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Tropical Forests, Climate Change and Neoliberal Environmental Governmentality

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Abstract: This chapter analyses tropical forests as objects of neoliberal environmental governmentality regimes which combine a range of discourses, rationalities and techniques and legal regimes with the aim of conserving them as sources of livelihoods and carbon sinks by treating them as sources of profit best managed by market forces. The chapter discusses the discourses of green governmentality and ecological modernisation and the degree to which technology enables forests to be surveilled, monitored and measured and their inhabitants subjected to market discipline under REDD+ regime. It examines indigenous rights and the unexpected inclusion of REDD+ as a standalone article in the Paris Agreement. A discussion of the vexed relationship between international environmental law and neoliberal environmental governmentality is discussed provides the basis for the conclusion that conflicting principles and inadequate enforcement mechanisms limit the efficacy of international environmental law and suggest that effective forest governance which safeguards the interests of forest dwellers ultimately depends as much on political will as legal regulation.

Introduction

Forests cover roughly a third of the Earth's land surface and are home to as much as ninety per cent of land-based animal and plant life. They provide food, shelter, fuel and livelihoods to 1.6 billion people. In addition to functioning as sinks through their ability to sequester carbon, they regulate climate and water cycles and prevent soil erosion. As much as 65 per cent of the Earth's land is owned, managed or occupied by the world's 370 million indigenous peoples, most of whom are directly dependent on forests and other ecosystems for survival (RRI, 2015). The UN Food and Agriculture Organisation estimates that there was a net loss of 88 million hectares (9 per cent of the total forest area) in Latin America between 1990 and 2010 and 75 million hectares (10 per cent) in Africa. It is estimated that forests store 652 Gigatonnes of CO₂, about half in biomass (FAO 2010, 2012). Trees absorb between a quarter and a third of total carbon dioxide emissions (Reich, 2011). The main drivers of deforestation include legal and illegal logging, and forest clearance for cash crops and biofuels (IFF, 2000). In Philippe Sands's view, "the destruction of tropical rainforests is probably the most dramatic and best known example of a national resource . . . becoming an international problem" (Sands 2003: xiv). For this reason, forests have become objects of governmentality under the United Nations Reducing Emissions from Deforestation and Forest Degradation (REDD+) framework which seeks to enable forests to be simultaneously exploited and conserved.

To have a 50 per cent chance of preventing dangerous anthropogenic climate change, the fifth Intergovernmental Panel on Climate Change (IPCC) assessment report concludes that CO_{2e} emissions should not exceed 1210 gigatonnes of carbon (IPCC

2013: 27). The management of natural systems through land use, land use change, and forestry (LULUCF) activities are responsible for about 15–25 per cent of total anthropogenic greenhouse gas (GHG) emissions (Vermeulen et al., 2012). Tropical deforestation emits 0.8-0.9 Gigatonnes of carbon (GtC) annually, which equates to 8 per cent of global carbon emissions. Tropical forest degradation accounts for a further 0.6–1.5 GtC per annum, equating to 10-14 per cent of global carbon emissions (TPCISU 2015: 4). Deforestation contributes more to global emissions than all forms of transport or the combined GHG emissions of the world’s two biggest emitters, China and the United States (Van Der Werf et al., 2009).

Tropical forests are objects of neoliberal environmental governmentality regimes which combine a range of discourses, rationalities and techniques and legal regimes with the aim of conserving them as sources of livelihoods and carbon sinks by treating them as sources of profit best managed by market forces.¹ Neoliberal environmental governmentality is discussed in section 1, in which I discuss the two main discourses in the literature, green governmentality and ecological modernisation. Technological developments enable forests to be surveilled, monitored and measured and their inhabitants subjected to market discipline under REDD+ regime discussed in section 2. In section 4 I examine indigenous rights and the unexpected acquiescence of developed countries to the inclusion of REDD+ as a standalone article in the Paris Agreement. Section 4 analyses the vexed relationship between international

¹ Neoliberal environmental governmentality includes environmental governance includes climate governance. See Stripple and Bulkeley, 2014.

environmental law and neoliberal environmental governmentality. Conflicting principles and inadequate enforcement mechanisms limit the efficacy of international environmental law and suggest that effective forest governance that safeguards the interests of forest dwellers ultimately depends as much on political will as regulation.

I. Neoliberal Environmental Governmentality

Michel Foucault coined the neologism governmentality as shorthand for mentalities and techniques of governance that link knowledge and power to governmental rationality. Foucault analysed the ways by which neoliberal governmentality becomes pervasive but warned that neoliberalism should “not be identified with *laissez-faire*, but rather with permanent vigilance, activity and intervention” (Foucault 2008: 132). ‘Free’ markets require extensive state regulation best achieved through “a minimum of economic interventionism, and maximum legal interventionism” (Foucault 2008: 167). Foucault understood measurement, surveillance and monitoring are crucial mechanisms of disciplinary and biopower.

