All Bark and No Bite?

Illegal Logging and REDD Implementation in Weak States

by

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Abstract

Despite efforts to reduce logging rates, deforestation due to illegal timber harvests continues to plague REDD+ countries. This problem occurs in an array of states that exhibit variance regarding quality of governance, commitment to REDD+ projects, as well as history and causes of deforestation. This behavior is best explained as a typical challenge of implementing policy for nations in which the 'weak' state is merely one of several actors wielding power in the form of social control. These power dynamics are likely to persist, or change only at a rate that puts successful implementation of REDD+ projects in jeopardy. Extending this framework to the international level demonstrates how the design of international regimes such as REDD+ may work either to exacerbate or to moderate existing conflict among actors with social power, and how contestation at the local level may act to influence the politics of these global regimes.

Table of Contents

Introduction

Global climate change is one of the most important and difficult political problems of our time. Particularly challenging has been the clash between reducing emissions of greenhouse gases, while at the same time pursuing economic development. An intriguing advancement of the last fifteen years has been the attempt to pursue these two goals concurrently through the Clean Development Mechanism (CDM), defined in the 1997 Kyoto Protocol. One component of the CDM is a collaborative initiative on Reducing Emissions from Deforestation and forest Degradation (REDD+). It is through REDD+ projects that developing nations aim to come to terms with deforestation, the source of 12.2% to 17% of carbon emissions worldwide.[1] By linking these countries to global carbon markets, supporters of REDD+ projects hope to conserve forests and remove carbon from the atmosphere, as well to encourage economic development.

The Clean Development Mechanism is a source of interest for scholars of environmental politics and development alike. The subject of this thesis is a puzzle that is empirical in nature; while steps forward have been made in REDD+ countries to combat deforestation and forest degradation, there has been much less evidence for progress regarding one of the primary drivers of this problem, illegal logging. This is true across countries exhibiting a great deal of variance regarding a number of possible explanatory factors: coherence of forestry policies, degree of commitment to REDD+ efforts, and the sources of illegal logging in each nation. I begin this thesis therefore by asking the question of why illegal logging persists in REDD+ nations, in spite of the many efforts made to eliminate the practice.

I argue that reducing illegal logging is a typical challenge of implementing policy for nations in which the 'weak' state is merely one of several actors wielding power in the form of social control. Underlying power dynamics in most REDD+ countries are driven by clashes among state agencies and various societal actors. The reality of these on-the-ground dynamics is not apparent from REDD+ policies which have been initiated at the national level. I further argue that the most successful efforts made at reducing illegal logging rates

[1] Interpol, UNEP, 2012 contains the 17% estimate, drawn from UNEP and UNFCCC data from between 2000 and 2005. The 12.2% estimate refers to a 2009 World Resources Institute study, which revised an earlier 18.2% estimate due to changes in the calculation of deforestation.

have come as a result of focusing on the level of policy implementation where the state encounters local communities; this can be observed in Indonesia, which in the first decade of the twenty-first century saw a reduction in illegal logging by an estimated 75% primarily due to a surge in law enforcement support.[2]

The framework for this argument stems from Joel Migdal's 1989 book *Strong Societies and Weak States*, which provides an insightful tool with which to analyze the prospects for successful implementation of environmental policy in developing nations. Migdal's theory allows us to move beyond simplistic notions and expectations regarding states' abilities to implement policy country-wide, and come up with a more detailed conception of the relative strength of these nations' states and societies. Migdal's theory unifies the seemingly disparate problems faced by REDD+ countries in their efforts to curb illegal timber harvests. The final proposal I make here is a modest extension of the strong society/weak state framework into the realm of international relations; the design of international regimes such as REDD+ may work either to exacerbate or to moderate existing conflict among actors with social power. In addition, contestation at the local level may act to influence the politics of these global regimes.

The structure of this MA thesis is as follows: I begin by reviewing the strong society/weak state framework, noting its origin as a response to previous conceptions of state-society relations, as well as its power as a tool of comparative politics. I also outline some of the challenges faced by weak states when it comes to implementing policy, especially in areas where there is resistance from other actors. I then move to describing the empirical puzzle which drives this study by providing background on REDD+ programs, as well as illegal logging and its impact worldwide. I review the different sources of illegal logging in weak states, and the policy tools that help to address this problem that are available to states. I then proceed to lay out the argument of this thesis, providing evidence that in each case, illegal logging represents a challenge of policy implementation by weak states. This is done by examining three REDD+ participant countries: Indonesia, the Democratic Republic of Congo, and Ghana. I highlight how Migdal's theory helps to identity the common thread faced by these countries in reducing illegal logging, despite the different forms it takes in each state. I also argue that this logging is likely to be most intractable in

[2] Lawson and McFaul, 2010, xiv.

states that focus solely on national-level implementation of REDD+ policies. Greatest success has come to those states that have made efforts to address the on-the-ground realities that their populations face daily. Finally, I make some connections between the state-in-society framework and the realm of international relations, noting that a conditional relationship exists among all the actors involved. The thesis ends with a brief discussion of my conclusions.

I. Theoretical Background

Strong societies and weak states

Scholars of political science have gone through an evolution regarding their view of state power in relation to society. Those writing in the first half of the twentieth century often characterized the state as an overwhelming wielder of power over society, exemplified in modernization and dependency theories. There existed a presumption of the capacity of states to implement policy nation-wide. On the other hand, political scientists of the late 1970s and 1980s urged for the analytical separation of states from societies, in a search for greater clarity regarding their differing roles and responsibilities. The perspective developed by Migdal and his colleagues shares some of the assumptions made by past scholars, but attempts to develop a finer degree of precision regarding the real nature of state-society relations.[3]

Migdal's theory challenges not only a uniform view of state power as a rule-setter, but also suggests that society in turn has the ability to influence states, and the goals set for policy-making. This mutually conditioning process occurs as a result of bargaining and accommodation.[4] The theory rests on the idea that individuals create *strategies of survival* in order to meet their most basic needs. These strategies are a compilation of the rewards, sanctions, and symbols available to individuals. Thus the decision of whether or not to comply with a norm or rule is based not only on the carrots and sticks offered, but also whether they are "packaged" in such a way as to provide some greater symbolic

[3] Migdal,1994, 2.
[4] Migdal, 1988, 256.

significance.[5] *Social control*, a key measure of the strength of states and societies, "rests on the organizational ability to deliver key components for individuals' strategies of survival."[6]

Social control can manifest itself in three ways. First, a social force may dominate a number of different issue areas within its sphere of influence. Second, a social sphere or arena may expand to include a larger percentage of the population or land. Migdal gives the example of the powers determining what language should be used expanding from a city to the state as a whole. Third, a force can use the resources obtained from one issue area in order to gain influence in another. Here Migdal references tribal chiefs in Africa, who become involved in debates at the national level as a result of the power they wield at the local level.[7] This last is of particular relevance for REDD+ projects; the continuing importance of local chiefs, patronage networks, and other social forces will have a major role to play in the implementation and success of REDD+ projects, and indeed representatives of local communities have begun to be included in REDD readiness planning and consultation.

