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Implementing REDD+: lessons from analysis of forest governance

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ABSTRACT

The anticipated benefits and co-benefits of REDD+ generated considerable enthusiasm and momentum prior to the Copenhagen Climate Change Conference, and the lack of agreement of a global mechanism for REDD+ at that Conference generated corresponding disappointment. However, experience from earlier forest-related initiatives, and from recent research in environmental and forest governance, suggest ways forward for REDD+ even in the absence of a post-2012 climate agreement. Comparative studies reveal that forest-rich developing countries already have formal forest management requirements that are at least as demanding as those of industrialised countries, and that poor implementation of these requirements is the key constraint to achieving forest conservation and sustainable forest management goals. Experience suggests that mechanisms that focus on enabling the implementation of these already-agreed requirements, and that draw from the lessons of forest certification as well as from PES schemes, are most likely to deliver positive outcomes for both forests and local stakeholders. Together, these lessons suggests that progress can be made towards the REDD+ outcomes envisaged by the Copenhagen Accord by supporting implementation of existing national and sub-national forest policies in ways that are consistent with the principles of good forest governance.

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1. Introduction

The importance of reducing greenhouse gas emissions from deforestation and forest degradation, and of enhancing forest carbon stocks ("REDD+"¹), were among the few points of global agreement at the 2009 Copenhagen Climate Change Conference² (UNFCC, 2010a). The Copenhagen Accord (UNFCC, 2010b) identified the need for "immediate establishment of a mechanism" to enable REDD+, drawing on financial resources

from developed countries, but made few firm commitments for international action. Recent forest policy research suggests that a focus on enabling implementation of existing national and sub-national commitments in forest conservation and management would deliver much of what is sought from REDD+. A greater focus on nurturing the existing commitments of sovereign governments, in turn, may offer more space for a variety of international arrangements, such as the partnership agreed between the Governments of Norway and

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¹ REDD: "Reducing emissions from deforestation and forest degradation"; REDD+: in addition to REDD, enhancing forest carbon stocks through activities such as forest conservation, forest restoration and sustainable forest management (Angelsen, 2009; Campbell, 2009).

 $^{^2}$ The 2009 Copenhagen Climate Change Conference (http://en.cop15.dk/). 1462-9011/\$ – see front matter © 2010 Elsevier Ltd. All rights reserved. doi:10.1016/j.envsci.2010.11.007

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Indonesia (Government of Norway, 2010), to enable rapid REDD+ implementation. A focus on REDD+ implementation at national, sub-national and local levels that is carefully designed to complement existing forest-related policies would be consistent with proposals for the development of 'nested' climate governance regimes (Forsyth, 2009; Pedroni et al., 2009; Streck, 2010) that respect local stakeholders' interests and rights (Phelps et al., 2010; Sikor et al., 2010).

2. The potential benefits and disbenefits of REDD+

The rise of REDD+ as part of the global response to climate change reflects growing recognition of both the scale of emissions from tropical forest loss and degradation,3 and of the potential benefits and co-benefits of REDD+-related policy interventions (Angelsen, 2009). The appeal of REDD+ includes the prospective immediacy of its benefits; its cost-effectiveness, relative to other mitigation options (Gullison et al., 2007; Kindermann et al., 2008; Stern, 2006); its potential to support biodiversity conservation and delivery of other environmental services (Busch et al., 2010; Gullison et al., 2007; PRP, 2009; Venter et al., 2009); and its potential to contribute to poverty reduction and improved rural livelihoods (Angelsen, 2008; Brown et al., 2008; Campbell, 2009; Miles and Kapos, 2008). As a result, a suite of REDD+-related initiatives is underway in anticipation of REDD+ forming part of a post-2012 global climate agreement: for example, the UN-REDD Programme (UN-REDD, 2009), the Forest Carbon Partnership Facility (FCCP 2010) and the Interim REDD+ Partnership (REDD+ Partnership, 2010) provide international frameworks or funding; national REDD+ strategies and policies are under development in more than 40 countries (Angelsen, 2009); and some 180 individual REDD/REDD+ readiness and demonstration activities are underway (Cerbu et al., 2010).