Ecogovernmentality emerged in the 1990s as a term covering theories that apply Foucault’s concepts of biopower and governmentality to the regulation of relations between human beings and the environment. They include ecological rationalities and technologies of government (Malette, 2009) and address, *inter alia*, (i) the production of expert knowledge about the environment, (ii) the construction of particular conceptions

of the environment as an object and environmental subjects, (iii) management of the environment through the globalisation of discourses of knowledge/power by individuals human and institutions, and (iv) the role of ideologies such as neoliberalism. Theories of ecogovernmentality link localised environmental management to national, regional, international and global mechanisms and structures of governance.

Maria Lemos and Arun Agarwal (2006: 299) argue that four trends - globalisation, decentralised environmental governance, market- and individual-focused instruments, and governance across scales have significantly shaped environmental governance. These trends are components of what I term neoliberal environmental governmentality. They are multi-scalar, predominantly techno-scientific discursive regimes of disciplinary and biopower in which power/knowledge is produced and wielded by changing combinations of actors in which states, international environmental institutions, the international financial institutions and transnational capital predominate but local regional and international non-state actors are also important. Since the 1980s, the most influential discourses of ecogovernmentality has been green governmentality and ecological modernisation.

The emergence of climate change, arguably the biggest ecological threat facing humanity, led Angela Oels (2005) and Karin Bäckstrand and Eva Lövbrand (2006) to discern the emergence of a discursive shift in the 1990s signalled by the adoption of the

Kyoto Protocol from biopower to advanced liberal government.² My own reading suggests a gradual transformation reflected the accommodation between the expanding power of markets and transnational capital on the one hand and the changing biopolitical role of security (and developmental) states as agents of and bulwarks against neoliberal globalization. States remain significant for three main reasons. First, they make and implement environmental policies, manage ecosystems and play a direct and fundamental role in producing and disciplining environmental subjects. Second, the power of sovereign states may have diminished in relation to transnational capital since the ascent of neoliberalism in the 1980s, not least due to the complicity of states themselves,³ but states continue to play a fundamental role in institutions of global environmental governance, even though their combined efforts too often lead to unsustainable outcomes. Third, states provide the economic, legal, political and social infrastructure required for environmental governmentality at all levels: sub-national, national, regional and international.

The codependence of states and transnational capital results in hybrid forms of neoliberal environmental governmentality. Oels (2005: 32) discerns a reconfiguration of biopower in more overtly economic terms, and Bäckstrand and Lövbrand (2006) describe the ways in which the dominant discourses of ecogovernmentality - green

² 'Advanced liberal government introduces the market as organizing principle for all types of social organization including the state. Advanced liberal government employs market forces to guarantee freedom from excessive state intervention and bureaucracy' (Oels 2005: 191). Others trace the discursive shift to the 1987 World Conference on Environment and Development.

³ Deregulated markets, permissive tax regimes, widespread corruption, austerity, extractivism and the continued use of fossil fuels are not inevitabilities but political choices.

governmentality and ecological modernisation – are increasingly combined in climate governance. The “transition from biopower to advanced liberal government in the field of climate policy must be understood in the context of the global rise of neoliberalism in the late 1970s and 1980s” (Oels 2005: 198).⁴

Timothy Luke (1996) introduced the concept of green governmentality to describe the power/knowledge nexus that emerges when the biosphere becomes the “ultimate domain of being” (Luke 1999: 150) and “a site of power, where truths are made, circulated, and remade” (Rutherford 2011: xvii), and an object of governance, requiring states to extend control beyond their territorial boundaries to ensure the security their populations (Luke 1999; 134).⁵ This occurred as evidence emerged of the limits and contradictions of economic growth and the rapidity with we are breaching planetary boundaries (Foster, Clark and York, 2010; Rockström et al. 2009). Green governmentality is a form of biopower that reinforces “the power of the administrative state in the name of responsible stewardship of nature” (Luke 1999: 129) and legitimises expanded governmental intervention.⁶ This leads to the “environmentalization” of the production of knowledge/power, the emergence of new forms of environmental knowledge and ecogovernmentality that prioritise ecology and

⁴ Hajer (1997) discusses the continuities between green governmentality and ecological modernisation.

⁵ Biopolitics emerged in the eighteenth century when life itself became the object of politics and the ancient sovereign “right to take life or let live was replaced by a power to foster life or disallow it to the point of death” (Foucault 1978:138). In Foucault’s view, biopolitical techniques increase, protect and regulate life because power is productive and positive. The central contradiction of neoliberal environmental and climate governance is that it too often lets die.