For Migdal, the "mélange of social organizations" (both formal and informal) is an environment of conflict. The currency being contested is social control, resulting in a model of state-in-society relations based upon the resistance of social organizations to state dominance. Social control is indicated in three ways. The first is through compliance, which is often tied to the coercive powers exercised by the state. The second way is through participation, characterized as being repeated and voluntary. These two indicators reflect carrot vs. stick calculations for citizens. The final indicator of social control is the legitimation of the first two; in other words, the symbolic acceptance of levels of compliance and participation. Though weak central states often clash with societal actors as well as lower levels of state administration over social control, this process need not be a zero-sum game. When states and societies are able to work to provide the right combination of rewards, sanctions, and symbols, populations may thrive and capacity can increase for all actors involved.

Rather than a state-versus-society or a state-over-society framework, Migdal suggests what he terms a "state-in-society" model, represented through the metaphor of a web. Social control, instead of being centralized in the state, is dispersed throughout the web, with the

[5] Migdal, 1988, 26.
[6] Migdal, 1988, 27.
[7] Migdal,1994, 22.

state being only one of multiple sites of control. State capacity therefore, is related to the structure of the society in question. The model further emphasizes the differentiated nature of states, and crucially allows scholars to define precisely what they mean when they categorize states and societies as 'weak' and 'strong.' The web model of power relations is one of the primary contributions of Migdal's work to the understanding of politics in developing nations. Goran Hyden describes the consequences of this dispersal of power in Africa, arguing that, "the state is rarely the sole harbinger of political power… it is often the public realm, not just the state, that is weak. Individuals see nothing wrong in using public resources for private or communal purposes. This attitude extends to a wider set of institutions than those we officially call the state."[8] Placing the state alongside other social forces, rather than above or separate from them, reflects more accurately than prior conceptualizations the reality of these relationships on the ground.

Policy implementation

Capacity is a primary way by which to quantify state strength, as well as the strength of other holders of social control. While this concept can have multiple meanings (the extent of a monopoly of the use of force, for example), the ability to implement policy is a principal means by which to judge state capacity: for the purposes of this thesis, the question is whether or not developing states are able to use the tools at their disposal to combat illegal logging, as part of the broader effort to implement REDD+ strategies. This task is particularly difficult in the areas of most abundant tropical forest growth, which are often far from the capital, as well as quite difficult to access. It is not enough to look merely at interests expressed by political leaders, nor even at policies initiated at the national level of discourse. The strong society/weak state model helps us to understand that "…political outcomes may not at all be in line with what seem to be the overall state's 'interests,' but may stem instead from the complex interaction of the different levels of the state and the peculiar pressures faced at each level."[9] The levels of the state are classified by Migdal as the "trenches", the "dispersed" field offices, agencies' central offices, and the "commanding heights."[10] It is at these levels that we may assess what happens when the relatively easy task

[8] Hyden, 1992, 6.
[9] Migdal, 1994, 15.
[10] Migdal, 1994, 16.

of passing legislation is over, and is followed by technical questions, cost-benefit analyses, and the opposition of groups that hold social control.[11]

According to Migdal, often in weak states a paradoxical relationship arises between top leadership and state agencies. These states are not highly efficient at marshalling resources, yet at the same time leaders must be wary of any agencies which do appear to exert a strong degree of social control, as they threaten cohesive state action. These agencies are sometimes then hamstrung by the state itself, preventing the state from increasing its capacity and extending its reach into society.[12] Goran Hyden highlights states' "reluctance to delegate authority to institutions outside the political center" in post-independence Africa.[13] Hyden notes that post-independence African states across the board have tended towards the marginalization of civil society:

> …much of the continent's social energy is wasted because of inadequate linkages between an omnipotent center and peripheral communities searching for ways of making progress on their own... A prominent feature of African postindependence rule – regardless of ideological color – has been the tendency to curb any independent political activities outside an institutional network controlled by a ruling party-state…[14]

This has resulted in the lack of a robust middle ground of civil society, wherein citizens could potentially interface with the state in order to articulate interests and encourage accountability. The implementation of policy that requires local buy-in, such as REDD+, becomes more difficult in this situation.

However, it is essential not to assume a uniform classification of 'weak' or 'strong' to be applied for states as a whole, or even for a particular level of state administration. It is often the case that states may be termed 'strong' in some issue areas or at some level of bureaucracy, and 'weak' in others. This thesis narrowly focuses on the implementation of policies related to REDD+ projects (e.g., land rights, law enforcement, timber regulations, etc). I do not attempt here to make broad conclusions regarding the strength of the case nations. While REDD+ programs themselves are relatively new, the policies and regulations

[11] Harrison and Sundstrom, 2010, 282.
[12] Migdal, 1988, 207.
[13] Hyden, 1992, 24.
[14] Ibid.

related to the projects are not, and we may therefore draw conclusions about the prospects of REDD+ implementation with some degree of confidence.

II. REDD+ and Illegal Logging

REDD+ programs

The concept of REDD+ was developed in response to the Bali Action Plan agreement made at the United Nations Framework Convention on Climate Change (UNFCCC) 13th session in December of 2007. The program is designed to combat climate change by assisting developing countries with forest management. While the term "REDD" refers primarily to deforestation and forest degradation, the UN defines "REDD+" as including "the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in reducing emissions."[15] For the purposes of this paper, deforestation will refer to actual loss of forest area, while forest degradation will refer to the loss of forest "quality" (e.g. vitality, species diversity, etc.), without an actual loss of forest coverage.

Measurement, reporting, and verification (MRV) are essential pieces of REDD+ programs. This term is used to refer to the monitoring, reporting, and verification of carbon emissions; monitoring of the implementation of safeguards; and monitoring of good governance related to the National Program. This last component includes the ability to "channel important amounts of funds, build capacities, fight corruption and deliver transparent data on GHG [greenhouse gas] emissions."[16]

There are two major multilateral REDD+ programs; the first is the Forest Carbon Partnership Facility (FCPF), financed by the World Bank, and the second is UN-REDD, run by the United Nations. In addition, there are a number of bilateral agreements to provide REDD+ funding, primarily involving EU states in the donor role. Norway in particular has made large funding commitments, as discussed below in the case of Indonesia.

The ultimate goal for REDD+ is for developed countries to pay developing countries for verified reductions of emissions and removal of carbon from the atmosphere (sequestration). The viability of market-based mechanisms has provoked much debate, and in some cases cautious optimism: "…REDD+'s ability to generate support from a diversity of

[15] UN-REDD 2008.
[16] UN-REDD 2008.

actors gives it the potential to be legitimate and effective" [17] As of this writing, the UN-REDD program has forty-four partner countries ranging across Latin America, Sub-Saharan Africa, and the Asia-Pacific region, and has begun funding what it calls National Programs in sixteen of those countries; Bolivia, Cambodia, Democratic Republic of the Congo (DRC), Ecuador, Indonesia, Nigeria, Panama, Papua New Guinea, Paraguay, the Philippines, Republic of Congo, Solomon Islands, Sri Lanka, Tanzania, Viet Nam and Zambia. Thirty-six countries are involved in REDD+ programs through the FCPF, with an additional seventeen having expressed interest. Many of the FCPF participant countries are the same countries receiving UN-REDD funding and assistance.

