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Locating the subject of REDD+: Between "improving" and safeguarding forest inhabitants' conduct

REDD+ is a forest conservation and carbon trading scheme seeking to incentivise a reduction in emissions through payments. This article draws on Foucault's governmentality concept and Dean's analytics of government framework to analyse the REDD+ negotiations under the UNFCCC. It argues that negotiators perceived forest inhabitants as malleable subjects whose conduct can and *should* be "improved" through disciplinary techniques instantiated in forest monitoring practices. Forest inhabitants are not powerless or passive recipients of discipline, but these techniques foster a conduct that only values carbon at the expense of other ecological and cultural values and, further, encourage conservation purely based on cost-benefit reasoning. The article also interrogates the negotiations of safeguards meant to ensure that REDD+ does no social or ecological harm. It argues that the safeguards appear to allow forest inhabitants to decide on REDD+ implementation and governance, and protect their existing forest governance practices should they elect to do so. However, the safeguards are formulated in a voluntary manner, casting doubts on their ability to offer suitable protection. The article concludes by reflecting on the current demand for carbon credits from REDD+ projects and the implications this has for the disciplinary techniques and the conduct they foster.

Keywords: REDD+; UNFCCC; Indigenous Peoples; governmentality; analytics of government

Introduction

> My point is not that everything is bad, but that everything is dangerous, which is not exactly the same as bad. If everything is dangerous, then we always have something to do. So my position leads not to apathy but to a hyper- and pessimistic activism. (Foucault 1984, 343)

Global forest cover loss reached record levels in recent years, with an area the size of Bangladesh being deforested yearly in 2016 and 2017 (Harris et al. 2020; Weisse and Goldman 2018). Policy makers are experimenting with a range of different approaches to halt this rapid rate of deforestation. Reducing emissions from deforestation and forest degradation

(REDD+) is one such approach that was negotiated under the United Nations Framework Convention on Climate Change (UNFCCC) between 2007 and 2015, and is included in the Paris Agreement under Article 5 (UNFCCC 2015a). The basic principle of REDD+ is to pay for reductions in carbon emissions from tropical forests, which is achieved by halting the rate of deforestation and forest degradation. When first proposed, it was envisioned that REDD+ would form part of future carbon market arrangements as an offsetting mechanism. This would generate payments for forest conservation in exchange for carbon credits that countries could count towards their commitments under a future UNFCCC agreement. However, as of early-2021, the role of markets in the Paris Agreement is still to be settled, but this has not stopped REDD+ from growing considerably and it is estimated that there are 359 active REDD+ projects located in 57 countries (Simonet et al. 2018).

The growth of REDD+ has been accompanied by considerable academic scrutiny, with crucial issues documented. Some of these are technical and concern the cost, leakage, impermanence and uncertainty associated with monitoring carbon emissions from forests (Hjort 2015). Others are documented cases of land grabbing and conflicts (Corbera, Hunsberger, and Vaddhanaphuti 2017), violence (Howson 2018) and failure to deliver financial benefits to forest inhabitants (Milne et al. 2018). If this literature provides a critique of the scheme, this article delivers another form of critical evaluation in that it undertakes a Foucauldian governmentality analysis of the REDD+ negotiations with a particular focus on the subject of REDD+ governance: forest inhabitants. The aim is twofold. Firstly, the analysis considers how forest inhabitants are governed through the scheme with the objective, following Dean (2009, 3-4), to interrogate and question "what is taken as given, natural, necessary and neutral". Secondly, the analysis considers ultimately rejected alternative proposals for how to govern forest inhabitants, illustrating that rather than being natural and neutral, REDD+ governance is based on the subjugation of deviating ideas and practices.

Stephan (2013) has analysed REDD+ from a governmentality perspective, and explains that the scheme presupposes and promotes a particular type of subject. To govern necessitates an understanding of those that are the targets of governance and this might include ideas about their statuses, capacities and attributes (Dean 2009). REDD+ is deeply influenced by neo-classical economic theory. It draws on opportunity cost logics and postulates that forest inhabitants can be incentivised to reduce the pressure they exert on forests if they receive payments corresponding to the revenue they attain from activities that degrade forests. It is implicitly assumed that "everybody engaging in deforestation activities is a rational, utility-maximising actor – a *homo economicus*" (Stephan 2013, 123). If the necessary market structures are in place, it is assumed that forest inhabitants will respond positively to economic incentives and maximise carbon sequestration. Stephan and other scholars in the Foucauldian governmentality tradition (e.g. Paterson and Stripple 2010) further assume that the introduction or intensification of market norms can have subjectifying effects, that is, they can shape the conduct of those subjected to them.

In related research with a focus on REDD+ in Indonesia, Boer (2020a) argues that the schemes' monitoring, reporting and verification (MRV) systems can have a disciplinary effect and ensure that forest inhabitants conform to certain standards and expected behaviours. The argument of this article relates closely to the work of Stephan and Boer. Through a close reading of Foucault's (2008) lectures on neoliberalism, this article draws on primary documents as well as 24 interviews with negotiators and non-state observers, and argues that forest inhabitants are not only framed as utility-maximising carbon entrepreneurs, but also as subjects composed of human capital that can be "improved" through educational investments. REDD+ presupposes that forest inhabitants are malleable subjects that can and *should* be encouraged to adopt particular behaviours to drive down costs and achieve optimal conservation outcomes. On this level of analysis, it is not claimed that REDD+ shapes forest

inhabitants' conduct in an empirically observable manner. Rather, it is argued that a degree of intentionality could be observed throughout the negotiations to intervene in forest inhabitants' conduct to improve the effectiveness of the scheme. The observed intention is to encourage forest inhabitants to monitor conservation progress, but also evaluate how their own conduct affect carbon quantities and adapt to that behaviour which increases carbon stocks. Through self-reflection techniques enabled by community-based carbon monitoring tools, the aim is to produce self-disciplining forest inhabitants with a high degree of ownership of REDD+ schemes. What Boer observed in Indonesia is by UNFCCC design and a constituent part of REDD+ governance.

The analysis subsequently moves on to consider how in particular non-state actors contested how the scheme seeks to govern forest inhabitants. They articulated forest inhabitants as rights-bearing subjects different from the rational subject composed of human capital, and claimed rights for forest dwellers to decide on REDD+ implementation and governance. This is considered through two separate agenda items: safeguards meant to ensure that REDD+ does no social or ecological harm, and non-carbon benefits, a concept that embodies an attempt to move the scheme beyond a sole focus on carbon monetisation. It will be argued that the outcomes of the negotiations did not alter the status quo, entailing that REDD+ as developed under the UNFCCC does constitute forest inhabitants as rights bearing-subjects. Moreover, local customary laws and normative systems are placed in a subservient position to the scheme and the self-disciplining techniques fundamental to REDD+ governance.