⁶ Disciplinary power transmogrifies into disciplinary neoliberalism through the multiple mechanisms and institutions by which capital disciplines states and non-state actors, primarily but not exclusively market mechanisms. States and the international economic institutions, amongst others, also play important roles alongside markets. See Gill (1995).

sustainability, and the reconfiguration of disciplinary power as “enviro-discipline” combining “the authority of eco-knowledgeable, geo-powered forces to police the fitness of all biological organisms and the health of their natural environments” (Luke 1999: 146). Eco-science and environmental law produce the knowledge and personnel needed to render environment measurable, manageable for the expansion of capital. Governmentality is extended into every part of the biosphere through “an elitist and totalizing discourse that effectively marginalizes alternative understandings of the natural world” (Bäckstrand and Lövbrand 2006: 55).⁷ Climate change is framed as a techno-scientific problem and prominent roles are given to multilateral institutions like the UN Framework Convention on Climate Change (UNFCCC)⁸ and IPCC, and increasingly as a security threat.

Geopower defines ecological problems as transnational security threats that require global interventions. Eco-knowledge emerges in discourses such as sustainable development which are designed to manage but not eliminate the underlying problem of unconstrained extractivist economic growth. Enviro-disciplines normalise individual behaviour through the production of environmentally friendly market actors.

Environmental technoscience makes possible the monitoring and surveillance of large populations and territories as environments become “spaces under police supervision, expert management or technocratic control” (Luke 1999: 149).

⁷ There is a substantial and rapidly increasing literature on global environmental constitutionalism that focuses primarily on the right to a safe and healthy environment. See for example Daly and May, 2015, Kotzé, (2016) and Bosselmann, (2016).

⁸ Adopted 9 May 1992 and came into force on 21 March 1994. 1771 UNTS 107 / [1994] ATS 2 / 31 ILM 849 (1992).

Ecological modernisation in its dominant weak form combines elements of biopower and liberalism and what Oels refers to as advanced liberal government. It evangelises the role of free markets and technological innovation as the most cost-efficient solutions to negative environmental externalities and collective action problems such as climate change.⁹ Small states and limited government are policy goals of Austrian market fundamentalism. Liberalisation, privatisation, deregulation at a time when strong state action is required to save people and the planet from anthropogenic warming.¹⁰ Ecological modernisation views the environmental crises as opportunities to modernise and reinvent capitalism. Building on the anthropocentric dualisms that characterise Western modernity, it reconceptualises nature as a public (but not necessarily common) good susceptible to control through a combination of techno-scientific management and economic incentives.

Sustainable development is the common denominator in these discourses. It is a widely accepted principle of international environmental law routinely incorporated into declarations, treaties and other instruments, and national, regional and international policy documents including the UNFCCC, the 2030 Agenda on Sustainable Development and the REDD+ framework.¹¹ The concept initially emerged at the World

⁹ Strong ecological modernisation demands broad public participation in environmental decision making and is more critical of the reformist capacity of political, economic and social institutions (Oels 2005: 196).

¹⁰ 'Good' governance, the rule of law, free trade, protection of private property and security of contract take precedence over environmental issues.

¹¹ *Transforming Our World: The 2030 Agenda for Sustainable Development* UNGA A/RES/70/71, 25 September 2015.

Conference on Environment and Development in 1987 following publication of the report of the Brundtland Commission, which conceived development as a process that meets “the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987: 43). The Brundtland report exemplified ecological modernisation through “market based solutions, good governance, flexibility and cost efficiency” (Holmgren 2013: 370). Bäckstrand and Lövbrand (2006: 53) argue that its distinctive feature “is the compatibility of economic growth and environmental protection, a liberal market order and sustainable development” in contrast to the focus of green governmentality on centralised multilateral regimes such as the UNFCCC (Holmgren 2013: 370). It is a discourse of global power “tied to the modern administrative state, mega-science and big business. It entails the administration of life itself - individuals, populations and the natural environment” (Bäckstrand and Lövbrand 2006: 54).

Sustainable development gained widespread acceptance at the 1992 Earth Summit in Rio de Janeiro as a development paradigm which combines economic growth with environmental protection, and meets the (intra-generational) needs of the current generation – primarily through poverty alleviation – and safeguards the (inter-generational) needs of future generations. Evading precise definition, it is sufficiently capacious to permit a wide range of interpretations and sufficiently malleable to actors as disparate as states, transnational corporations, the international financial institutions and civil society organisations to embrace it. Its vagueness is regarded by some as a strength but it is more vulnerable to the criticism that it fosters delusions such as

endless economic growth on a finite planet (Robinson, 2004). Wolfgang Sachs (1999) accurately described it as an oxymoron. Sustainable development becomes dangerous when it turns into an ideology that insidiously promotes the illusion that capitalism is compatible with sustainability. It is a leitmotif in the final document of the 2012 Rio+20 conference on sustainable development, where it was reincarnated as “green economy in the context of sustainable development and poverty reduction,”¹² the Paris Agreement and Sustainable Development Goals.¹³

Climate change is framed primarily as an economic problem susceptible to governance through market mechanisms and technological solutions but states are still important not only because they facilitate markets and operate alongside non-state actors to induce behaviour that conforms with market rationality (Paterson and Stripple, 2010).¹⁴ The Stern review describes climate change as “the greatest market failure in history.”¹⁵

Climate change in a regime of biopower is produced by experts
as an issue requiring global management, thereby making

¹² The Rio+ 20 final document contains numerous exhortations for the sustainable management of forests, conservation, reforestation and forest restoration but but no binding commitments. *The Future We Want*, General Assembly Resolution A/RES/66/288 (27 July 2012). It promotes trade in legally harvested forest products. See Adelman (2013 and 2015a) for extended critiques of green economy and sustainable development.