These potential benefits of REDD+ have to be weighed against possible adverse outcomes. For example, there are concerns that implementation arrangements could deny the rights of indigenous and forest-dependent peoples over their territories and resources (Brown et al., 2008; IIPFCC, 2009; Schroeder, 2010), and prejudice progress towards more decentralised, locally-empowering modes of forest governance (Phelps et al., 2010). Others fear that a focus solely on forest carbon will override concerns about biodiversity conservation, particularly if the definition of "forests" eligible for REDD+ credits does not distinguish between natural forests and plantations and encourages replacement of the former by the latter (Sasaki and Putz, 2009). Although these issues have now been formally acknowledged in text recognising the need for environmental and social "safeguards" for REDD+ (UNFCC, 2010a), major challenges remain in operationalizing these intentions in practice. For example, indigenous peoples' agency in REDD+ negotiations remains problematic (Schroeder, 2010), and there is continued disagreement on what constitutes a REDD+ eligible"forest" (Sasaki and Putz, 2009). Other foundational concerns remain, such as the additionality, leakage, and permanence of forest-based emissions reductions compared to those of other sectors (Ingerson, 2007; Tavoni et al., 2007). Nevertheless, as the scale and urgency of emissions reductions required to mitigate global warming become more apparent, there has been a growing consensus on the need to somehow incorporate forest-based emissions reductions into global action on climate (Corbera et al., 2010; PRP, 2009; Tavoni et al., 2007).

One of the most compelling arguments in favour of REDD+ from a climate change mitigation perspective is that conserving and restoring carbon in forests can, in addition to delivering co-benefits, "buy time" for the agreement and implementation of more comprehensive strategies to address climate change (Lubkowski, 2008; PRP, 2009; Stern, 2006). The limited progress at the Copenhagen Climate Change Conference illustrates the profound difficulties of reaching a more comprehensive global climate agreement (Biermann, 2010), and suggests that countries committed to REDD+ objectives should explore how they might be realised regardless of the timetable for any future global climate agreement. This sentiment is evidently shared by countries and organisations participating in initiatives such as the Interim REDD+ Partnership (FIELD, 2010; Interim REDD+ Partnership, 2010). A central challenge these initiatives face is how to begin to realise the prospective benefits of REDD+ in the absence of a comprehensive global climate agreement, and without generating harm or perverse outcomes (Brown et al., 2008; Phelps et al., 2010; Sikor et al., 2010). We suggest that experience of previous forest-related initiatives, and the outcomes of recent environmental and forest governance research, can inform strategies for REDD+ implementation in this context.

3. Learning from experience of previous forest-related initiatives

Strategies to advance REDD+ and deliver its co-benefits should be informed by the experience of decades of initiatives, at scales from the local to the global, which have sought – largely unsuccessfully – to curtail forest loss and degradation (Angelsen, 2009; Brown et al., 2008; Levin et al., 2008; McDermott et al., 2007; Pfaff et al., 2010; Skutsch and McCall, 2010). A number of strands of experience are particularly relevant; we discuss each of these below.

First, a fundamental constraint to reaching global agreement about forest conservation and management has been the reluctance of countries to allow their sovereign rights to be impinged upon by an agreement (Dimitrov, 2005; Humphreys, 2006), a situation mirrored in international climate negotiations (Streck, 2010). In the case of forests, recognition of this political reality has progressively directed attention to the need to facilitate new forms of "good forest governance" at the national and sub-national levels (Contreras-Hermosilla et al., 2008; Glück et al., 2005), which are now recognized – in any case – as prerequisites to the success of any global efforts

 $^{^{3}}$ Now estimated at 15% of the global anthropogenic total (van der Werf et al., 2009).

⁴ 'Governance': "the management of the course of events in a social system and the use of institutions and structures of authority to allocate resources and coordinate or control societal activity" (Burris et al., 2005).

to conserve and better manage forests (Agrawal et al., 2008; Ostrom, 2007; World Bank, 2008). This experience suggests that REDD+ implementation is more likely to succeed where it relies more on what has already been agreed by countries than on what might yet need to be agreed between them.

Secondly, reflecting in part the governance issues discussed above, experience of "REDD readiness" activities - the enhancement of capacity and competencies, and the policy and institutional changes, necessary for countries to participate in REDD+ (Brown and Bird, 2008) - suggests that the policy and institutional reforms necessary for successful implementation of REDD+ will be substantial (FCPF, 2010; Mayers et al., 2010); and, therefore, that realising the potential of REDD+ will be "neither fast, nor easy" (Hansen et al., 2009). These issues, the most fundamental of which are associated with the political economy of resource access and use - which largely favour economic development over conservation, and elite capture of forest-derived wealth over more equitable outcomes – are both familiar and pervasive in most of the forest-rich developing countries that are the primary focus of REDD+ (Hansen et al., 2009; Pfaff et al., 2010). This experience suggests that addressing 'governance gaps' (Pedroni et al., 2009) in forest-related policies, in ways that are consistent with the principles of good forest governance discussed below, is essential for REDD+ success.