Before elaborating on these arguments, the next section expands further on data sources and the governmentality concept as an analytical tool.

Analytical framework and data sources

Michel Foucault's (2007) governmentality concept refers to a historically constituted form of power that he distinguished from sovereign and disciplinary powers. It developed in the early modern period in conjunction with advances in political economy and the human sciences, and involved new ways of thinking about how to manage or govern populations. Instead of exercising repressive power over subjects, this form of power was concerned with disposing the population in particular ways to achieve certain ends. Government, as Foucault called this power, was not devised by a king or a particular institution, and can better be thought of as an "ensemble formed by . . . institutions, procedures, analyses . . . reflections . . . calculations and tactics" that disposes subjects in particular ways (Foucault 1991a, 102). Instead of being forced into particular behaviours, the diverse ensemble deliberates on and influences people's conduct, hence the oft-cited term "conduct of conduct". The neologism governmentality is an amalgam of the two words government and mentality, and Foucault used it to suggests that systems of practices – the above ensemble – does not "exist without a certain regime of rationality", forms of knowledge and rationales inscribed into the practices of government (Foucault 1991b, 79).

An impressive literature has emerged that deploys and develops Foucault's insights (Dean 2009; Miller and Rose 1990; Rose and Miller 1992). These scholars retain the idea that governing reflects certain rationalities and draws on particular forms of knowledge, but not necessarily that the population is always the target of governance. Mitchell Dean has developed an *analytics of government* framework based on Foucault's governmentality concept. Such an analytics is suitable for analysing *regimes of government*, which Dean (2009, 31) defines as "the more or less organized ways, at any given time and place, we think about, reform and practice such things as caring, administering, counselling, curing, punishing, education and so on". Regimes of government are historically constituted

assemblages of knowledge, rationalities and practices that can be analysed to glean insights into the government of humans, non-humans such as the climate, and the relationship between the two (Rutherford 2007). Any regime of government can be analysed along four dimensions, the first being *fields of visibility*, which can be thought of as spatial pictures painted by regimes. Any regime illuminates its terrain in a certain way, foregrounding some aspects at the expense of others. It includes knowledge of those aspects, be they human or non-human, including what they are composed of and can do, and what relationships they have with other aspects of the regime (Dean 2009). The second dimension is *technologies of government*, and they are the mechanisms, procedures, instruments and tactics by which power is exercised onto the objects and subjects of government. Dean calls the third dimension the *episteme of government*, and it designates the forms of knowledge, calculations and rationalities that make up the "mentality" part of the governmentality neologism. The fourth dimension is *forms of subjectivity* and concerns people, the subjects of government. As mentioned, to govern necessitates an understanding of those that are the targets of government and this might include ideas about their statues, capacities and attributes (Dean 2009). Importantly, subjects with particular capacities and attributes are both presupposed by a regime of government and promoted by the technologies operating within the regime.

Stephan (2013) was first to analyse REDD+ as a regime of government, and subsequent scholarship has researched the introduction of REDD+ into existing regimes of tropical forest government (Astuti and McGregor 2015a, 2015b; Boer 2017, 2020a, 2020b; Collins 2019, 2020; Li 2014). This article makes an intervention into this literature, with a particular focus on the forms of subjectivity dimension, that is, forest inhabitants with their presumed capacities and attributes. Collins (2019, 2020) cites Foucault's lectures on neoliberalism and argues that REDD+ presupposes a rational subject that is responsive to economic incentives, the homo economicus. Li (2014) and Stephan (2013) also claim that

REDD+ presupposes this subject, although they acknowledge another type of subject, namely the collectivised Indigenous subject or the noble savage that lives in harmony with nature. Forms of subjectivity similar to these will appear in the forthcoming analysis, but Foucault uncovered a subject in neoliberal theory more nuanced than the homo economicus, and I will argue that this is the subject that underlies the ambition to influence forest inhabitants' conduct.

Foucault (2008) devoted considerable attention to post-WW2 North American neoliberalism in his 1978-1979 lecture series. He argued that if the subject in earlier liberal scholarship was the rational homo economicus, then it was re-defined as a subject composed of human capital, derived from both innate and acquired elements, in later neoliberal analyses. Human capital is seen as a stock that can be increased through educational investments, which includes both formal education and parents' nurture and care. Neoliberalism sees "[a]n economy made up of enterprise units" (225), and the units themselves or others can invest in the enterprises to improve their human capital and, as a result, the rate of return on labour. The forthcoming analysis will illustrate that REDD+ is steeped in this tradition. Forest inhabitants are not exclusively thought to be rational and responsive to economic incentives, or stewards of nature based on Indigenous normative systems. They are seen as malleable and their stock of human capital can be increased. REDD+ does not only govern through economic and other incentives, it also governs by "improving" the conduct of forest inhabitants through training and disciplinary practices.

The analysis subsequently moves on to consider how in particular non-state actors contested REDD+ along two dimensions of the regime of government. Firstly, a large portion of non-state actors and certain states articulated a rights-bearing form of subjectivity, and claimed rights for forest dwellers to decide on REDD+ implementation and governance. Secondly, the analysis considers an attempt to expand the field of visibility of REDD+

beyond a predominant focus on carbon to other ecosystem attributes. The disciplinary practices fundamental to REDD+ are instantiated in community-based monitoring of carbon stocks in exchange for compensation, and an expanded field of visibility would reorient the practices away from a sole focus on carbon. The analysis is based on 10 interviews with REDD+ negotiators and 14 with non-state actors observing the negotiations. They were undertaken between 15 February and 19 November in 2013, thirteen of which were conducted at the negotiations that I observed as an accredited non-state actor, while eleven were conducted over telephone or Skype. They complement a comprehensive document analysis of the negotiations that was undertaken as part of a larger research project. A rough third of those documents, 81 out of 243, were analysed for this article. They include all formal submissions of states' and non-state actors' pre-negotiation positions, as well as negotiation outcomes compiled by the UNFCCC Secretariat, including conclusions and decisions pertaining to relevant agenda items. These agenda items are primarily: "Issues relating to indigenous people [sic] and local communities for the development and application of methodologies" (see UNFCCC 2009a), and "Methodological issues related to non-carbon benefits" (see UNFCCC 2014a). They were chosen as they clearly illustrate the forms of subjectivity that REDD+ presupposes and the contestation along the two dimensions of the regime of government. The dataset was analysed in a chronological and thematic manner, where the data was coded into themes according to different forms of subjectivity and regime of practice dimensions, and subsequently interpreted. This analysis is presented in the following section and it starts by elaborating on the forms of subjectivity that REDD+ presupposes and promotes.