¹³ UNFCCC, Paris Agreement, 12 December 2015, FCCC/CP/2015/L.9/Rev.1. *Transforming Our World: The 2030 Agenda for Sustainable Development* CITATION.

¹⁴ “[G]overnmentality and sovereignty are not mutually exclusive but that the latter embeds the former so that power is exercised in an advanced liberal way [A] Foucauldian perspective does not postulate a transfer of power from state to non-state actors, but that the state (as well as other actors) governs at a distance” (Methmann 2013: 79, 85).

¹⁵ Stern (2007: 1). If markets were capable of dealing with climate change, we might expect them to have done so by now. The Stern review concluded that all countries will be affected by climate change, but developing countries will suffer earliest and most. It argued that the interests of future generations should be protected and advocated early investment in adaptation and mitigation. The review’s conclusions are controversial but it is reference point for all research on the economics of climate change.

government interventions look inevitable. Climate change as framed by biopower creates the basis for justifying far-ranging policy interventions and even the extension of state power in the name of 'survival' of life on planet Earth. Advanced liberal government, on the other hand, renders climate change governable as an issue of state failure requiring market-based solutions or the creation of markets. The extent to which action is to be taken on climate change is not a moral issue but instead a matter of cost-benefit analysis. (Oels, 2005: 201).

By the time of the Rio+20 summit in 2012, it was taken for granted that markets could protect the environment and reduce GHG emissions through sustainable development in the context of poverty reduction and green economy, an orthodoxy further entrenched by the inclusion of REDD+ in Article 5 of the Paris Agreement.

II. REDD+, Forest Governance and Neoliberal Environmental Governmentality

The REDD mechanism for reducing emissions from deforestation and forest degradation has been under negotiation in the UNFCCC since 2005 (Lyster, 2013). Forest degradation was included in the Bali Road Map at the thirteenth Conference of the Parties (COP) in 2007, which framed deforestation primarily as a problem of climate

governance.¹⁶ The Warsaw Framework on REDD+ was adopted at COP 19 in December 2013 with the aim of “reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries.”¹⁷ The plus element of REDD+ goes beyond reducing deforestation and forest degradation and includes conservation, sustainable management of forests, reforestation, and sequestration of GHGs. REDD+ is based on results-based finance from the Green Climate Fund which is forthcoming if host countries comply with a range of measurement reporting and verification (MRV) mechanisms such as collecting information on the drivers of deforestation, national forest monitoring methods, and providing information on safeguarding the rights of forest dwellers.¹⁸

In its final form, REDD+ will comprise a complex array of institutions and technologies designed to bring forests under a marketised regime of carbon governmentality in which deforestation results from a misallocation of capital or the absence of adequate financial incentives. Forests are sites of ecosystem services and natural capital that have been incorrectly valued and must therefore be priced to reflect the carbon stored in them and enable compensation to be paid to those who forego the right to cut them down. REDD+ turns forests into fungible, tradable carbon storage services by extending property rights

¹⁶ See Sands (2003: 545-551) and Boyd (2010a: 863-67) for a history of previous attempts to address deforestation under international environmental law prior to REDD.

¹⁷ UNFCCC, Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013 FCCC/CP/2013/10/Add.1 (31 January 2014).

¹⁸ The Green Climate Fund is the financial mechanism of the UNFCCC and Paris Agreement. It was established to provide funds to developing countries for adaptation and mitigation. became operational in 2011. It aims to mobilise US \$100 billion annually. At the time of writing, developed countries had contributed \$10 billion.

over carbon and clarifying laws of tenure (Doherty and Schroeder, 2011). According to the UN Environment Programme, “unless people have clear rights over a resource, they will lack the incentive to manage it well” (UNEP 2011: 564-65).

Forests have traditionally been governed at local or national levels but became objects of global environmental governmentality as soon as their importance in carbon sequestration, offsetting and trading was understood. REDD+ is the foremost example of a biopolitical regime that combines MRV mechanisms and resources derived from state contributions and market incentives as it becomes more deeply embedded in carbon markets in future.

Forests are “a fundamental part of the earth’s ecological infrastructure and forest goods and services are important components of a green economy” (UNEP 2011a: 156).