Thirdly, there are concerns that the significant financial resources that could become available under REDD+ might exacerbate, rather than address, institutional and social factors that contribute to forest loss and degradation, such as elite capture of benefits and corrupt behaviours (Hansen et al., 2009; Phelps et al., 2010; Sikor et al., 2010; Tacconi et al., 2009). The design of REDD+, as a performance-based system of payments for environmental services (PES), is in contrast to most previous forest policy interventions, and is generally seen to offer better prospects for realising intended outcomes than non-performance-based mechanisms (Angelsen, 2009; Pfaff et al., 2010). Proposals for REDD+ design have been informed by experience of other PES schemes (e.g. Angelsen, 2008, 2009; Wunder et al., 2008); experience from other forest-related market mechanisms, notably of forest certification (Cashore et al., 2006; Levin et al., 2009; McDermott et al., 2008), may also be instructive for REDD+.

Two elements of learning from the experience of certification may be particularly relevant to REDD+ implementation. The first is that certification has both enhanced inclusivity in policy networks and fostered "a rebalancing of power relations away from business-industry clientelist networks to more pluralistic arrangements involving environmental, community, and indigenous peoples' interests" (Cashore et al., 2006, p. 578) at multiple scales - e.g. through the creation of certification standards that nest local indicators within global principles and criteria. The second is that the limited evidence available to date suggests that forest certification standards have rarely diverged greatly from forest management standards set by government (McDermott et al., 2008), highlighting the inter-dependence of public and private governance and the need to render more transparent the government policies that underpin marketbased mechanisms (McDermott et al., 2009). Thus, experience of certification may offer guidance for addressing concerns about REDD+ governance and implementation at national, subnational and local levels (Phelps et al., 2010; Sikor et al., 2010); it also reiterates the importance of focusing, in the REDD+

context, on the implementation of forest management standards set by public policy.

4. Learning from related research

Two strands of recent research are particularly informative in relation to the implementation of REDD+. The first is that of forest governance and its interaction with the emerging climate governance regime. Over the past few decades, there has been increasing emphasis on understanding and giving effect to 'good forest governance' (Glück et al., 2005). As with environmental governance more generally (Esty, 2006; Gale, 2007; Gunningham, 2009), good forest governance is built around principles such as accountability, inclusion and transparency (Cashore, 2009; World Bank, 2008). However, knowledge of how these principles are best translated to improved forest conservation and management outcomes remains poor (Miles and Kapos, 2008; Agrawal et al., 2008; World Resources Institute, 2009). This is largely due, on the one hand, to the complexity of forest governance contexts, arrangements and outcomes (Agrawal et al., 2008); and, on the other, to inadequate frameworks for comparative policy analysis and policy learning (Howlett and Cashore, 2007; McDermott et al., 2009; Ostrom, 2009).

Recent reviews of environmental, climate and forest governance (Agrawal et al., 2008; Biermann et al., 2009; Cashore, 2009; Gunningham, 2009) suggest that a promising approach in this context is to reorient scholarship and practice away from focusing on separable "international", "national" and "local" policy arenas (Bartley et al., 2008) to a more systematic consideration of how forest governance functions across multiple scales, and how traditional state-based policy measures can be integrated with networked, "bottom up", public-private, and market-based governance initiatives. This thinking has already been applied, at an exploratory level, to aspects of REDD+ implementation (Angelsen, 2009), and is reflected in proposals that 'nested' governance should form the basis of REDD+ implementation (Forsyth, 2009; Pedroni et al., 2009; Sikor et al., 2010).

The second strand is the development of analytical frameworks that facilitate comparative environmental policy analysis (Biermann et al., 2009; Howlett and Cashore, 2007; Ostrom, 2009), and their use to inform forest and climate governance. Our global analysis of forest practice policies (McDermott et al., 2010) illustrates the utility of such an approach. This work first developed a classification system that provided the basis for a systematic, global-scale comparison of "on the ground" policy settings, such as those specifying riparian zone protection or regulating the scale of forest harvesting.⁵ We then applied this comparative framework to a global sample of 20 countries across all continents.⁶

⁵ The forest policy settings assessed were allowable harvest levels, biodiversity protection, clearcutting and harvesting rules, reforestation requirements, riparian buffer specifications, and roading rules.

⁶ Countries sampled represent 70% of global forest area and 61% of global forest products trade, and include those with the highest deforestation rates (McDermott et al., 2009, 2010).

This global-scale comparison of national and sub-national environmental performance requirements for forest management offers insights relevant to the implementation of forest governance initiatives such as REDD+.

Our studies found that, contrary to common assumptions, developing countries took a more "prescriptive" approach than did industrialised countries to the environmental performance of forest management. Countries that account for a high proportion of forest-based emissions, such as Brazil and Indonesia, have environmentally-oriented forest practice requirements that are highly prescriptive and include some of the most demanding environmental performance requirements. Conversely, some of the least prescriptive and least stringent performance requirements are those of industrialised countries for their private forests. For some policy settings directly relevant to the implementation of REDD+, such as the proportional extent of protected areas, there was no overall difference between developing and industrialised case study countries. In contrast, on average, the greatest regulatory variation in policy settings was that between public and private forests in industrialised countries. Consequently, little would be gained by further efforts to agree higher forest management standards globally, as had been the focus of international forest processes (Humphreys, 2006).