"Improving" forest inhabitants' conduct

The original REDD+ proposal submitted to the UNFCCC presented the following problem:

> [I]n the absence of revenue streams from standing forests, communities and governments in many developing countries have little incentive to prevent deforestation … Without a more complete market valuation, standing forests cannot overcome the economic opportunity costs associated with their conservation. (UNFCCC 2005, 4-5)

The proposal called for a market valuation of standing forests. They had to become commodities just like harvested trees are commodities; only then could economic opportunity costs be overcome. An ambitious project was described in which the carbon content of trees would be measured as precisely as possible over time, and if the rate of carbon loss was reduced (not necessarily halted), then this should be counted as carbon credits to be exchanged for money emanating from the Global North. The operation would necessitate clear property rights and rigorous monitoring systems, but it was nevertheless assumed to be both achievable and beneficial for the stakeholders involved. Many countries were in favour of the scheme and in their submissions of negotiation positions to the UNFCCC, they cited Stern's (2006) *Review on the Economics of Climate Change* in which the scheme is discussed as a highly cost-effective approach to reducing emissions with a range of positive "co-benefits" such as biodiversity conservation (UNFCCC 2007).

The scheme would be cost-effective because specific forest uses have low opportunity costs. Stern argues that "[o]il palm and soya produce much higher returns than pastoral use, with net present values of up to $2,000 per hectare compared to as little as $2 per hectare" (Stern 2006, 217). Though implicit, the logic here is that pastoral use and other less intensive forest uses should be the target of the scheme. Paying pastoralists, shifting cultivators and similar forest inhabitants would cost-effectively reduce emissions because they are the ones with low opportunity costs. As discussed by Stephan (2013), implicit in these calculations are the rational and utility-maximising individuals that the neo-classical economic tradition relies on. These "cheap" forest inhabitants are assumed to willingly engage with the scheme and alter their livelihood strategies should suitable economic compensation and necessary market

structures be in place. The livelihood strategy under REDD+ would be one where forest inhabitants safeguard forest resources based on calculations of future economic benefits. Scholars of payment for ecosystem services (PES) schemes have sought to evaluate the possible impact of such strategies. Vatn (2010, 1245) argues that PES schemes may "introduce a purely instrumental logic and in some cases worsen the environmental status by crowding out environmental virtues". Taking Vatn's argument to its logical extreme, REDD+ could introduce a form of subjectivity that conserves forests purely based on cost-benefit calculations and crowd out other ways of relating to forests.

However, this logical extreme tenuously assumes that forest inhabitants are passive recipients of external powers, and that pre-existing forms of subjectivity would be subjugated. It omits the possibility of co-existence, strategic mimicry and resistance (e.g. Astuti and McGregor 2015a; Gupta et al. 2012). Though I will return to resistance at the level of the negotiations below, the present discussion continues by suggesting that forest inhabitants were not only thought of as rational economic subjects by REDD+ proponents, but also as malleable where their conduct can be actively shaped to better fit the objectives of the scheme. This form of subjectivity is implicit in welcome negotiations on the ways in which forest inhabitants should participate in, and take ownership of, a possible REDD+ scheme.

A few years into the negotiations, delegates decided to consider whether forest inhabitants should take part in monitoring carbon emissions from forests. State and non-state actors submitted their views on this and a large majority was in favour (UNFCCC 2009a, 2009b, 2009c, 2009d). There were three broad reasons underpinning this view, one of which referred to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and held that meaningful participation is a right that should be accorded to all forest inhabitants (ECA 2009). A second reason was based on effectiveness. Two respondents

argued that community participation has been proven to result in positive outcomes, with one arguing that "community managed forests and Indigenous territories have much lower rates of deforestation than territories that are not managed by communities" (Non-state actor 1, personal communication; Non-state actor 2, personal communication). The third reason overlaps with the second, but hones in on nurturing increased ownership through participation. A submission from a non-state actor held that "[i]nvolvement creates ownership – and thus protection of the forest resources – and generates a steady revenue stream to the local communities that may help establish sustainable livelihoods" (ITC 2009, 6). The two countries of Panama and Costa Rica similarly argued that

> [t]he advantage of having local and indigenous peoples [sic] taking part in the monitoring process is that it increases their sense of ownership and their understanding of the impact of land use change, thus enhancing the possibility of success of REDD activities. (UNFCCC 2009a, 13)

The notion that participation increases ownership and that ownership increases effectiveness is commonplace in development assistance and natural resource conservation (Cornwall and Brock 2005; Fletcher 2010).[1] To facilitate the participation of forest inhabitants in monitoring activities, several state and non-state actors were in favour of

> [c]apacity-building specifically oriented to include indigenous peoples [sic] and local communities and local organizations, especially under participatory approaches and methodologies, such that these stakeholders can be efficiently engaged in the design and implementation of REDD methodologies (i.e. monitoring and the measurement of carbon stocks). (UNFCCC 2009d, 7; see also UNFCCC 2009b, 2009c)

Because support for such measures was broad-based, a decision was taken under the UNFCCC that *encourages* "the development of guidance for effective engagement of indigenous peoples [sic] and local communities in monitoring and reporting" (UNFCCC 2009e, 12).

A desire to increase forest inhabitants' sense of ownership is not fully consistent with the rational and utility-maximising subject drawn from neo-classical theory. Beyond attributes of being rational and utility maximising, forest inhabitants are theorised in terms of their degrees of ownership. It is seen as a malleable variable that can be increased through appropriate procedures. This form of subjectivity resonates with the subject Foucault (2008) saw in post-WW2 neoliberal scholarship. Such theorists addressed the labour category in the classical analyses of Adam Smith and David Ricardo, and argued that labour is not solely a determinant of value measured by the time spent producing a product or service. Rather, labour is a skill, ability or machine, something that can vary in quality and be improved; hence Foucault (2008, 229) calls neoliberal subjects "abilities-machines". These machines are composed of a variable stock of human capital derived in part from parenting, formal education and professional training. They can be improved through investments "made at the level of man himself", much like an enterprise can increase its rate of return by investing profits in workforce development (231). These investments can be carried out by anyone, including by the subjects themselves. Neoliberalism therefore replaces the "homo economicus as a partner of exchange with a homo economicus as entrepreneur of himself" (226, emphasis removed).