The empirical puzzle driving this study is that illegal logging is a rampant problem in many of these REDD+ countries, despite all efforts during the past two decades to contain the practice. These efforts include certification schemes, such as that offered by the Forest Stewardship Council; voluntary partnership agreements, like the European Union's Forest Law Enforcement, Governance and Trade (FLEGT) initiatives; regulatory changes; some capacity-building for enforcement and customs offices; and the raising of awareness of the extent of the illegal trade.[18] Consumer countries have also aided in reducing the practice, by attempting to prevent the importing and sale of illegal timber. Yet the harvests persist, even among countries with very different measures of general governance, corruption, REDD+ participation, history of implementing forestry policy, and particular types of illegal logging. This timber harvest can be quite devastating ecologically, and has important social and economic ramifications. Before offering my analysis of this puzzle, I first review below the impact and various types of illegal logging.

Illegal logging

Illegal logging makes up a significant portion of world levels of deforestation, approximately 15-30% according to most sources.[19] While definitive figures are difficult to obtain, it is estimated that illegal logging is a US$30-100 billion dollar per year industry.

[17] Levin and Cashore 2011
[18] See UNEP, INTERPOL, 2012, 61 and Lawson and MacFaul, 2010, 2.
[19] See UNEP, INTERPOL, 2012; Lawson and MacFaul, 2010; Dauvergne and Lister, 2011.

According to a report recently released by the United Nations Environmental Program, between 50-90% of this illegal logging is conducted by organized crime operations.[20]

The illegal timber trade has complex effects on both producing and consuming countries, including environmental, social, and economic consequences. These include:

> …loss of biodiversity, erosion and subsequent water pollution, forest fires, flash flooding and landslides. Illegal logging also threatens the livelihoods of around one-billion forest-dependent people. Illegal logging starves cash-strapped governments of billions of dollars in revenue, undermines the rule of law, fosters corruption, and creates and fuels armed conflict.[21]

Given the significant impacts of illegal logging, it is clear that the success of REDD+ projects rests at least partially upon the program's management of this pervasive problem.

The outlook is not entirely grim. A 2010 report released by Chatham House indicated that "illegal logging is estimated to have fallen in the last decade by 50 percent in Cameroon… between 50 and 75 percent in the Brazilian Amazon, and by 75 percent in Indonesia." [22] These three countries combine to make up a significant percentage of the global illegal timber trade; both Indonesian and Cameroon are FCPF participating countries, and UN-REDD partner countries to different extents.[23] Even more encouraging, the same study suggests that worldwide illegal logging has been reduced by nearly 22%.[24]

While the fight against illegal logging has shown itself to have made progress, the issue is far from solved: illegal harvesting still accounts for between 30% and 60% of total logging in each of the countries mentioned above. Additionally, there is some disagreement as to the deeper meaning of declining rates of illegal logging:

> The much heralded decline of illegal logging in the mid-2000s in some tropical regions was widely attributed to a short-term law enforcement effort. However, long-term trends in illegal logging and trade have shown that this was temporary, and illegal logging continues. More importantly, an apparent decline in illegal logging is due to more advanced laundering operations

[20] UNEP, INTERPOL 2012, 6.
[21] Lawson and MacFaul 2010, 1.
[22] Ibid, xiii.
[23] Indonesia receives direct support in the form of a National Programme; Cameroon is part of a group of nations that receives targeted support for national actions already in place.
[24] Lawson and MacFaul 2010, xvii.

> masking criminal activities, and not necessarily due to an overall decline in illegal logging. [25]

Illegal logging remains a problem even under the most optimistic of interpretations of the current state of global levels. A United Nations Environmental Program and Interpol report recognizes the importance of REDD initiatives as a way to combat illegal logging, but urges action: "If REDD+ is to succeed, payments to communities for their conservation efforts need to be higher than the returns from activities that lead to environmental degradation. Illegal logging threatens this payment system if the unlawful monies changing hands are bigger than from REDD+ payments."[26] Even this assessment does not truly capture the difficulties associated with the different forms of illegal logging; increasing incentives would help, yet fail to address the underlying power dynamics in weak states that give rise to conditions that foster illegal timber harvests. These dynamics are likely to persist, or change only at a rate that would put REDD+ projects in jeopardy.

Types of illegal logging

The curbing of illegal logging is likely to be a persistent and stubborn problem for REDD+ stakeholders. There are multiple factors contributing to the difficulty associated with reducing this logging, which can be understood by examining the sources of illegal logging in each case nation. For REDD+ countries, there are three primary sources of illegal logging. The first is small-scale deforestation; local groups cut down trees for heating and cooking. This type of logging is often for household use rather than market-oriented, though that does not necessarily imply sustainability. The second source is through organized crime outfits. The third cause of illegal logging is quite common in developing countries; timber companies, with legal licenses to operate, harvest logs illegally. This may take the form of logging in areas outside of official concessions, the harvest of trees other than those types that have been approved, or other harvesting practices that lead to increased forest degradation. This final source of illegal logging is further complicated in some cases by patron-client ties between logging operations and government or military elite.

[25] UNEP, INTERPOL 2012, 7.
[26] Ibid, 5.

Each of these sources of illegal logging will be examined in more detail below as they apply to each of the case countries. Broadly, my argument is that in each case illegal logging represents a particularly difficult challenge for 'weak' states, which in this instance means states that struggle to successfully implement forestry policy. Logging in these countries typically takes place far from the capital, where policy implementation is most difficult. In Ghana and the DRC, much of deforestation is due to local communities felling timber to be used for cooking and heating homes. Small-scale logging has a diffusion of responsibility that makes it challenging to address through better regulations at the national level. Increased local law enforcement efforts may help, but requires incentives for local officials to be sufficient to trump their more proximate societal linkages. Logging due to organized crime is primarily an issue of law enforcement; as I demonstrate below, funding for law enforcement has not been a REDD+ priority until only recently. Additionally, enforcement in very rural areas remains difficult for a country the like the Democratic Republic of the Congo, which must deal with the parallel challenge of violent conflict in these areas. Illegal logging conducted by companies with legal licenses is a final problem that is typical of weak states with strong societies, with long-standing patron-client networks. Relatives of Indonesian state leaders, for example, head timber companies that have been issued large land concessions throughout the past few decades.[27]

Policy instruments

Governments have a number of policy instruments through which to regulate the usage of forests. Some of these policies are directly related to forest management and timber industry. Briefly, these include "investment provisions, tax incentives, credit concessions, agricultural pricing policies, and the terms on which firms obtain access to forests…"[28] Effective governance over these policy areas is of particular importance when it comes to reducing the sort of illegal logging stemming from commercial operations. In addition, there are some policy areas that are not forestry-specific, yet have a significant impact on issues related to REDD+ implementation. Law enforcement, often through dedicated forestry

[27] Repetto, 1988, 25. See also Dauvergne, 1998.
[28] Repetto, 1988, 16.

officers, as well as land tenure rights are additional areas of policy through which states have influence over illegal timber harvest practices.

