

REDD+ at the crossroads

Choices and tradeoffs for 2015–2020 in Laos

Michael B. Dwyer Micah Ingalls



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Executive summary

This study examines key choices and tradeoffs that confront current efforts to reduce emissions from deforestation and forest degradation (REDD+) in Laos. Drawing on key informant interviews and document analysis conducted between late 2013 and late 2014, it builds on recent work by other scholars on REDD's policy landscape and wider sociopolitical context in Laos, but focuses on the landscape of projects as a window into policy-level debates. Policy has long been an uncertain arena in Laos, both for REDD and elsewhere; looking at the project scale helps provide insight into how the current balance of clarity and ambiguity, both domestically and globally, are being addressed by Laos's REDD practitioners. We focus on three sets of choices and tradeoffs: (1) those involving driver engagement - namely, the choices and tradeoffs that surround which drivers of deforestation and degradation REDD projects attempt to mitigate; (2) choices and tradeoffs involving spatial transparency and development planning, which are relevant to many spheres of governance but have special application to REDD's process of impact measurement (or reference levels); and (3) choices and tradeoffs related to property formalization, which are also relevant well beyond REDD, but impact REDD efforts through their influence on forest loss related to insecure livelihoods at the farm-forest edge.

We argue, in short, that REDD is at a crossroads in Laos, and needs to "think bigger" – both to remain relevant, and even to survive. To date, REDD projects have made relatively conservative choices on driver engagement, focusing on smallholder-related drivers like shifting cultivation and small-scale agricultural expansion, to the exclusion of drivers like agro-industrial concessions, mining concessions and energy and transportation infrastructure. While these choices have been based on calculated decisions made in the context of REDD project

areas, they have created a pair of challenges that REDD practitioners must currently confront. The first is lost opportunity. By not engaging industrial drivers of forest loss, REDD misses an important chance to engage with high-level economic decision making; this has implications not only for climate mitigation, but more importantly for current efforts to make Laos's current trajectory of natural resourceintensive development socially, environmentally and economically more sustainable. The second challenge is more immediate. Due to the political-economic circumstances under which forest loss occurs, there is a significant gap between loss that is planned and loss that can be accounted for under REDD's "national circumstance" allowances for planned deforestation. This means that REDD's positive impacts on mitigating forest loss, to the extent that they occur, may be swamped by planned but unaccountable forest loss, and thus difficult or impossible to verify. Thinking bigger on issues from driver engagement to spatial planning and concession regulation to land tenure and rural livelihood possibilities thus presents not only a series of opportunities, but a series of imperatives.

Following two overview sections on the current state of REDD efforts in Laos, we present three sections on the three sets of choices and tradeoffs outlined above. The conclusion then discusses ways in which industrial drivers of forest loss could be usefully engaged. We focus on the significant potential for shared analysis and policy action that exists between REDD's existing challenges and current government efforts to make development – and particularly investment – more effective from an economic perspective. While such an approach must include social and environmental considerations, it privileges the economic arena as one where opportunities exist on issues that have, thus far, been REDD's greatest stumbling blocks.

1 Introduction

Efforts to link climate change mitigation to improved forest management in the global south have been difficult from the start. Initially avoided deforestation was deliberately left out of the United Nations Framework Convention on Climate Change (UNFCCC) process because it threatened to both sidestep the problem of reducing emissions in the global north and create "moral hazards" when it came to paying people *not* to do something. Then, when the project currently known as REDD+ did eventually emerge – first through the proposal to reduce emissions from deforestation, then from adding degradation to the equation, and finally through including carbon stock enhancement and sustainable development (the "+") – it did so amidst a volatile mix of science and politics. Proposed by the Coalition of Rainforest Nations and created specifically to push avoided deforestation in the name of development (Somare 2005), REDD fit both the evolving climate science and the offsetbased model to emissions reduction established under the Kyoto Protocol (Stern 2006). As REDD has developed, it has continued to face concerns about its scientific effectiveness, its distributional impacts vis-à-vis rural smallholder and especially indigenous communities facing longstanding political and economic marginalization, and its ability to meet competing demands on both of these fronts simultaneously. Confounding the distinction between technics and politics that has been a cornerstone of post-war development, REDD was born techno-political (Mitchell 2002) and has remained so ever since.1