Foucault (2008, 232) noted the spread of neoliberalism in the late 1970s and argued that "the problems of the economy of the Third World" was being "rethought on the basis of human capital". The problem of crafting an effective REDD+ mechanism is also considered on the basis of human capital. This is seen most starkly among institutions working with REDD+ capacity building and implementation. UN-REDD (2011), for example, argues that "investments in natural and human capitals … reduce the risk for REDD+ investments", and similar sentiments are echoed by other institutions implementing REDD+ (FONAFIFO et al. 2012; Ministry of the Environment, India 2018). The transfer of relevant knowledge and

skills through education and capacity building constitute human capital investments, and a key objective is to enable forest inhabitants to engage in monitoring practices (FONAFIFA et al. 2012). Italy, on behalf of the EU, explains the pay-off, which is that "involving local communities in the collection and processing of information can enhance cost-effectiveness and ownership" (UNFCCC 2014b, 26). An enhanced ownership includes increased commitment to REDD+ and the behaviours expected from those enrolled in the scheme. Thus, forest inhabitants are assumed to be responsive to economic incentives, but also malleable abilities-machines with potential for "improvements" of their conduct through suitable investments; this is one prominent underlying understanding of forest inhabitants advanced throughout the negotiations and influencing a decision on their monitoring participation.

To further understand how REDD+ conducts forest inhabitants' conduct, insights can be gleaned from the Community Carbon Accounting initiative of the Institute for Global Environmental Strategies (2020), an observer organisation part of this article's empirical sample, as well as the Global Observation of Forest and Land Cover Dynamics sourcebook, which provides a consensus perspective from carbon experts on forest land use, and has been cited 44 times by the empirical sample (GOFC-GOLD 2016). Both sources stress the above mantra that MRV participation leads to increased ownership, and that training is necessary to ensure that forest inhabitants can undertake monitoring tasks, such as selecting and setting up sample plots, undertaking measurements, entering data into databases and submitting data to national forest monitoring systems (IGES 2012). It is recommended that forest inhabitants use personal digital assistants or smartphones, as they enable the recording of plot measurements and provide useful on-screen maps, aerial photos and satellite images (GOFC-GOLD 2016). When using such devices, forest inhabitants are able to measure how effective they have been at conserving carbon stocks by comparing their measurements with on-screen

datasets showing conservation performance over time and in different locations. There are two ways in which community-based monitoring practices encourage self-discipline among forest inhabitants. First, the sourcebook recommends that community monitoring results should be analysed and compared to results of other communities to ensure measurement quality, and if issues come to light "then the causes need investigation" (GOFC-GOLD 2016, 227). If monitoring quality is in doubt, the community should be investigated by external experts and, if need be, further trained. Awareness of these procedures will encourage a disciplined conduct to ensure that submitted monitoring data results in payments rather than training. Second, the monitoring toolkits recounted by GOFC-GOLD (2016) allow forest inhabitants to collect monitoring data and construct helpful figures and graphs of this data. This enables forest inhabitants to monitor conservation progress and reflect on how their own conduct affects this progress. Thus, the monitoring toolkits can be used as self-diagnostic tools. Indeed, forest inhabitants are encouraged to use them for self-diagnosis given that monetary or other rewards are involved. If the data suggests little progress, then forest inhabitants are encouraged to improve their conduct to achieve better results.

Monitoring participation encourages self-discipline, and it is assumed that such reflexive practices increase scheme ownership and "enhance the sustainability of REDD+ activities, as communities will have a better understanding of what must be done to ensure future REDD+ payments" (GOFC-GOLD 2016, 222). With suitable human capital investments, quantitative knowledge of conservation progress and awareness of the payments this can result in, forest inhabitants are assumed to grow into skilled enterprises of themselves and custodians of REDD+ schemes, but only if payments are forthcoming. Carbon stocks are conserved with monetary or other rewards in mind. It is a means to an end, a job for a salary. A purely instrumental logic is indeed encouraged where conservation is conducted solely for rewards, but this need not entail that forest inhabitants become rational subjects that calculate

whether to conserve forests or engage in alternative land uses based purely on cost-benefit analysis. Agrawal (2005, 165-6) is right to argue that governmentality research often "defers a consideration of how subjects make themselves, focusing primarily on technologies of power aimed at objectifying individuals". The effect of the disciplinary techniques is contingent on how forest inhabitants "make themselves" when subjected to them. Cases have, for example, been documented where forest inhabitants have used monitoring tools to safeguard customary lands and "produce alternative forms of knowledge that may counter a Northern elitist expert driven discourse" (Gupta et al. 2012, 4). Foucault (1990, 95) reminds us that "resistance is never in a position of exteriority in relation to power". He has also argued that while not "everything is bad", "everything is dangerous" (Foucault 1984, 343). The disciplinary techniques and the instrumental logic they encourage should be evaluated in a cautious and empirical manner. They can be considered dangerous because they are not apparent in the "win-win" discourse with which REDD+ is advertised (e.g. TVE/UN-REDD 2009), and their subjectifying effects are unknown. Moreover, negotiators subjugated other forms of subjectivity and rejected efforts to accord forest inhabitants the right to decide on REDD+ implementation and governance. This is considered further in the next section.

Safeguarding forest inhabitants' conduct

Thus far, the forms of subjectivity – the type of person both presupposed and promoted by the scheme – articulated throughout the negotiations have been those of the rational and utility-maximising subject of neo-classical theory, and the more malleable subject composed of human capital derived from later neoliberal scholarship. Another form of subjectivity jostling for foothold throughout the negotiations was the rights-bearing subject. This subject was articulated in two distinct ways, one of which was to argue that REDD+ will not work without strong rights. For example, Switzerland, together with Lichtenstein, Mexico, Monaco

and the Republic of Korea held that

> financial incentives will only dissuade forest owners from degrading and clearing forests
> if property rights, as well as the human, civil and political rights, including rights of
> indigenous peoples [sic], women, communities and other possibly marginalized groups
> in forest areas are recognized. (UNFCCC 2009f, 2)

This constellation of states sought to accord rights to forest inhabitants, because it was seen as instrumental to encourage engagement with the scheme. One of the assumptions here is that without secure rights, forest inhabitants may fear that they will not benefit from REDD+ and therefore favour short-term incentives through activities that may degrade forests. In this view, it is not enough to improve the human capital of forest inhabitants and subject them to monitoring participation with its self-disciplining techniques. Only a person accorded suitable rights will become a custodian of REDD+ projects.