III. Illegal logging as a Strong Society/Weak State Conflict

The task of reducing illegal logging can be understood as an example of the challenges faced by weak states with strong societies. This theoretical framework, borrowed from Joel Migdal, is useful in allowing for the identification of the root causes of illegal logging, as well as why this logging does, and likely will continue to persist. By looking at the interaction among different actors wielding social power, it is possible to move beyond a myopic examination of only those laws and rules officially put into place at the national level. This level of analysis has been identified by scholars as the crucial area where compliance with international agreements should be measured: "The state must mobilize an effective administrative and political effort to translate the legislation on the books into the reality of changing the behavior of private parties in accordance with treaty norms. Environmental treaties implicate the capacity of the state to govern – to enforce its own rules in significant ways."[29] This perspective, coming from international law and agreements literature, highlights the importance of using the reality on the ground as the basis for making assessments regarding policy implementation.

REDD+ programs are typically targeted at heavily forested areas away from the capital, far from direct supervision of state elite. Local officials are relied upon to enforce the laws and policies that form the basis of the institutional design of REDD+. Environmental concerns are not always a high priority for state officials, especially when addressing them entails a high cost. In theory REDD+ programs alleviate this concern by engaging these communities in the carbon market, but it is not clear that sufficient incentives are in place to ensure compliance. REDD+ implementation also requires a great deal of technical assistance and training. This assistance is built into the design of the programs, yet still represents a challenge to be overcome in a sustainable fashion for long-term success.

An additional reason for proposing the strong society/weak state framework for understanding illegal logging is that it brings some degree of unification to the analysis of

[29] Chayes, Chayes, & Mitchell, 1998, 52.

REDD+ implementation in participating countries. The illegal harvest of timber takes different forms among REDD+ countries, as do the obstacles facing states in curbing the harvests. However, these challenges are tied together under the common framework of weak states; rather than viewing each REDD+ country in isolation, useful comparisons can now be made, with important implications for those interested in successful REDD+ implementation.

Evidence

The following section includes evidence from three cases. The three countries I discuss are Indonesia, the Democratic Republic of the Congo, and Ghana. These countries have been selected because of their diversity of relevant characteristics. There are substantial differences among the three nations geographically, among their levels of governance, extent of forest cover, REDD+ commitment, and sources of illegal logging. Together they are fairly representative of the diversity of experiences found among REDD+ countries as a population. Illegal logging persists in each of these REDD+ countries despite efforts to curb the practices. By comparing the three cases, it is clear that for each nation illegal logging and REDD+ implementation are issues of state-society interaction.

Each country section begins with a brief review of recent history that is relevant to the issues of deforestation, illegal logging, and social control. I also detail the extent of forest cover in each nation, and the extent of REDD+ implementation. This includes the number of pilot projects, their location when relevant, as well as the amount and sources of REDD+ funding. I then review the sources of illegal logging for each nation. While there are some similarities among the three countries in this regard, on the whole illegal logging ends up having a unique place in state-society relations for the cases I've included. Finally I examine illegal logging in each country through the lens of Migdal's strong society/weak state framework, highlighting the challenges inherent in curbing these practices.

Indonesia

Boasting one of the largest areas of tropical forest cover in the world totaling approximately 120 million hectares, Indonesia has the potential to derive huge benefits from successful REDD+ projects. Forests make up about 60% of Indonesian lands, the third

largest tropical forest area in the world.[30] Deforestation has been a consistent problem for Indonesia, with an average rate of 1.7 million hectares lost per year through the 1980s and 1990s, and a total of about 40 million hectares lost under President Suharto's tenure. The late 1960s through the 1990s also saw the restructuring of Indonesian timber institutions, with a move from customary (*adat*) ownership to centralized state management of forests.[31] Deforestation reached a peak from 1997-2000, with 2.8 million hectares lost per year.[32] Since that time rates have decreased slightly to 1.17 million hectares per year.[33]

Indonesia was one of the first nations to initiate REDD+ projects, and has since made significant strides towards securing funding and implementing these projects. It is one of the largest recipients of REDD+ funding: UN-REDD contributes about US $6 million, and the FCPF $3.6 million. In addition, Indonesia has partnered with Australia through the Indonesia Australia Forest Climate Alliance with $30 million in funding, and has signed on to Norway's Forest Climate Initiative for another $30 million in readiness preparation funding.[34] In 2010 Indonesia and Norway signed an agreement in which Norway agreed to provide a total of $1 billion in REDD+ funding throughout the various phases of implementation. Over 20 pilot projects began in 2009, and that number has since grown. The size of Indonesia's REDD+ funding, much greater than most other REDD+ nations, may in part be explained by its levels of governance and state strength. In their discussion of the limits of clean development, Peter Newell and Matthew Paterson argue that:

> …investors have been attracted to those areas where 'low-hanging fruit' (the easiest and cheapest options) are plentiful, where they have other reasons to invest and where institutions are much stronger. They have not been attracted to weaker states where poverty levels are higher and there are fewer opportunities for high returns over short time-frames… flows of carbon finance tend to mirror flows of finance in general in the developing world.[35]

This appears to be true of REDD+ funding and, as argued below, Indonesia has had the most success in reducing illegal logging rates.

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[30] Ministry of Forestry, Joint Programme Document, 2009, 8.
[31] Ross, 2001, 165-169.
[32] Ministry of Forestry, Readiness Plan, 2009, 3.
[33] Ministry of Forestry, Joint Programme Document, 2009, 8. For a detailed account of changes in Indonesian forestry policy under Suharto, see Ross 2001 and Dauvergne, 2001.
[34] Ministry of Forestry, 2010, 1.
[35] Newell and Paterson, 2010, 129.

Historically Indonesia has faced several sources of deforestation in general, and more specifically illegal logging. Poverty acts as a foundation for illegal logging in Indonesia, as it does for most other REDD+ countries. Despite GDP growth rates hovering round 6% for most of the last 30 years (with the exception of the period surrounding the Asian Financial Crisis), GDP per capita in Indonesia was roughly US $3500 on average between 2008 and 2012.[36] As a result, the harvesting of firewood and shifting cultivation are both crucial as survival strategies for the Indonesian population. These factors have been of particular importance in Kalimantan and Java, respectively.[37] Shifting cultivation involves abandoning fields to allow them to lay fallow while moving farming operations to a new plot. Slash-and-burn techniques often accompany this practice, and fallow fields are rarely left untouched long enough to fully recover from previous cultivation.

A number of institutional factors collectively form a second source of deforestation in Indonesia. Six government departments have some role in affecting forestry management, and problems of coordination have led to inefficient implementation of policies and a lack of clarity. Logging concessions through the last quarter of the twentieth century were generally 20 to 25 years in length. Most of the tropical forest areas need at least 30 years of growth to recover from logging to the point where they can be sustainably harvested again. Incentives for logging companies to replant and to manage lands carefully were thus absent. The Indonesian state has continued a transmigration policy stemming from the colonial period under the Dutch; the state has attempted to alleviate overcrowding and environmental damage on the main islands by moving families to the more remote Outer Islands. This has required the felling of hundreds of thousands of hectares of forest per year.