Consistent with this discourse, a multilevel system of payments for environmental services is being constructed locally, nationally and globally.¹⁹ “Many REDD+ projects plan to sell credits into voluntary carbon markets, and subject to international agreement, to global and regional compliance markets” (Boer 2013: 124). It is unlikely that forest carbon offsets will be included in the EU’s Emission Trading Scheme before 2020 but REDD+-generated credits are being sold in voluntary carbon markets and this may increase following the Paris Agreement. Like other mechanisms in the UNFCCC

¹⁹ FERN, Friends of the Earth, Greenpeace and Rainforest Foundation UK. 2011. *REDD+ and carbon markets: Ten Myths Exploded*, p. 3 <<http://www.fern.org/10myths>> (accessed 25 March 2014).

designed reduce emissions such as the Kyoto Protocol, the integration of REDD+ into carbon markets may prove to be of limited efficacy by enabling companies with compliance obligations to buy credits generated from projects in the global South to offset rather than reduce their GHG emissions. Joanna Cabello and Tamra Gilbertson (2012: 167) warn that “[a]lthough not yet explicitly connected to UN-backed carbon markets, even those REDD+ initiatives currently being supported by public money are generally designed to help jump-start forest carbon markets.”

REDD+ is predicated upon the assumption that forests “suffer from multiple market failures in that neither the benefits that they produce nor the costs of their destruction are visible in economic terms” (UNEP 2011a: 8). The remedy for such failures is intensified marketisation since, as Andrew Jamison (2001: 96) tartly remarks, “capitalism has failed to deal adequately with environmental problems, because it has not been capitalist enough.”

To its proponents, REDD+ combines cost efficiency, effective mitigation and sustainable development while protecting biodiversity and the rights and livelihoods of indigenous forest dwellers. It is a win-win framework that enables developing countries to be rewarded for reducing deforestation and emissions with financing and investment from industrialised countries who are able to offset their own emissions without reducing them (Stephan, Rothe and Methmann, 2014). There are fears that REDD+ may be undermined by corruption, land grabbing, insecure land tenure rights, measurement,

reporting and verification (MRV) fraud, evaluation and reporting, elite capture of REDD+ revenues, and leakage (Adelman, 2015a).

REDD+ is a form of green governmentality that highlights “the ways in which business activity is both a response to, as well as constitutive of, environmental governance at the global level” (Levy and Newell, 2005: 2). In the logic of green capitalism, the optimal way of managing forests is through the abstract efficiency maximising, profit seeking *homo economicus* on whom neoclassical economics is constructed. And, consistent with neoliberal rationality, forests must be measured and quantified as units of carbon sequestration so that they can be priced and monitored, commodified and monetised.²⁰ This make it possible for results-based payments to be made contingent upon the ability of forest dwellers to demonstrate secure rights of access or tenure and regulatory regimes in which forests are effectively treated as private property even though, or especially when, such regimes clash with customary, collective, commons-based forms of governance. Lee Godden and Maureen Tehan (2016: 104) note that “The term ‘tenure’ typically indicates a formalisation of rights in a state-based system – a situation that may not exist for many groups, even though the rights may be strongly grounded in the indigenous or local community ‘laws’”. They argue that “confusion around the interplay of tenure and ‘customary’ law has led to an overemphasis on ‘formalisation’ of current ‘tenure’ as the basis for REDD+ safeguards around indigenous and customary rights” (Godden and Tehan 2016: 86). Neoliberal environmental governmentality leads

²⁰ This is why neoliberalism consistently results in target-driven, instrumentalist managerialist cultures concerned with the price of everything and the value of nothing.

to unintended consequences even when conservation and the protection of indigenous rights are its primary aims because the trajectory of governance ultimately depends on whether forests are treated primarily as sources of use or exchange value. Tensions are inevitable when long-established communal forms of governance come into conflict with the REDD+ programme's need to construct new active, responsible and accountable biopolitical environmental subjects (Agarwal, 2005) spurred to forest conservation as they became imbued with market logic – self-regulating market actors and forest managers to whom discipline appears more as choice than compulsion, neoliberal environmental subjects. Biopolitics governs populations through the imposition of certain types of freedom (Miller and Rose, 2008).

Benjamin Stephan describes the emergence of new subjects like the carbon forester, who combines forestry skills, carbon accounting expertise, and knowledge of biochemistry and remote sensing technologies (Stephan, 2013). Ambrose-Oji et al. (2002: 159) discuss the ways in which the encouragement of communal forest management and “conservation-through-participation” disguise the surveillance, disciplining and control of forest dwellers for *raisons d'état* and the interests of market actors.²¹ Surveillance and measurement technologies such as remote sensing by satellite make it possible to collect data on deforestation, land use, and land-use change and underpin MRV systems essential to forest governance (Boyd, 2010; Stephan, 2012). They are core components of national mitigation programmes and the operation

²¹ Death (2014) warns against an over-hasty assumption that governmentality is easily transposed from the local to the global and against conflating it with neoliberalism.

of carbon markets and facilitate expanded monitoring and surveillance of forested lands beyond the jurisdiction and control of states that “permits bureaucracies to pursue regulatory enforcement and judicial approaches to controlling illegal land-use and forest loss” (Boer 2013: 133).