The rights-bearing subject was also articulated in submissions from Indigenous Peoples' organisations highly critical of REDD+ (COICA 2009; IIPFCC 2009). The International Indigenous Peoples' Forum on Climate Change, for example, declared that they "oppose the commercialization and commodification of forests" (IIPFCC 2009, 6). This was followed by a recommendation for "Parties and other key actors to be educated to understand the different, holistic world view of indigenous peoples [sic] and to understand the different values that forests have for indigenous peoples [sic] and for humankind" (IIPFCC 2009, 6). The submission argued that there are better ways to value forests than as commodities, and other stakeholders would benefit from learning about this. The IIPFCC articulates a regime of tropical forest government where the commodification of standing forests – the rationality underlying REDD+ – is seen as alien and counter-productive. Moreover, it is not necessary to improve the forest governance ownership of these subjects, because they embrace a holistic world view in which forests are conserved based on distinct non-monetary values.

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To promote the rights-bearing subject, a range of submissions argued that Indigenous Peoples and, in certain submissions, other forest-based communities should be accorded with rigorous rights (CAN 2009; COICA 2009; ECA 2009; IIPFCC 2009). Though there were nuances between the submissions, many sought to have the REDD+ mechanism affirm the UNDRIP as well as principles such as free, prior and informed consent (FPIC), rights to self-determination and self-government, and the right to manage natural resources according to customary use (ECA 2009). Some submissions, including by the IIPFCC, opposed the commodification of forests, whereas the Climate Action Network (CAN) did not exclude the possibility that the scheme could benefit Indigenous Peoples and other forest-based communities. Uniting all submissions articulating the rights-bearing subject, however, is an argument that forest inhabitants themselves should decide on REDD+ implementation and governance, and should be able to safeguard their lands and customary laws and practices. There were, on the other hand, influential states that chose to abstain from a rights-based language in their negotiation submissions. The USA, for example, carefully avoided such terminology and instead opined in one submission that

> [e]ffective implementation and enduring results will only be achieved with an open and transparent process, including broad stakeholder participation and taking into account the needs and interests of local communities, forest dwellers, and indigenous peoples [sic]. (UNFCCC 2009g, 33)

Stripping away rights-based language entails that forest inhabitants are not articulated as rights-bearing subjects and would not have prescriptive UNFCCC text to rely on if they were to oppose REDD+ implementation.

These different positions on rights formed part of the negotiations of safeguards meant to ensure that REDD+ does no social or ecological harm. The negotiations concluded in Cancun in 2010 and of the adopted safeguards, those relevant for this discussion are:

(c) Respect for the knowledge and rights of indigenous peoples [sic] and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;

(d) The full and effective participation of relevant stakeholders, in particular indigenous peoples [sic] and local communities, in … [REDD+] actions. (UNFCCC 2010, 26)

On the surface, the text appears to safeguard the rights and knowledge of Indigenous Peoples and members of local communities. However, it does not compel states to adhere to the UNDRIP; it is merely noted that the United Nations General Assembly has adopted it. According to one respondent, this was because certain countries have "problems" with their Indigenous Peoples and it was a legal red line (State negotiator 1, personal communication). The same respondent also explained that text obliging countries to obtain the FPIC from forest inhabitants before instituting REDD+ projects was refused by several key countries. Moreover, the safeguards section is preceded by text stating that they should be "promoted and supported" (UNFCCC 2010, 26). This can be compared to drafts of the negotiation text, which obliged countries to adhere to them by having the text "Parties shall" preceding the safeguards (Hjort 2020). The legal status of the safeguards was downgraded to a situation where it is not obligatory to abide by them when implementing REDD+.

This article makes no assumptions as to the constitution of the regime of tropical forest government in locations where REDD+ can or has been implemented, including whether or not forest inhabitants would welcome the scheme. However, if there are conflicts between forest-dwelling communities and state agencies implementing REDD+, then the safeguards offer little protection as it is up to such agencies to decide on whether or not to abide by them. Any pre-existing regime of government, whether resembling the customary normative systems articulated by the IIPFCC or not, is placed in a subservient position to REDD+, and it is possible that the latter, with its disciplinary techniques, is implemented

without the consent of forest inhabitants. The safeguards provide an illusion of assurance for those keen to see forest dwellers' rights and customary normative systems protected, but they are formulated so as to achieve compliance with the REDD+ mechanism and the neoliberal form of subjectivity it promotes.

States implementing REDD+ will have considerable flexibility in abiding by the safeguards. The monetisation of forest carbon, however, remains a core rationality of the scheme, and if carbon is the only aspect of forests that is quantified and monetised, then it subjects forests to a "carbonification" where "non-carbon qualities … are rendered invisible" in the field of visibility of REDD+ (Stephan 2012, 636). The disciplinary techniques discussed in the previous section, which may be introduced without the FPIC from forest inhabitants, would therefore promote an instrumental logic solely around carbon. After the safeguards' negotiations, however, there was a twin backlash against the dominant forms of subjectivity and the field of visibility of REDD+. This backlash occurred within a work programme on non-carbon benefits (NCBs) initiated by UNFCCC negotiators (UNFCCC 2014a, 2014c). NCBs were never defined under the UNFCCC but are often associated with improved forest governance, various ecosystem services, climate change adaptation, improved social and economic conditions, as well as support for social and cultural values (UNFCCC 2014a). NCBs would expand the scheme beyond a sole focus on carbon and constitute a much broader field of visibility. According to one respondent, a consideration of NCBs developed out of a realisation that they "help improve resilience" of REDD+ projects (State negotiator 2, personal communication). This is because a singular focus on carbon, the respondent explained, makes forest conservation and the livelihoods of forest inhabitants vulnerable to fluctuating market prices, which could jeopardise the benefits they see from the scheme and their willingness to participate. In other words, NCBs were advanced on effectiveness grounds, and they were supported by a range of countries and non-state

observers (IWGIA et al. 2014; REDD+ Safeguards Working Group, Accra Caucus and Indigenous Peoples' Caucus 2014; UNFCCC 2014a, 2014c).

