv.qc.ca/en/ententes-et-engagements/presentation>> accessed 28 August 2014

Morgan J and others, 'Race to the Top: Driving Ambition in the Post-2020 International Climate Agreement' (Agreement for Climate Transformation 2015 (ACT 2015) 2014) Working Paper <<http://www.wri.org/our-work/project/act-2015/publications>> accessed 12 November 2014

Myers N and others, 'Biodiversity Hotspots for Conservation Priorities' (2000) 403 *Nature* 853 <<http://dx.doi.org/10.1038/35002501>>

Nelson K and Dejong B, 'Making Global Initiatives Local Realities: Carbon Mitigation Projects in Chiapas, Mexico' (2003) 13 *Global Environmental Change* 19
 <<http://linkinghub.elsevier.com/retrieve/pii/S0959378002000882>> accessed 9 August 2013

Ozanne CMP, 'Biodiversity Meets the Atmosphere: A Global View of Forest Canopies' (2003) 301 *Science* 183
 <<http://www.sciencemag.org/cgi/doi/10.1126/science.1084507>> accessed 31 January 2014

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CONFERENCE PAPER - WORK IN PROGRESS
DO NOT CITE OR CIRCULATE WITHOUT AUTHOR'S PERMISSION

Paquin S, 'Paradiplomatie Identitaire et Diplomatie En Belgique Fédérale: Le Cas de La Flandre' (2003) 36 Canadian Journal of Political Science / Revue canadienne de science politique pp. 621 <<http://www.jstor.org/stable/3233087>>

Phelps J, Webb EL and Agrawal A, 'Does REDD+ Threaten to Recentralize Forest Governance?' (2010) 328 Science 312
<<http://www.sciencemag.org/content/328/5976/312.short>>

Pistorius T, 'From RED to REDD+: The Evolution of a Forest-Based Mitigation Approach for Developing Countries' (2012) 4 4/6 Climate systems 638
<<http://www.sciencedirect.com/science/article/pii/S1877343512000899>>

Ramsar Secretariat, 'The Convention on Wetlands Text, as Amended in 1982 and 1987' (1994) <http://www.ramsar.org/cda/en/ramsar-documents-texts-convention-on/main/ramsar/1-31-38%5E20671_4000_0__> accessed 11 September 2014

Ruis BMGS, 'No Forest Convention but Ten Tree Treaties' (2001) 52 *UNASYLVA-FAO*
<http://www.fao.org/docrep/003/Y1237e/y1237e03.htm#P0_0> accessed 9 September 2014

Schreurs MA, 'From the Bottom Up: Local and Subnational Climate Change Politics' (2008) 17 The Journal of Environment & Development 343
<<http://jed.sagepub.com/cgi/doi/10.1177/1070496508326432>> accessed 8 August 2013

Soares GFS, *Direito Internacional do Meio Ambiente: emergência, obrigações e responsabilidades* (Atlas 2001)

Stern NH, 'The Economics of Climate Change: The Stern Review' (2006)
<http://webarchive.nationalarchives.gov.uk/20130129110402/http://www.hm-treasury.gov.uk/stern_review_report.htm> accessed 13 August 2013

Sunderlin WD and others, 'The Challenge of Establishing REDD+ on the Ground: Insights from 23 Subnational Initiatives in Six Countries.' (CIFOR 2014) 104
<http://www.cifor.org/publications/pdf_files/occpapers/op-104.pdf> accessed 7 August 2014

Teubner G and Fischer-Lescano A, 'Regime-Collisions: The Vain Search for Legal Unity in the Fragmentation of Global Law' (2004) 25 Michigan Journal of International Law 999

Van Asselt H, 'Managing the Fragmentation of International Environmental Law: Forests at the Intersection of the Climate and Biodiversity Regimes' (2011) 44 NYUJ Int'l L. & Pol. 1205

Vancley JK and Nichols JD, 'What Would a Global Forest Convention Mean for Tropical Forests and for Timber Consumers?' (2005) 103 Journal of Forestry 120

VCS, 'Jurisdictional & Nested REDD+: Scaling Up REDD+ Activities' <http://www.v-c-s.org/sites/v-c-s.org/files/FactSheet%20JNRI%202013%20-%20MidRes_2.pdf> accessed 24 January 2014

Ernesto Roessing Neto
 CONFERENCE PAPER - WORK IN PROGRESS
 DO NOT CITE OR CIRCULATE WITHOUT AUTHOR'S PERMISSION

Viana V and others, 'Juma Sustainable Development Reserve: The First REDD Project In the Brazilian Amazon. Fundação Amazonas Sustentável' <http://fas-amazonas.org/versao/2012/wordpress/wp-content/uploads/2013/06/FAS_Juma-REDD-Project-summary.pdf> accessed 24 January 2014

Wiersema A, 'New International Law-Makers-Conferences of the Parties to Multilateral Environmental Agreements, The' (2009) 31 Michigan Journal of International Law 231

Wunder S, 'The Efficiency of Payments for Environmental Services in Tropical Conservation' (2007) 21 Conservation Biology 48
 <<http://doi.wiley.com/10.1111/j.1523-1739.2006.00559.x>> accessed 24 January 2014

——, *Pagamentos Por Serviços Ambientais: Perspectivas Para a Amazônia Legal* (2nd edn, Ministério do Meio Ambiente 2009)

Acre, Lei Estadual N. 2308, de 22 de Outubro de 2010 (Unofficial English Translation) 2010 [2308/2010]

California, Code of Regulations 2013

Norwegian Ministry of Foreign Affairs and Banco Nacional de Desenvolvimento Econômico e Social - BNDES, Donation Agreement 2009

UN, Charter of the United Nations 1945

UNCTAD, International Tropical Timber Agreement, 1983 1983 [TD/TIMBER/11/Rev.1]

——, International Tropical Timber Agreement, 1994 1994 [TD/TIMBER.2/16]

——, International Tropical Timber Agreement, 2006 2006 [TD/TIMBER.3/12]

UNESCO, Convention Concerning the Protection of the World Cultural and Natural Heritage 1972

UNFCCC, United Nations Framework Convention on Climate Change 1992

——, Kyoto Protocol to the United Nations Framework Convention on Climate Change 1997

——, Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action 2011 [Decision 1/CP.17]

——, Agreed Outcome pursuant to the Bali Action Plan 2012 [Decision 1/CP.18]

——, The Timing and the Frequency of Presentations of the Summary of Information on How All the Safeguards Referred to in Decision 1/CP.16, Appendix I, Are Being Addressed and Respected 2013 [Decision 12/CP.19]

Ernesto Roessing Neto
CONFERENCE PAPER - WORK IN PROGRESS
DO NOT CITE OR CIRCULATE WITHOUT AUTHOR'S PERMISSION

UN General Assembly, Resolution Adopted by the General Assembly. 56/83.
Responsibility of States for Internationally Wrongful Acts 2001 [Resolution 56/83]

VCLT, Vienna Convention on the Law of the Treaties 1969

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