III. REDD+, Indigenous Rights and the Paris Agreement²²

REDD+ is based upon models of extractive development and environmental governance historically antagonistic to the interests of indigenous and poor peoples in the global South. Jesse Ribot and Anne Larson (2012: 248) argue that if it “is to challenge business as usual and to benefit local populations, safeguard policies must not just protect rights, but must also establish, strengthen, and secure rights.” The 2009 Indigenous Peoples’ Global Summit on Climate Change demanded that REDD initiatives:

must secure the recognition and implementation of the human rights of Indigenous Peoples, including security of land tenure, ownership, recognition of land title according to traditional ways, uses and customary laws and the multiple

²² For a brief history of REDD+ Godden and Tehan (2016) and Adelman (2015a).

benefits of forests for climate, ecosystems, and Peoples before taking any action.²³

Appendix I to the Cancún Agreements signed at COP 16 outlines the safeguards that should be “promoted and supported” in REDD+ activities; including “respect for the knowledge and rights of indigenous peoples and members of local communities”.²⁴ Parties to the UNFCCC have agreed seven safeguards that do not define acceptable and unacceptable performance but merely require improvements beyond a minimum threshold (Client Earth, 2013: 18). The safeguards include transparent and effective national forest governance structures consistent with national legislation and sovereignty; respect for the knowledge and rights of indigenous peoples and members of local communities taking into account United Nations Declaration on the Rights of Indigenous Peoples; full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities; and actions consistent with the conservation of natural forest and biological diversity to address the risks of reversals and to reduce displacement of emissions. Indigenous communities are not convinced that their rights and cultural ties to forests can be adequately recognised and protected under REDD+.²⁵

²³ Anchorage Declaration, Report Indigenous Peoples’ Global Summit on Climate Change, Anchorage Alaska, 24 April 2009 <unfccc.int/resource/docs/2009/smsn/ngo/168.pdf> accessed 4 February 2016 and the Margarita Declaration on Climate Change <<http://www.redd-monitor.org/2014/08/08/the-margarita-declaration-on-climate-change-we-reject-the-implementation-of-false-solutions-to-climate-change-such-as-carbon-markets-and-other-forms-of-privatization-and-commodification-of-life/>> accessed 4 February 2016.

²⁴ The United Nations Cancún Agreements, 10 December 2010, FCCC/CP/2010/7/Add.1, Decision 1/CP.16, Appendix 1, para. 2. On indigenous knowledges, see Adelman, 2015.

²⁵ Margarita Declaration on Climate Change <<http://www.redd-monitor.org/2014/08/08/the-margarita-declaration-on-climate-change-we-reject-the-implementation-of-false-solutions-to-climate-change-such-as-carbon-markets-and-other-forms-of-privatization-and-commodification-of-life/>> accessed 24 July 2016.

The Indigenous Environment Network describes it as a neo-colonial regime designed to co-opt traditional forest communities into neoliberal schemes that benefit others (Indigenous Forest Network, 2009).

Article 5 in the Paris Agreement states that Parties should take action to conserve and enhance the sinks and reservoirs of greenhouse gases referred to in Article 4.1(d) of the UNFCCC and calls for “adequate, predictable and sustainable financial resources” and incentivises efforts to reduce deforestation through a results-based approach.

Paragraph 55 of the Paris Decision recognises “the importance of adequate and predictable financial resources, including for results-based payments . . . and positive incentives for reducing emissions from deforestation and forest degradation.”²⁶

Although most countries were in favour of including explicit references to indigenous rights in the agreement there was robust disagreement about whether they should be confined to the preamble.²⁷ Article 5 does not explicitly safeguard the rights of

²⁶ The provision of adequate resources for adaptation and mitigation has been a bone of contention throughout the history of the UNFCCC. The Coalition for Rainforest Nations demanded secure financing for REDD+ and developing countries have consistently argued that developed countries have an historical responsibility to provide adequate resources for adaptation, mitigation and climate-related loss and damage. See Adelman, (2016).