Negotiators discussed whether such benefits should be paid for, just like sequestered carbon, which would necessitate stipulations for how to monitor and estimate changes in such non-carbon categories. Many countries with tropical forests argued that this is both possible and desirable (UNFCCC 2014a, 2014c). A submission from the Central African Forest Commission (COMIFAC), comprising ten countries, held that "non-carbon benefits should be properly incentivized and both technically and financially supported and therefore integrated in consideration of results-based finance" (UNFCCC 2014a, 20). Non-state actors similarly argued that NCBs can be monitored with simple monitoring systems that would be cheaper than those required to estimate carbon stocks (Non-state actor 3, personal communication). Incentivising NCBs entails that further aspects of forest inhabitants' everyday life become monetised, which certainly warrants further discussion. However, it would have the consequence that the disciplinary techniques would not solely foster a conduct conducive to carbon conservation. The techniques would promote a conduct that values a variety of ecosystem attributes, including NCBs that are local and unique such as specific climate adaptation and livelihood strategies. As recognised by several countries during the negotiations, NCBs are not easily homogenised across REDD+ schemes and countries (UNFCCC 2014a). Methodologies for evaluating such benefits would, therefore, have to be tailored to the requirements of different countries or sub-national regions. REDD+ would, in effect, build in a methodological requirement to safeguard diversity as opposed to encourage behavioural homogenisation.

The NCB negotiations also featured a direct backlash against the weak rights enshrined in the safeguards. It was primarily advanced by non-state actors and the logic of argumentation was predominantly couched in effectiveness rationales. Instead of claiming

rights to ensure that REDD+ implementation and governance should be decided by forest inhabitants themselves – a strategy that had failed – equally strong rights were this time advanced based on the argument that to achieve resilience, NCBs are not enough (IWGIA et al. 2014; REDD+ Safeguards Working Group, Accra Caucus and Indigenous Peoples' Caucus 2014). The argument was once again that without clear land rights, incentives to conserve forests are lower. This, they argued, is because of the historical relationship many forest inhabitants have with state and corporate entities, marked by significant resource extraction and, in some cases, alienation from ancestral lands. REDD+ would be an additional externally imposed element and if underlying rights issues are not resolved, positive engagement may not be forthcoming. To overcome this, a recognition and implementation of land rights was considered paramount in addition to a stringent application of the safeguards, the UNDRIP and FPIC (IWGIA et al. 2014). With such measures, non-state actors again sought to ensure that forest inhabitants are recognised as rights-bearing subjects.

This was not to be, however, because several influential states were strongly opposed to non-carbon benefits, including Norway, Brazil, USA and the EU (UNFCCC 2014a, 2014c). A negotiator from one of said countries remarked that "it would be completely crazy to pay for this [NCBs] because it is your benefits that are coming with avoided deforestation" (State negotiator 3, personal communication). The respondent saw non-carbon benefits as a positive consequence arising naturally from actions to reduce deforestation and, therefore, argued that it would be akin to paying twice for one activity. Several non-state actors were also sceptical of NCBs. One likened REDD+ to a donkey and the negotiations to a hill, and opined that "there are so many things being put on the donkeys back that it is not going to be able to actually make it up the hill" (Non-state actor 4, personal communication). In other words, NCBs increase the complexity of REDD+ to the extent that it may be too difficult to

agree on suitable implementation rules. Armed with such arguments and partial support from non-state observers, a coalition formed against further consideration of NCBs and the final decision on the matter states that they "do not constitute a requirement" (UNFCCC 2015b, 15). Non-carbon benefits can be promoted, but there is neither a requirement to pursue them nor to pay for them. Thus, Stephan's (2012) discussion of a carbonification of forests is still relevant. The field of visibility of REDD+ remains unchanged and the disciplinary techniques will be geared towards a conduct that exclusively values forests as a carbon storage. Moreover, forest inhabitants are not recognised as subjects with rights to decide on REDD+ implementation and governance at the international level. The implications of this in a setting of weak global demand for REDD+ carbon credits are discussed further in the next section that concludes the article.

Conclusion

This article drew on Foucault's governmentality concept and Dean's analytics of government framework to analyse the REDD+ negotiations under the UNFCCC. It has argued that REDD+ manifests a regime of government that inscribes forest inhabitants as malleable subjects composed of human capital that can and should be actively moulded in ways perceived to increase the effectiveness of forest conservation. An "improved" conduct is fostered through a set of disciplinary techniques that are instantiated in the monitoring of carbon stocks in forests, and which encourage an instrumental logic where conservation is conducted solely for rewards. There is, of course, huge diversity among forest inhabitants across the Global South and no homogenous impact on their conduct can be assumed. Following on from Astuti and McGregor (2015a), and Gupta et al. (2012), it is also very possible that monitoring tools will be used in attempts to safeguard customary lands and, where relevant, counter claims made by state or corporate actors. However, these techniques

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may be imposed on forest inhabitants rather than consensually agreed, and carbon might be the only aspect of forests that inhabitants are incentivised to nurture. Carbon stocks will feature in labour and reflexive practices on a recurring basis. As ensured by the UNFCCC decision on non-carbon benefits, all other aspects of the ecosystem will be rendered valueless from the perspective of REDD+. The scheme therefore fosters a homogenised and disciplined conduct where carbon sequestration is the dominant livelihood strategy. Though no assumption is made as to whether this conduct differs from how forest inhabitants experience their social, ecological and cultural environment, the outcomes of the safeguards' negotiations subjugate any pre-existing customary laws and normative systems to the scheme. Should there be conflicts between REDD+ and local laws and practices, then the safeguards offer no protection for the latter.

Dean (2009, 44) reminds us that any form of subjectivity promoted by a regime of government is "successful to the extent that … agents come to experience themselves through such capacities". The prevalence of the instrumental logic discussed in this article is an empirical matter. However, as of early 2021, REDD+ finds itself in limbo. UNFCCC negotiations are still ongoing regarding the role of REDD+ in the climate regime's carbon market arrangements. A consequence of this is that a stable global demand for REDD+ credits is outstanding, and existing REDD+ projects cannot rely on market-based finance. With an uncertain funding landscape, REDD+ schemes are for the moment moving away from a strict focus on the performance-based and disciplinary elements considered in this article. Project implementers are experimenting with a range of different measures, including multiple forms of incentives and governing instruments, in their attempts to achieve forest conservation without a strong carbon credit demand (Angelsen 2018; Boer 2017). The legal landscape remains unchanged as forest inhabitants still cannot rely on international REDD+ rules for protection of customary laws and practices, but payments for precise carbon

quantities are less common, which means that the scheme's disciplinary techniques – the twin act of monitoring both carbon stocks and the self to ensure positive conservation outcomes – feature less prominently. However, it is still possible that the scheme will form part of future carbon market arrangements, driving up the demand for REDD+ credits. If this comes to be, then the disciplinary techniques with their instrumental logic and potentially subjectifying effects could be rolled out in earnest across the Global South.