While historically the Indonesian state has had ownership of the natural forest lands, local groups have had the right to use land within two kilometers of any river. This has resulted in confusion over land rights between local groups and logging companies who have been granted concessions by the government.[38] The state faces pressure from its rural poor and from logging companies; the state is also its own enemy, as multiple branches of administration work on forestry-related policy, not always in tandem. The institutional facet of deforestation and illegal logging may soon undergo a tremendous shift; recently the

[36] The World Bank, 2013.
[37] Gillis, 1988, 48.
[38] Ibid, 49.

Indonesian Constitutional Court has invalidated the state's long-standing claim of ownership to customary forests. While the outcome is still unclear, the allocation of rights to 30% of Indonesian forests back to local communities has enormous potential to affect the course of REDD+ implementation, and state-society relations in general.[39]

The third category of deforestation is through the commercial logging industry itself, which has by far the largest impact on Indonesian forests. The industry grew substantially beginning in the late 1960s as Suharto opened Indonesia to foreign investment.[40] Illegal logging comes in a few forms embedded within the legal activities timber companies take part in. Companies may encroach upon lands outside of their concessions; permits may be illegally obtained; and loggers fail to abide by rules that regulate which trees may be felled, and in what quantities.[41] This variety of illegal logging has been a priority in the design of REDD+ programs in Indonesia, with emphasis placed on improvement and enforcement of existing regulations, as well as the addition of rules to prevent logging companies from operating outside of their concession agreements.

Of the three countries included in this thesis, Indonesia stands out as having the strongest state, at least broadly speaking. Despite the nation's poverty, the state has, as noted above, managed to set the conditions for consistently impressive GDP growth rates for decades. Still the issue of state strength becomes more complicated upon deeper investigation; Harold Crouch describes how the apparent state strength in part rested on Suharto's ability to balance rival factions. Regional leaders were co-opted into patronage networks, further weakening challenges to the central government. Reliance on these networks to provide stability signaled some degree of weakness, despite appearances.[42] The mass uprisings and protest that accompanied Suharto's eventual fall from power in 1998 signaled the emergence of new actors wielding social control. While the state likely retains some of its penetrative power from Suharto's tenure, it is necessary to look more closely at the particular area of interest: the state's ability to implement meaningful policy regarding deforestation and illegal logging.

[39] Butler, 2013.
[40] Ross, 2001, 168.
[41] See Ross 2001 and Dauvergne, 2001.
[42] Ibid, 101.

Indonesia's history of attempting to combat illegal logging and deforestation has seen mixed results. The state demonstrated some strength in this area by instituting a ban on exports of logs in the 1980s, but this in turn led to overcapacity in the pulp and paper sectors.[43] Furthermore, strength does not always make for smart policy. Repetto and Gillis describe the state's attempt in the 1970s and early 1980s to curb the consumption of timber for the purpose of firewood and cooking fuel among local communities, particularly in Java. The central government set up a subsidy for kerosene as an alternative to wood fuel, hoping to push the population to the consumption of alternative fuels, at a cost of around 4% of GDP. This subsidy failed however; kerosene and fuelwood were not used for the same purposes in most households. The cheap kerosene was primarily used for lighting, while rates of fuelwood consumption fell very little. The high-cost program that protected only a small forest area was an inefficient policy choice by the Indonesian state.[44] A more successful measure to slow illegal logging in Indonesia has been the creation and expansion of National Nature Reserves. During the 1980s and 1990s the Ministry of Environment initiated the process of adding new areas to conservation lands, up to 20% and 27% of the areas of Kalimantan and Sumatra, respectively. The Forestry Department was not a leader in this process, highlighting the fact that the Indonesian state should not be viewed monolithically.[45]

One of the most difficult challenges facing the Indonesian state in combating illegal logging is the fact that timber companies have historically been enmeshed within patron-client networks extending to the ruling elite. Peter Dauvergne notes that these links are "a key avenue by which non-state organisations, especially corporate executives, interact and influence the state."[46] These ties were particularly strong in the 1980s and 1990s; the heads of most timber companies were close friends of Suharto, loyal military officers, or members of the Suharto family.[47] However, the fall of the Suharto regime in 1998 brought with it efforts to break up existing monopolies in the logging sector. Spurred on in part by conditional loans from the World Bank, the Indonesian government managed to some extent to break the hold of Mohamed 'Bob' Hasan and his company Apkindo on the logging

[43] Barr, 2001, 131.
[44] Gillis, 1988, 82-83.
[45] Ibid, 84.
[46] Dauvergne, 1998, 142.
[47] Dauvergne, 1997, 62 and 167.

industry.[48] While severe challenges remain, such as state under-capacity when faced with overseeing nearly 400 forest concession-holders, progress has been made in disentangling the state from illegal logging operations.[49]

Indonesia is in some ways a success story in more recent years regarding the reduction of logging rates. A 2010 Chatham House report indicates that illegal logging levels have dropped by approximately 75% over the last decade. In addition, there are indications that the government is taking illegal logging seriously.[50] However despite the reductions in levels of logging, Indonesia continues to face challenges; according to the 2010 Chatham House report, "use of best practice in law enforcement" remains an area of weakness. In addition, "…the apparent fall in illegal logging seen in both countries [Cameroon and Indonesia] does not appear to have been the result of improved regulation."[51] Complex and incoherent legislation has also been an obstacle to effective enforcement, though recently the government has adopted a new definition for legality of timber to help alleviate this problem.

Indonesia has some safeguards in place to address issues of corruption, which have a serious effect on enforcement efforts. There exists both a parliamentary commission with formal oversight over the Ministry of Forestry, as well as an internal inspectorate within the Ministry itself. It is unclear however whether these efforts are effective: "…stiff penalties for government officials exist in Indonesia (not specific to the forestry sector), but are rarely applied."[52] Other recurring problems include, "…the tendency to 'net the small fish' rather than the big players, a lack of transparency over the methods and standards used, a lack of accountability over the disbursement of revenue from the auctioning of illegal timber seized and the undermining of local government authorities."[53] Clearly the task of reducing illegal logging continues to be a difficult one. If we accept this activity as a window into state-society relations and strength however, Indonesia has some reason for optimism given progress in recent years.

[48] Barr, 2001, 11.
[49] Barr, 2001, 54.
[50] Luttrell, Obidzinski, et. al. 2011, 8.
[51] Lawson and MacFaul 2010, 12.
[52] Ibid, 17.
[53] Luttrell, Obidzinski, et. al. 2011, 9.

The Democratic Republic of the Congo

While Indonesia stands out as having had some success in reducing illegal logging as a result a degree of state strength, the Democratic Republic of the Congo rests at the opposite end of the spectrum. Ruled by Mobutu Sese Seko from shortly after independence until 1997, the DRC has been hampered by corruption, inefficiency, and violence for decades. Under Mobutu there formed a state-based class, who relied on the state for preferential access to resources. But instead of creating a strong state capable of serving their interests, this class aided in the gradual diminishment of state capacity, exacerbated by rampant corruption, economic dysfunction, and a colonial legacy of low levels of education and governing experience.[54] The DRC has also been consumed by civil war for the better part of the last three decades; despite various peace accords signed in the 2000s, violent clashes with rebel groups continue, especially in the eastern part of the country. This area is also home to some of the largest reserves of tropical forest in the world.