²⁷ Canada, the Philippines, Mexico and the members of the Independent Association of Latin America and the Caribbean strongly in favour but other countries - most notably Brazil, a longstanding opponent of the inclusion of REDD+ in any treaty - objected to any reference to the REDD regime on the basis that all previous decisions, including the methodological framework and the safeguards information system are already contained in the Warsaw Framework for REDD+. The main concern of opponents was that including indigenous rights in the operative part of the Agreement might create legal liabilities in domestic and regional tribunals. Bergen, Molly ‘Experts: Paris Agreement falls short on indigenous rights’, *humanature*, 17 December 2015 <<http://blog.conservation.org/2015/12/expert-paris-agreement-falls-short-on-indigenous-rights/>> accessed 5 February 2016.

indigenous forest dwellers but it has been argued that the related guidance and decisions in the article refer to “critically important REDD+ safeguards . . . designed to protect natural forests and their biodiversity as well as the rights of indigenous peoples and local communities. Most importantly, it includes a system to report on how those safeguards are addressed and respected.”²⁸ Victoria Tauli-Corpuz, the UN Special Rapporteur on the Rights of Indigenous Peoples, argues that the Paris Agreement does not adequately protect indigenous peoples’ rights, is likely to fuel destruction of forests and other ecosystems managed by indigenous peoples and lead to social conflict that will exact tremendous economic harm because “our forests are our homes, our lives, our culture, and the heart of our spirituality.”²⁹

The inclusion of REDD+ in a standalone article was widely welcomed, but concern has been expressed that the Paris Agreement is tantamount to a trade agreement likely to “privatize, commodify and sell forested lands as carbon offsets in fraudulent schemes such as REDD+ projects. These offset schemes provide a financial laundering mechanism for developed countries to launder their carbon pollution on the backs of the global South.”³⁰

²⁸ Forests Embraced for First Time in Climate Negotiations, December 14, 2015 <<http://reddplussafeguards.com/climate-change-land-use/redd-safeguards-working-group/>> accessed 4 February 2016.

²⁹ Removing Rights for Indigenous Peoples Places Forests, Climate Plan at Risk. Statement from Paris, COP21 <<http://unsr.vtaulicorpuz.org/site/index.php/en/statements/106-statement-cop21>> accessed 1 February 2016.

³⁰ Human rights attorney and Indigenous Environmental Network counsel Alberto Saldamando <<http://indigenusrising.org/indigenous-peoples-take-lead-at-d12-day-of-action-in-paris-official-response-to-cop21-agreement/>> accessed 24 January 2016.

IV. Neoliberal Environmental Governmentality and International Environmental Law

International environmental law is a discourse of neoliberal environmental governmentality distinct from green governmentality and ecological modernisation but equally concerned with environmental protection and sustainability. It is compatible with green governmentality because it is designed to manage the environment, including territory under sovereign jurisdiction, as property and differs from ecological modernisation because it perpetuates a sovereign-centric, hierarchical vision of ecogovernmentality. As Joseph Camilleri and Jim Falk (1992: 192) argue that the Westphalian system is poorly equipped to embody ecological principles and address environmental challenges because “[i]ts approach to the ecological dilemma is confounded by its institutional interests, instrumental role and domain of authority, which are at odds with ecological principles and global ethos required for planetary management.” Climate change is fundamentally a transboundary problem, but state sovereignty is incompatible with problems that require collaborative cosmopolitan solutions (Adelman, 2011). Henry Shue (2014: 150) argues in favour of binding limits on the right of states to pursue domestic economic goals through measures akin to the *jus cogens* prohibition against torture regardless of their willingness to accept such constraints.

The disciplinary power of transnational capital often seems to be greater than that of international environmental law because the latter is riven by contradictory and largely unenforceable principles such as sustainable development. International environmental law is, however, singularly effective in hindering the emergence of alternatives to private property and sovereignty such as commons (Capra and Mattei, 2015).

Sands (2003) identifies seven principles of international environmental law including sovereignty over natural resources accompanied by the responsibility not to cause transboundary environmental damage; preventive action; the principle of co-operation; sustainable development; the precautionary principle; the polluter-pays principle; and common but differentiated responsibility. No principle has precedence because there is no clear hierarchy so that “the absence of judicial authority and in view of the conflicting interpretations under state practice, it is frequently difficult to establish the parameters or the precise international legal status of each general principle or rule” (Sands 2003: 231). As Bosselmann (2010: 2424) wryly observes, “environmental laws and policies have saved some ‘trees’, but the ‘forest’ is being lost as critical global issues including climate change, biodiversity loss, and our ecological footprint continue to worsen.”

The presence of conflicting principles is common in documents such as the UNFCCC, which notes the sovereign right of states to exploit their natural resources and their duty to ensure that activities within their jurisdiction or control do not damage the

environment of other countries in the preamble.³¹ The principle of permanent sovereignty over natural resources originated in the 1950s as a manifestation of the right to self-determination. Developing countries were concerned that transnational corporations were the main beneficiaries of the natural resources they regarded as their national patrimony (Schrijver, 1997). In 1966, the UN General Assembly recognised “the inalienable right of all countries to exercise permanent sovereignty over their natural resources in the interest of their national development.”³²

There is a sovereign prerogative to exploit forests as natural resources but soil degradation and erosion, species extinction, and the destruction of natural habitats and carbon sinks appear to contravene the injunction to do no harm and the requirement for states to co-operate to protect the environment. As David Takacs observes, “Once intact forests are deemed essential to mitigating GHG buildup, they inch closer to an international resource that states no longer control” (Takacs 2013: 704). Mechanisms like REDD+ are effectively “debates over sovereignty, whether or not they’re framed in those terms” (Takacs 2013: 700).