Notes

1. This is not to say that the cited authors subscribe to the simplistic assumption that participation unproblematically creates ownership.

References

Agrawal, A. 2005. *Environmentality: Technologies of Government and the Making of Subjects*. Durham, NC: Duke University Press.

Angelsen, A., ed. 2018. *Transforming REDD+: Lessons and New Directions*. Bogor: CIFOR.

Astuti, R., and A. McGregor. 2015a. "Responding to the Green Economy: how REDD+ and the One Map Initiative are Transforming Forest Governance in Indonesia." *Third World Quarterly* 36 (12): 2273-2293.

Astuti, R., and A. McGregor. 2015b. "Governing Carbon, Transforming Forest Politics: A Case Study of Indonesia's REDD+ Task Force." *Asia Pacific Viewpoint* 56 (1): 21-36.

Boer, H. 2017. "Welfare Environmentality and REDD+ incentives in Indonesia." *Journal of Environmental Policy & Planning* 19 (6): 795-809.

Boer, H. 2020a. "The Biopolitics of Carbon Accounting in Indonesia's Forests." *Environment and Planning C: Politics and Space* 38 (1): 174-192.

Boer, H. 2020b. "Power, REDD+ and Reforming Forest Governance in Indonesia." *Third World Quarterly* 41 (5): 783-800.

CAN. 2009. *Views on Issues Relating to Indigenous Peoples and Local Communities for the Development and Application of Methodologies. Submission of the Climate Action Network* 15 February 2009. https://unfccc.int/resource/docs/2009/smsn/ngo/098.pdf.

COICA. 2009. *SBSTA Submission De La Coordinadora De Las Organizaciones Indigenas De La Cuenca Amazonica – COICA.* https://unfccc.int/resource/docs/2009/smsn/ngo/112.pdf.

Collins, Y. A. 2019. "Colonial Residue: REDD+, Territorialisation and the Racialized Subject in Guyana and Suriname." *Geoforum* 106: 38-47.

Collins, Y. A. 2020. "How REDD+ governs: Multiple Forest Environmentalities in Guyana and Suriname." *Environment and Planning E: Nature and Space* 3 (2): 323-345.

Corbera, E., C. Hunsberger, and C. Vaddhanaphuti 2017. "Climate Change Policies, Land Grabbing and Conflict: Perspectives from Southeast Asia." *Canadian Journal of Development Studies* 38 (3): 297-304.

Cornwall, A., and K. Brock. 2005. "What do Buzzwords do for Development Policy? A Critical Look at 'Participation', 'Empowerment' and 'Poverty Reduction'." *Third World Quarterly* 26 (7): 1043-1060.

Dean, M. 2009. *Governmentality: Power and Rule in Modern Society*. 2nd ed. London: Sage.

ECA. 2009. *Response to Calls for Submissions on the UNFCCC Processes.* 5 February 2009. https://unfccc.int/resource/docs/2009/smsn/ngo/101.pdf.

Fletcher, R. 2010. "Neoliberal Environmentality: Towards a Poststructuralist Political Ecology of the Conservation Debate." *Conservation and Society* 8 (3): 171-181.

Foucault, M. 1984. "On the Genealogy of Ethics." In *The Foucault Reader*, edited by P. Rabinow, 340-372. New York: Pantheon Books.

Foucault, M. 1990. *The History of Sexuality Vol. 1: An Introduction*. New York: Vintage Books.

Foucault, M. 1991a. "Governmentality." In *The Foucault Effect: Studies in Governmentality*, edited by G. Burchell, C. Gordon, and P. Miller, 87-104. Chicago: University of Chicago Press.

Foucault, M. 1991b. "Questions of Method." In *The Foucault Effect: Studies in Governmentality*, edited by G. Burchell, C. Gordon, and P. Miller, 73-86. Chicago: University of Chicago Press.

Foucault, M. 2007. *Security, Territory, Population: Lectures at the College de France 1977-1978*. Edited by M. Senellart and translated by G. Burchell. Basingstoke: Palgrave Macmillan.

Foucault, M. 2008. *The Birth of Biopolitics: Lectures at the College de France 1978–1979*. Edited by M. Senellart and translated by G. Burchell. Basingstoke: Palgrave Macmillan.

FONAFIFO (National Forestry Financing Fund of Costa Rica), CONAFOR (National Forestry Commission of Mexico), and Ministry of Environment, Ecuador. 2012. *Lessons Learned for REDD+ from PES and Conservation Incentive Programs: Examples from Costa Rica, Mexico, and Ecuador*. Washington: World Bank.

GOFC-GOLD (Global Observation of Forest Cover and Land Dynamics). 2016. *Sourcebook: COP 22 Version 1*. Wageningen: Wageningen University.

Gupta, A., E. Lövbrand, E. Turnhout, and M. J. Vijge. 2012. "In Pursuit of Carbon Accountability: The Politics of REDD+ Measuring, Reporting and Verification Systems." *Current Opinion in Environmental Sustainability* 4 (6): 726-731.

Harris, N., T. Munroe, L. Goldman, C. Slay, and F. Follet. 2020. "Agriculture Drove Recent Record-breaking Tree Cover Loss." *Global Forest Watch*, February 21. https://blog.globalforestwatch.org/data-and-research/agriculture-drove-recent-record-breaking-tree-cover-loss.

Hjort, M. 2015. "Governing Deforestation: A Governmentality Analysis of Tropical Forests in Climate Negotiations." PhD diss., University of Birmingham, UK.

Hjort, M. 2020. "Who Should be Governed to Reduce Deforestation and How? Multiple Governmentalities at the REDD+ Negotiations." *Environment and Planning C: Politics and Space* 38 (1): 134-152.

Howson, P. 2018. "Slippery Violence in the REDD+ Forests of Central Kalimantan, Indonesia." *Conservation and Society* 16 (2): 136-146.

IIPFCC. 2009. *Submission to SBSTA on Item 11 of FCCC/SBSTA/2008/L.23.* https://unfccc.int/resource/docs/2009/smsn/ngo/108.pdf.

IGES. 2012. *Community Carbon Accounting Action Research Project – Vietnam: Activity Report FY2012.* https://archive.iges.or.jp/files/research/natural-resource/forest/pdf/cca/fy2012/summary_vietnam_2012.pdf.

IGES. 2020. Community Carbon Accounting Action Research Project. https://archive.iges.or.jp/en/natural-resource/forest/activity_cca.html.