Instead, such standardized comparisons could be used in a deliberative way to build international support for effective national forest governance. For example, REDD+ countries could report on the carbon storage potential and co-benefits to be gained from successfully implementing existing forest and land use laws⁸ and thereby channel REDD+ funds from available sources⁹ to strengthen legal compliance. Likewise, countries whose environmental and social standards are demonstrated by global comparison to be rigorous might explore ways to leverage market rewards or other forms of international support to maintain those standards. Such processes would be consistent with McDermott et al.'s (2010) hypothesis that increasing the transparency of international forest policy comparisons would provides a critical first step in the overall "ratcheting up" of global environmental performance related to forest conservation and management.

5. Conclusions

The architecture of both a global climate governance regime and a REDD+ mechanism within it remains the subject of considerable uncertainty and debate (Angelsen, 2009; Biermann, 2010; Biermann et al., 2009; Sikor et al., 2010; UNFCC, 2010b). Both the experience of previous initiatives to conserve and sustainably manage forests, and the results of recent forest policy research, offer important guidance for this architecture.

One message is that REDD+ initiatives should focus on implementation of existing national and sub-national commitments for forest conservation and management, in ways that are consistent with established principles of good forest governance. Focusing on enabling implementation in these terms would respond to concerns about the potential for disempowerment of local communities (Phelps et al., 2010), and would be consistent with the rationale and strategies proposed for nested climate governance (Forsyth, 2009; Pedroni et al., 2009; Sikor et al., 2010). This focus is consistent with broader trends in environmental and forest governance: that towards greater decentralization (Agrawal et al., 2008), and the associated exploration of how local-level policymaking and implementation might link with national and international forest and climate policy in mutually supportive ways (Agrawal and Angelsen, 2009; Sikor et al., 2010); and that of capitalising on locally-specific synergies between public and private authority to deliver environmental outcomes (Gunningham, 2009; McDermott et al., 2009). Successes in, for example, community forest management (Agrawal and Angelsen, 2009), forest certification (Cashore et al., 2006) and curtailing illegal logging (Tacconi, 2007), offer insights relevant to REDD+ implementation.

A second message is that which emerges from governance research more generally. Biermann et al. (2009) discuss the fragmented structure of global governance architectures, including that for climate, and suggest a typology of synergistic, cooperative and conflictive fragmentation. They note that the latter appears unlikely to offer good performance outcomes, and discuss how climate governance architecture is characterised largely (but not only) by cooperative fragmentation, viz. a diversity of institutions and decision processes that are loosely, but sufficiently, integrated. In the light of the discussion above, this characterisation seems relevant and appropriate to models of REDD+ implementation; allowing REDD+ arrangements to emerge organically, largely from the bottom-up, within a sufficiently- but not overly-defined international framework, would be consistent with the principles of good forest governance and the lessons of experience outlined above, and with emerging experience of REDD+ development (Streck, 2010). If enough REDD+ activity can be fostered on this basis, sufficient momentum could be generated through a 'norm cascade' (Finnemore and Sikkink, 1998) to both impact substantially on forest loss and degradation and shape an enabling global climate and forests governance architecture for the future.

The trajectory of anthropogenic climate change, and the continuing high rates of deforestation and forest degradation, suggest that realising REDD+ in the terms discussed here is urgent as well as desirable. This, in turn, suggests that drawing from pre-REDD+ forest governance experience is important to both maximise REDD+ effectiveness and minimise the attendant risks (Angelsen, 2009; Seymour and Angelsen, 2009). Both contemporary thinking about environmental governance and the evidence from empirical studies suggest that an effective REDD+ regime can be built around national and sub-national policy settings for forest conservation and management, provided that implementation is locally empowering (Brown et al., 2008; Phelps et al., 2010; Sikor et al., 2010). This conclusion should focus the international

⁷ "Prescriptive" characterises regulations that were mandatory rather than discretionary, and focused on specific performance outcomes rather than on procedures (McDermott et al., 2009, 2010).

⁸ See for example (Soares-Filho et al., 2010) on the role of Brazil's legal reserves in climate change mitigation.

⁹ Funding options are discussed by, amongst others, Corbera et al. (2010), Isenberg and Potvin (2010) and Streck (2010).

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community's attention on realising REDD+ by building national, sub-national and local capacities to implement existing forest conservation and management requirements in ways that are consistent with the principles of good forest governance, and suggests a feasible pathway for development and implementation of the REDD+ mechanisms envisaged by the Copenhagen Accord.

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