Official estimates give the size of tropical rainforest in the DRC at 145 million hectares.[55] The DRC has comparatively low deforestation rates among REDD+ target countries, with official measurements putting deforestation at about 0.25% per year. However, the massive size of the Congolese rainforest means that this is a substantial volume of timber. The DRC is also a nation of great possible benefit to the UN-REDD program. It has the second largest area of rainforest in the world, combined with one of the world's lowest per capita income.[56] In a government-authored report reflecting on REDD+ readiness in the DRC, this potential is highlighted:

> …a preliminary study based on conservative deforestation and degradation projections by 2030 estimated that the DRC had a REDD+ potential of over 400 million tons of CO2 per year… Compared to a GDP of about 10 billion dollars, REDD+ represents an exceptional financial and economic potential at the country's scale. [57]

The DRC's involvement with REDD+ projects has been extensive. Pilot projects have been initiated in each of the eleven provinces, with budgets totaling around US $22

[54] MacGaffery, 1992, 245.
[55] DRC, R-PP, 2010, 3.
[56] World Bank measures place GNI per capita, PPP at $350 for the years 2007-2011 (data.worldbank.org).
[57] Democratic Republic of the Congo 2010, 4.

million dollars. $5.5 million of this budget has been requested from UN-REDD, $3.4 million from the Forest Carbon Partnership Facility, and $1.8 million is funded by the DRC. The DRC has made additional requests from other sources to secure the remainder of the funding.[58]

The DRC Ministry of Environment has identified a number of direct and indirect sources of deforestation. In urban areas, expansion of small-scale agricultural operations and the collection of firewood is extensive. 80% of the country's energy needs are satisfied through firewood and charcoal, due in part to the state's inability to distribute electricity to all areas.[59] Commercial logging covers about 9 million hectares, and brings with it deforestation due to the creation of roads and other infrastructure. Logging roads make up a large percentage of the total road system in the DRC. Similarly, mining activities and related infrastructure and agriculture expansion are important sources of deforestation. More indirect causes of deforestation include an expanding population; the DRC's disconnect from international markets, leading to dependence on cross-border trade of illegal materials; extreme poverty, which makes alternative sources of fuel prohibitively expensive; and a lack of technological innovation, especially in the agricultural sector.

In terms of illegal logging, the harvest of timber for carpentry, firewood, and for the production of charcoal is a major cause of both deforestation and forest degradation. Charcoal is a primary component of the informal cross border markets on the borders with neighboring Angola, Zambia, Burundi, Rwanda, Kenya via Uganda, and Sudan.[60] The Ministry cites estimates that put illegal timber production at several times the volume of legal production. It is no surprise that the DRC state has a difficult task in combating illegal logging given the high levels of violence surrounding the practice. The felling of timber to make charcoal has become entangled with the actions of armed militias in the hinterlands of the Congo, even in nominally protected areas. In mountain gorilla habitats, "…militias drive villagers into refugee camps, then profit from cutting and producing charcoal in the Virungas national parks and selling the high-demand charcoal to the camps… more than 200 rangers have been killed in the last decade defending the park boundaries against a charcoal trade estimated at

[58] DRC, National Programme Document, 2010, 5.
[59] DRC, R-PP, 2010, 38.
[60] Ibid, 40.

over US$28 million annually…" [61] To see REDD+ implementation separately from the civil violence would thus miss the reality of the situation on the ground. Law enforcement in this sector is difficult not only because of the violence present in the area; the Ministry of Environment has recognized that forestry brigades are underpaid as well as undertrained. There are only 50 state agents for the entirety of the DRC, a woefully small number for the area involved.[62]

More broadly, the violence and lack of state capacity in the DRC has caused the population to withdraw from formal interactions with the state, a problem documented by Janet MacGaffey: "The country is plagued by transport and communication difficulties, a corrupt and ineffective administration, industry working far below capacity, scarcities of all kinds, and a huge foreign debt… investigation reveals people confronting the seemingly insuperable problems of survival… by taking matters into their own hands and organizing an unofficial economy and other parallel social institutions to offset the failures of the official ones."[63] The 'unofficial' economy described is of great importance to a population whose survival needs cannot be met through the official wage system alone.[64] While the Congolese state is clearly lacking in capacity, this does not mean it is absent from involvement with the border markets and other manifestations of the secondary economy. Citizens utilizing the markets must do so while avoiding legal penalties, as barter is illegal in the DRC. They do so through a variety of measures: "People avoid legal sanctions by payoffs to tax collectors, licensing authorities, and customs officials… Local authorities are bribed to turn a blind eye to the large markets on the frontiers... Widespread evasion and disregard for the law undermines the legitimacy of the state and public morality, and also contributes to the declining administrative efficacy of the state."[65]

The secondary economy proves even more difficult to regulate or eliminate because it also involves a turn for citizens to more 'traditional' networks for survival needs, including patron-client systems, kinship and ethnic bonds, and other informal networks.[66] In the post-independence period these networks have proven to be resilient, and increasingly relevant as

[61] UNEP, INTERPOL 2012, 29.
[62] DRC, R-PP, 2010, 56.
[63] MacGaffery, 1992, 243.
[64] Ibid, 255.
[65] Ibid, 247.
[66] Ibid, 254.

people turn away from the state as a provider of basic needs. James Coleman enumerates five political functions these groups perform in modern Africa: they have a democratizing influence on native authority councils; in multitribal cities tribal associations are a recognized representative of town councils, and agents of tax collection; the associations are a forum of political expression for young people; they are the foundation of national political parties; and tribal associations have played a central role in postwar development planning and constitutional review.[67]

The withdrawal of the Congolese population from formal interactions with the state, combined with violent conflict in the hinterlands of the country, together form conditions that make it unlikely that the state will easily reduce illegal logging rates as a part of REDD+ implementation. Conflict over social power here is intense and entrenched, and will probably remain so in coming years.

Ghana

The strong society/weak state framework gives cause for cautious optimism in Indonesia and qualified pessimism in the DRC; predicting the path REDD+ implementation will take in Ghana, however, is a more complicated undertaking. A moderately strong state and recent commitment to REDD+ are running up against strong economic incentives for illegal logging at the local level which will likely make the reduction of deforestation a prolonged endeavor. Immediately following independence, Ghana was one of the most successful and wealthy countries of Africa. By the late 1970s and 1980s however, Ghana was stagnating. On December 31st, 1981, military leader Jerry Rawlings came to power in a coup, establishing the Provisional National Defense Council (PNDC) as the government of Ghana. Under Rawlings the state experimented with heavy management of the economy; this would turn out to be disastrous, as the Ghanaian economy began to experience negative growth. Rawlings reversed course, relaxing restrictions placed on markets, and appealing to the IMF for help through a structural adjustment plan. At this point however, Naomi Chazan argues that the Ghanaian population had begun a process of removing itself from the civic realm: "The reactions of most people to the revolutionary zeal of the first phase of PNDC rule was to withdraw as much as possible from the reach of government. The aim of this

[67] Coleman, 1994, 18-19.

disengagement was twofold: to establish a barrier between individuals and unpredictable regime agents; and to ensure a modicum of survival in conditions of immense adversity."[68] The Ghanaian state found itself unable to provide basic necessities, and so the population turned to private networks and informal markets as a strategy of survival.