Natural resources can be designated as the common heritage of humankind under international environmental law and obligations imposed on states to protect common

³¹ Principle 21 of the Stockholm Declaration (slightly modified by Principle 2 of the Rio Earth Summit Declaration) is similarly phrased. Sands (2003: 236) regards this principle as “the cornerstone of international environmental law.” In contrast, French (2001: 381) views the Stockholm Declaration’s no harm rule as the “most fundamental rule of modern international environmental law.”

³² G.A. Res. 2158 (XXI), UN GAOR, Twenty-First Session (1966).

resources under their territorial jurisdiction. Examples of global commons to which all states have access include Antarctica, the high seas, the atmosphere and space. Ann Hooker (1994) and Dan Tarlock (1997) argue that the function of forests in mitigating climate change dictates that they be governed as global commons, but the principle is not universally accepted and belied by state practice. The incompatibility of these principles leads Nico Schrijver to suggest that the heritage of mankind regime can only start at the point at which the permanent sovereignty principle ends (Schrijver 1997: 229). Developing countries are concerned that calls to treat forests as the common heritage of humanity, as global commons or regulating them under an international climate regime “will increase pressure for a *de facto* internationalisation of tropical forests given their role in the global carbon cycle and their importance to climate protection efforts” (Boyd 2010a: 880, fn. 144)³³ In Boyd’s view, attempts since the early 1990s to construct “a comprehensive international legal instrument on forests have foundered on the fundamental conflict between the conception of tropical forests as the ‘common heritage of mankind’ and forests as sovereign national resources” (Boyd 2010a: 865). Framing deforestation as a problem of climate governance will not succeed because:

deforestation is not a unitary phenomenon amenable to easy generalization, much less global governance. Previous ways of seeing the problem . . . have not

³³ Sands (2003: 546-47) argues that “Attempts by developed countries to ‘internationalise’ forest issues have so far been unsuccessful in legal terms, and the tropical forest resources of developing countries are carefully guarded as part of the national patrimony of these countries”. Mgbeoji (2003: 828) views the notion of common heritage as “a barely disguised ideological tool in the politics of and struggle for control of plant genetic resources across the globe.”

provided a sufficient foundation for effective governance, raising the important question of whether a climate policy approach to deforestation (a very different way of seeing the problem) will succeed where past efforts have failed. (Boyd 2010a: 866).

Paradoxically, “[S]overeignty over natural resources is not “permanent” - or even temporary - if forests degrade or disappear due to changing ecological conditions” (Takacs 2013: 710). Tarlock calls for a modified conception of sovereignty reflected in:

erga omnes duties to require more sustainable use of national territories such as tropical rainforests and wetland systems. The legal rationale is that the potential adverse global impacts of ecosystem modification may make them part of the common heritage of mankind or a matter of common concern or common interest. (Tarlock 2007: 587).

Scholtz (2008) argues in favour of a form of custodial sovereignty that respects the right of states to exploit their natural resources but also creates the expectation that these resources will be protected on behalf of humanity. Other states would be obliged to assist the custodian state to fulfil its obligations consistent with the principle of common but differentiated responsibilities and respective capacities.³⁴

³⁴ Glennon (1990) makes a similar argument.

International environmental law is increasingly characterised by *à la carte* voluntarism of which the Paris Agreement is the latest conspicuous example, and inadequate enforcement.³⁵ Humphreys (2006: 215) argues that states are now takers as much as makers of standards in governance regimes increasingly characterised by market rationalities and “voluntary alternatives to state regulation and intergovernmental regimes” (Humphreys 2006: 223).

Conclusion

Since the IPCC issued its first assessment report in 1990, the rule of markets has trumped the rule of law, growth fetishism has trumped environmental protection, and profit has trumped people’s rights. Deforestation has continued apace, greenhouse gases have not been reduced, and three planetary environmental boundaries have been transgressed - biodiversity loss, climate change, and the nitrogen cycle - and a further six are under threat (Rockström et al. 2009). REDD+ combines biopower and green governmentality with market power and the rationality of ecological modernisation. Time will tell whether REDD+ is an adequate framework for reducing deforestation, emissions and biodiversity loss while protecting the livelihoods of those who depend on tropical forests to survive. Saving forests and the planets requires

³⁵ The Sustainable Development Goals are entirely voluntary, have no enforcement mechanisms and dubious status under international law.

resistance to neoliberal environmental governmentality rather than the production of subjects compatible with the sustainable development.

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