ITC. 2009. *Forest Biomass Assessment in Support of REDD by Indigenous People and Local Communities*. https://unfccc.int/resource/docs/2009/smsn/ngo/109.pdf.

IWGIA, Asia Indigenous Peoples Pact, Forests of the World, IBIS, CARE-Denmark, Nepal Federation of Indigenous Nationalities, and Aliansi Masyarakat Adat Nusantara. 2014. *Submission on Non-Carbon Benefits as an Imperative for the Sustainability of REDD+.* https://unfccc.int/resource/docs/2014/smsn/ngo/408.pdf.

Li, T. M. 2014. "Fixing Non-market Subjects: Governing Land and Population in the Global South." *Foucault Studies* 18: 34-48.

Miller, P., and N. Rose. 1990. "Governing Economic Life." *Economy and Society* 19 (1): 1-30.

Milne, S., S. Mahanty, P. To, W. Dressler, P. Kanowski, and M. Thavat. 2018. "Learning from 'Actually Existing' REDD+: A Synthesis of Ethnographic Findings." *Conservation and Society* 17 (1): 84-95.

Ministry of Environment, Forest and Climate Change, India. 2018. *National REDD+ Strategy India*. New Delhi: Ministry of Environment, Forest and Climate Change.

Paterson, M., and Johannes S. 2010. "My Space: Governing Individuals' Carbon Emissions." *Environment and Planning D: Society and Space* 28 (2): 341-362.

REDD+ Safeguards Working Group, Accra Caucus, and Indigenous Peoples' Caucus. 2014. *Methodological Issues Related to Non-carbon Benefits Resulting from the Implementation of REDD+ Activities.* https://unfccc.int/resource/docs/2014/smsn/ngo/409.pdf

Rose, N., and P. Miller. 1992. "Political Power Beyond the State: Problematic of Government." *British Journal of Sociology* 43 (2): 173-205.

Rutherford, S. 2007. "Green Governmentality: Insights and Opportunities in the Study of Nature's Rule." *Progress in Human Geography* 31 (3): 291-307.

Simonet, G., A. Agrawal, F. Bénédet, M. Cromberg, C. de Perthuis, D. Haggard, N. Jansen et al. 2018. ID-RECCO, International Database on REDD+ projects, Linking Economic, Carbon and Communities Data. Version 3.0. http://www.reddprojectsdatabase.org.

Stephan, B. 2012. "Bringing Discourse to the Market: The Commodification of Avoided Deforestation." *Environmental Politics* 21 (4): 621-639.

Stephan, B. 2013. "Not Seeing the Forest for the Carbon in the Trees? The Role of Fighting Tropical Deforestation in Global Climate Governance." PhD diss., Hamburg University.

Stern, N. 2006. *Review on the Economics of Climate Change*. London: H.M. Treasury.

TVE/UN-REDD (TVE/United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries). 2009. *REDD as Part of the Solution*. https://www.youtube.com/watch?v=PYHldt9gfMw.

UNFCCC. 2005. *Reducing Emissions from Deforestation in Developing Countries: Approaches to Stimulate Action. Submissions from Parties.* FCCC/CP/2005/MISC.1. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2007. *Views on the Range of Topics and other Relevant Information relating to Reducing Emissions from Deforestation in Developing Countries. Submissions from Parties.* FCCC/SBSTA/2007/MISC.2. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2009a. *Issues relating to Indigenous People and Local Communities for the Development and Application of Methodologies. Submissions from Parties.* FCCC/SBSTA/2009/MISC.1. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2009b. *Issues relating to Indigenous People and Local Communities for the Development and Application of Methodologies. Submissions from Parties. Addendum.* FCCC/SBSTA/2009/MISC.1/Add.1. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2009c. *Information on Experiences and Views on Needs for Technical and Institutional Capacity-building and Cooperation. Submissions from Parties.* FCCC/SBSTA/2009/MISC.2. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2009d. *Information on Experiences and Views on Needs for Technical and Institutional Capacity-building and Cooperation. Submissions from Parties. Addendum.* FCCC/SBSTA/2009/MISC.2/Add.1. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2009e. *Report of the Conference of the Parties on its Fifteenth Session, held in Copenhagen from 7 to 19 December 2009. Addendum.* FCCC/CP/2009/11/Add.1. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2009f. *Issues relating to Indigenous People and Local Communities for the Development and Application of Methodologies. Submissions from Parties. Addendum.* FCCC/SBSTA/2009/MISC.1/Add.2. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2009g. *Ideas and Proposals on the Elements Contained in Paragraph 1 of the Bali Action Plan. Submissions from Parties. Addendum.* FCCC/AWGLCA/2009/MISC.4/Add.2. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2010. *Report of the Conference of the Parties on its Sixteenth Session, held in Cancun from 29 November to 10 December 2010. Addendum.* FCCC/CP/2010/7/Add.1. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2014a. *Views on the Issues Referred to in Decision 1/CP.18, Paragraph 40. Submissions from Parties and Admitted Observer Organizations.* FCCC/SBSTA/2014/MISC4. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2014b. *Views on Types of Information from Systems for Providing Information on How the Safeguards are Being Addressed and Respected and that May be Provided by Developing Country Parties. Submissions from Parties and Admitted Observer Organizations.* FCCC/SBSTA/2014/MISC.7. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2014c. *Views on the Issues Referred to in Decision 1/CP.18, Paragraph 40. Submissions from Parties and Admitted Observer Organizations. Addendum.* FCCC/SBSTA/2014/MISC4/ADD1. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC. 2015a. *Adoption of the Paris Agreement. Proposal by the President.*
FCCC/CP/2015/L.9/Rev.1. Bonn: United Nations Framework Convention on Climate
Change.

UNFCCC. 2015b. *Report of the Conference of the Parties on its Twenty-first Session, held in
Paris from 30 November to 13 December 2015. Addendum.*
FCCC/CP/2015/10/Add.3. Bonn: United Nations Framework Convention on Climate
Change.

UN-REDD. 2011. "REDD+ and a Green Economy: Opportunities for a Mutually
Supportive Relationship." Geneva: United Nations Programme on Reducing
Emissions from Deforestation and Forest Degradation.

Vatn, A. 2010. "An Institutional Analysis of Payments for Environmental Services."
Ecological Economics 69 (6): 1245-1252.

Weisse, M., and L. Goldman. 2018. 2017 was the Second-worst Year on Record for Tropical
Tree Cover Loss." *Global Forest Watch*, June 27.
https://blog.globalforestwatch.org/data-and-research/2017-was-the-second-worst-
year-on-record-for-tropical-tree-cover-loss.