Ghana is much smaller in size compared to Indonesia and the DRC, and its forest cover is also substantially less. There is an estimated 6.1 million hectares of tropical forest, with approximately 115,000 hectares cut down annually between 2000 and 2006.[69] Forests in Ghana deteriorated seriously over the last quarter of the twentieth century, with around 25% of forest cover lost between 1990 and 2005 alone. For Ghana, the majority of benefits coming from REDD+ engagement may stem from the "plus" aspect: improved forestry management and reforestation. However local communities, whose interests have been articulated at REDD+ discussions by groups of tribal chiefs, have raised several concerns about the implications of REDD+ implementation. Aside from the question of which forest areas will be targeted by the programs, these communities are greatly worried about the negative impact on agriculture due to the potential of expanding forested areas. They have also raised the question of what will happen to timber revenues, which are an important part of Ghana's GDP, as well as whether cocoa plantations will be included in this process. This last point is critical, as cocoa farming makes up 24% of foreign exchange earnings and employs 18% of the population.[70]

Ghana is one of 31 countries that participate in the UN-REDD program in a more limited, and targeted manner. US$59.3 million has been allocated by UN-REDD to be used among 14 of these partner countries, though it is unclear as of yet what Ghana's share will be. REDD+ projects are planned to be more limited in scope than in the other cases discussed above; Ghana's government has released a proposed budget of US$7.3 million for REDD+ preparation projects. $1.7 million of this is set to come from the Ghanaian government, $3.6 million from the Forest Carbon Partnership Facility, and the balance from other development partners, including UN-REDD as applicable.[71]

[68] Chazan, 1992, 128.
[69] Ghana, 2010, 16.
[70] Quisumbing, 2001, 35.
[71] Ibid, 12.

For Ghana, deforestation and forest degradation are not primarily due to commercial logging; instead agricultural expansion, dependence on wood for cooking and heating, and a land tenure system that removes incentives to protect trees are the primary drivers. Ghana's population is highly dependent on agriculture, particularly cocoa. The small area of arable land, combined with a lack of high-level agricultural technology, means that land is at a premium. A growing population has resulted in encroachment on forested lands.

Until the 1970s, forested lands in Ghana were customarily owned and managed by traditional communities, whose leaders are generally termed 'stools' or 'skins.' In the early 1970s however, the central government took over ownership for most of these lands as a way of avoiding potential conflict.[72] The stools and skins received in exchange a share of the revenues from land use. The tenure system has since evolved through the 1990s to a point where stools and skins now have complete ownership over forested lands. But, crucially, they do *not* have ownership of trees on their lands. Local farmers thus have little incentive to conserve forested areas in lieu of converting them to agricultural plots.

Ghana has made some progress in dealing with illegal logging. An official review of the problem has been conducted by the government, demonstrating some high-level policy commitment to addressing the illicit trade. There is some degree of incoherence to its forestry legislation, but it is not as severe as in a country like Indonesia.[73] To address legislative concerns, Ghana has implemented a plan to streamline and replace existing laws through a FLEGT voluntary partnership agreement.[74] This agreement has seen strong support by Ghana's parliamentary committee responsible for land and forestry, a committee that in general has been active in aiding law enforcement efforts.[75]

While Ghana is seeing improvement in dealing with illegal logging, it starts from a low baseline: over the period 1996-2005, it is estimated that 70% of Ghana's total timber production was harvested illegally.[76] While there has been an increase in the number of cases brought to courts, where successful cases are eventually brought the penalties have not been proportionate to the potential benefit of illegal trade. Thus legal consequences have not been a successful means

[72] Chazan, 1992, 312.
[73] Lawson and MacFaul 2010.
[74] European Forest Institute and European Union 2010.
[75] Lawson and MacFaul 2010, 16.
[76] Hansen and Treue 2008, 573. It should be noted that this figure can vary depending on the source. Hansen and True's article cites an official Ghanaian report by the Forestry Commission, prepared for the Ministry of Lands and Forestry.

of dissuasion. Customs agents are not well-trained, and there is a severe lack of coordination among law enforcement agencies. [77] Hansen and Treue's 2008 study concludes:

> The high incidence of illegal logging is the result of policy failures, notably the failure to establish positive economic incentives for farmers and local communities to tend and conserve timber trees and forests, the outlawing of the chainsaw operators, and the failure to downsize the timber industry. [78]

For Ghana, recent improvements in forestry governance at the national level are encouraging, but may not signal a clear path for REDD+ implementation. The primary underlying obstacle to combating illegal logging for Ghana is a growing population that is heavily reliant on agriculture, and that requires a large amount of arable land to sustain itself. REDD+ benefits may begin to address the survival needs of the population, but it is unlikely that they will suffice on their own.

The cases reviewed above support the argument that REDD+ implementation can be usefully understood as a conflict over social control between states and societal actors of varying degrees of strength. Further, the evidence points to greater success for countries that have attempted to address the on-the-ground reality of these power dynamics, such as Indonesia. Illegal logging is just one facet of the complex interactions involved in REDD+ programs; other potential causes of state-society conflict include questions of benefit distribution, accurate measurement and verification of carbon sequestration levels, and technical training required for local actors.

In the final section below I suggest a means by which we may connect the analysis of state-society relations and REDD+ to the realm of international relations. In the end this may help to explain shifting power among all the actors involved, the success and failure of various forestry policies, and the evolution of REDD+ as a regime. The term *regime* itself is defined, famously by Stephen Krasner, as "principles, norms, rules, and decision-making procedures around which actor expectations converge in a given issue-area."[79] My analysis of the REDD+ regime is done through an examination of the founding documents of the UN-REDD program.

[77] Lawson and MacFaul 2010, 31.
[78] Hansen and Treue 2008, 587.
[79] Krasner 1982, 186.

IV. From Local to Global

It has become increasingly difficult to think of comparative politics and international relations as separate fields. From monetary regulations, to the creation of democratic institutions, it has been demonstrated that policy-making at the national level often lacks autonomy from international influence. There exists a substantial literature on international regime design, and the influence this design has on both implementation and effectiveness.[80] Of critical importance are the ways in which these regimes take into account the conflict over social control among all the actors in the web model of a given nation.

An examination of one of the major REDD+ regimes, UN-REDD, helps to underscore the importance of regime design when it comes to implementation at the country level. The UN-REDD design reveals at least some emphasis on resolving the state-society conflicts that have been discussed above. Much of UN-REDD funding is directed towards building state capacity; most of the guidelines revolve around measuring, verifying, and reporting deforestation and carbon sequestration levels, as well as building the legal structures to deal with tenure rights and illegal logging. Furthermore, the UN-REDD program's comprehensive approach to deforestation and forest degradation attempts to kill several birds with one stone. The "+" aspect of REDD+ denotes the focus on conservation and sustainable management of forests in developing countries. This includes an emphasis on preserving biodiversity, and recognition of the social and economic importance of forests to local communities. Combating deforestation also has a potentially tremendous positive impact on the parallel efforts to reverse desertification. This helps to avoid a situation in which addressing one environmental issue causes more damage in another area.[81]

A point is made in the program's framework document of stating that "solutions need to be tailor-made to the environmental and socio-economic conditions of each country and their institutional capacity."[82] This acknowledgement of the wide range of domestic conditions found in REDD+ partner countries seems appropriate, yet such broad guidelines can be troublesome as well. Chasek and Downie, in their analysis of international environmental regimes, state that "…control measures and reporting requirements that are too complex or extremely vague

[80] See for example Krasner 1982, Mearsheimer 1994
[81] For example, the creation of hydroelectric dams to provide clean energy can often result in negative consequences for ecosystems connected to the affected water networks.
[82] Ibid, 2.

might not be implemented correctly."[83] The language used in the UN-REDD framework document is both vague and minimal regarding illegal logging. In practice this has meant a broad approach to governance, with little targeted focus on law enforcement. Illegal logging is mentioned exactly once in the framework document, one item in a list of the many causes of deforestation in developing countries,[84] while the term "law enforcement" is mentioned only twice in the document.

A coauthor of the UN-REDD framework document is the Food and Agriculture Organization (FAO), a UN specialized agency. FAO is one of the primary venues through which the United Nations addresses deforestation and associated illegal logging. However, the UN-REDD program framework includes no explicit links to FAO efforts to combat this problem. The UN-REDD program has just in recent months begun to collaborate with INTERPOL's Project LEAF (Law Enforcement Assistance for Forests).[85] This is an initiative designed to fight illegal logging and organized forest crime.[86] LEAF is a joint effort between INTERPOL and the United Nations Environmental Programme (UNEP), one of the other coauthors of the UN-REDD framework and architects of the program. This future partnership represents UN-REDD's most important foray to date into the law enforcement facet of project implementation.

Land tenure has been discussed as one of the most important aspects of REDD+ implementation, and has also been recognized as critical by state officials of REDD+ countries.[87] Tenure rights have been given less attention by REDD+ regime designers. Language surrounding tenure in REDD+ agreements is vague, with no clear process by which tenure will be recognized. However, the connection between tenure and the distribution of carbon finance derived from REDD+ activities has caused renewed attention to the issue at the national level of many of the countries involved.[88] REDD+ nations are now struggling with questions of ownership, and whether to formalize customary tenure arrangements. It is unclear whether customary tenure will lead to better forestry management, though there are some indications that it may help to increase incentives for local

[83] Chasek and Downie 2009, 288.
[84] FAO, UNDP, UNEP 2008, 1.
[85] UN-REDD, 2012.
[86] INTERPOL, "Project LEAF - INTERPOL."
[87] See: Ghana, 2010; DRC, R-PP, 2010; Indonesia Ministry of Forestry, 2009.
[88] Doherty and Schroeder, 2011, 75-77.

communities more than simple economic incentives.[89] The REDD+ regime has brought this conflict to a high level of priority for state and societal actors alike, who face increased pressure to resolve the gap that exists between formal laws of land tenure and the reality of ownership on the ground.

The inclusion of an international regime such as REDD+ into an analysis of state-society relations becomes increasingly appropriate as it becomes evident that contestation at the local level has the ability shape these regimes as they evolve. As mentioned in section one above, Joel Migdal's strong society/weak state theory recognizes that the actors holding social power have the ability to shape one another. There is growing evidence that this pattern holds true for programs related to the Clean Development Mechanism. Peter Newell and Adam Bumpus relate the process by which conflict at the community level influenced the implementation of the World Bank Carbon Finance Unit in Honduras.[90] Conflict in negotiations between local level state administrators and indigenous groups caused the World Bank to step in directly to ensure local buy-in, which was necessary for success of the project. As a result, governance of the project was increased, as was the price per ton of carbon dioxide to be sold through the project, in order to help pay for the project and improved communications with local actors.

The international regime in this instance can be interpreted as a member of the web of social control, rather than directing processes from on high with the state as a conduit for this power. The influence among these actors is reciprocal, and the strength of that influence is dependent on the extent of social control held by any given actor. I do not propose here that the state-in-society model can be used to explain each interaction at every level of politics; however, a better understanding of the social control dynamic taking place at the local level can aid in explaining changes taking place at the international regime level.

For supporters of REDD+ initiatives, a theoretical extension such as this may help to predict what improvements may be needed in order to make project implementation as successful as possible. Efforts to craft appropriate policy at the national level should not be discounted as inappropriate; still, the analysis presented in this thesis demonstrates that examining the realities of policy implementation are crucial to long-term success. REDD+

[89] Ibid, 77.
[90] Newell and Bumpus, 2012, 61-62.

designers who ignore the social power held by local societal actors, as well as by different levels of state administration, face an uphill battle. If REDD+ incentives do not exceed the costs faced by these actors, its success as a means of both development and reduction of emissions is in serious doubt.

V. Conclusions

In this thesis I have laid forth the argument that implementation of REDD+ programs are usefully understood through the power dynamics present between strong societies and weak states. Joel Migdal's state-in-society model provides the groundwork for analyzing the patterns of power that shape local outcomes of forestry policy made at the national level. The persistence of illegal logging in REDD+ countries is one powerful way in which these dynamics manifest themselves. Finally, I have proposed a modest extension of the state-in-society model to include the impact of international regime design.

REDD+ programs represent an important step towards minimizing what has long been seen as a conflict between conservation and economic development. Their successful implementation will be a long process characterized by negotiation and accommodation among the state and societal actors involved, as well by evolution of the international REDD+ regime. These processes cannot be adequately understood without the recognition that state power is not a given among the nations involved in REDD+ programs. Lest the analysis I have provided appear too grim, I should reiterate a point made earlier; social control is not a zero-sum game. Lisa Sundstrom and Kathryn Harrison describe the conditions for the mutual reinforcement of social control in the area of climate change policy:

> Diffusion or concentration of authority may find quite different expression at the policy implementation stage. As noted above, in systems where multiple actors can exercise vetoes, it is likely to be more difficult to achieve agreement on a course of action. However, to the extent that agreement can be achieved, diverse actors may insist on more formal reporting and oversight to ensure that their hard-won (and difficult to revisit) compromise is respected.[91]

[91] Harrison and Sundstrom 2010, 18.

Proper alignment of rewards, sanctions and symbols for state and societal actors, and appropriate design of the international regime, together can increase the prospects for all involved. This alignment of interests may happen as a result of sufficient economic incentives, or perhaps for normative reasons. Disturbingly, the critical importance of climate change has been brought home to several developing countries as they begin to come to grips with the devastating effects of rising sea levels and desertification. Whatever the motivations, resolving the strong society/weak state conflicts surrounding deforestation, and climate change in general, is an essential task given the stakes involved.

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