REDD's key pieces – analysis of and engagement with locally relevant causes (or "drivers") of deforestation and forest degradation; monitoring, reporting and verification (MRV) of those engagements in order to measure their impacts; and social safeguard mechanisms to make sure that the cure is not worse than the disease, so to speak – exemplify this technical and political mixture. Deforestation and forest degradation span a range

of socially, economically and environmentally complex drivers, from the livelihoods of marginal smallholders to the mining of high-value timber by elites, as well as a range of socioeconomic goals, from rural industrialization and infrastructure building to addressing corruption's persistent drain on national treasuries. MRV systems and REDD safeguards, for their part, sit respectively astride a key tension that all modern societies confront: the economic impetus to commodify natural resources for purposes of development and trade, and the regulatory impetus to protect society – including communities, landscapes and even the economic system itself – from the negative consequences of particular commodification efforts (Polanyi 1957). Given this range of engagements, it is hardly surprising that as REDD has become closer to the ground in the decade since it was first embraced by the UNFCCC, it has started to look less and less like the "quick win" it was initially conceived to be, and more like a new way to tackle the longstanding problem of underdevelopment. As one practitioner consulted for this study put it, "REDD turns out not to be such low-hanging fruit – the tree has grown a lot in the last five years!"2

This is not necessarily a bad thing. While some have been quick to judge REDD a failure as it has run up against issues such as illegal logging, insecure forest tenure and the prioritization of economic development by national policymakers in the global south, others point out that running headlong into the reality of development is precisely the point. Operational challenges, in this view, are an indication that the "REDD-plus window", as one practitioner described it,3 provides a way to actually engage fundamental development issues like land tenure insecurity, opaque spatial planning, poor forest management, and the heavy reliance on resource extraction for economic growth. For others, REDD itself is a far more limited vehicle - "a nice car," as one practitioner put it – "but you still have to build the road."4 This view of REDD as an accounting

¹ For ease of readability, this study uses the term REDD rather than REDD+ when the acronym appears in the middle of a sentence. It is not intended to distinguish between pre- and post-Copenhagen versions of the same.

² Interview, Vientiane, 2013. See below for methods.

³ Interview, Vientiane, 2014.

⁴ Interview, Vientiane, 2014.

framework rather than a governance reform program highlights the range of opinions about what REDD is and what it might or might not be capable of. This question of what REDD is, and what its ambitions are, underlie much of the material presented below.

The REDD landscape in Laos is quite heterogeneous; as one practitioner put it, "there are many ways to do REDD now."5 This is due to both local and distant factors. REDD's early days saw a rush of piloting efforts, but with the lack of a global climate agreement in Copenhagen in late 2009, REDD practitioners faced two related sets of choices. They had to decide how much to stick with REDD's "original" goal of creating verified emissions reductions versus how much to hedge into other types of development activities that could be pursued with "no regrets." To the extent that projects stuck with the original goal of creating emissions offsets, they also had to decide how much to pursue accreditation on the voluntary market and become offsetting projects in the present, versus acting as pilots for a future REDD scheme where demand - and carbon prices in particular - would be significantly higher. Today's REDD landscape, both specific projects and the institutional efforts to support them, thus grapple with questions of methodology, financing, and the balance between explicit REDD efforts and "no regrets" development and conservation.

The sections that follow examine three specific sets of choices and associated tradeoffs which help elucidate these questions. One of the most basic questions that any REDD project needs to address is where it is working and how. As we elaborate below, choosing a geography of REDD activities goes hand in hand with selecting the drivers of deforestation and degradation with which to engage in that project area. There is already significant experience with this process - indeed, a number of Laos's REDD projects have spent the majority of their existence dealing with this twin issue of driver engagement and project location. Looking at how projects engage (or decline to engage) with drivers of forest loss, and how they structure themselves geographically in the process, provides insight into where Laos sits within the global landscape of REDD, and points to how REDD efforts might need to change if they are going to take up the global call to engage industrial drivers of forest loss and make the development process itself more sustainable (Sunderland et al. 2008; Thomas et al. 2009).

A second set of choices and tradeoffs emerges once a project has selected its geography and particular drivers of interest; these involve the methodology attached to measuring the project's impact on emissions. REDD projects work – in the narrow sense, at least – by changing the rates or trajectories of forest loss; measuring these means not only accounting for deforestation and forest degradation after the project's interventions begin, but also figuring out what these should be compared to. This means developing a baseline and counterfactual scenario against which to compare observed results. If all forest landscapes were equal from a development perspective, this would be a technical but manageable endeavor. Because they are not – because forest landscapes sit in different positions on the "forest transition" curve (Mather and Needle 1998) - there are a range of ways to measure a given REDD project's performance against what might have happened in the absence of intervention (Angelsen et al. 2011). This takes REDD out of strict forest science and remote sensing into the realm of development studies and political ecology. Because REDD tries to allow for "national circumstances" which might otherwise conflict with development, a series of choices and tradeoffs emerge when it comes to actually trying to do this, especially in a data-limited environment. Laos's current national circumstances – notably the extensive use of infrastructure building as a source for, and sometimes as a cover for timber extraction by local rather than central authorities – make these issues especially difficult, but also especially important. Transparency of development planning thus emerges as a crucial policy arena for the practice of REDD in Laos.

A third set of choices and tradeoffs concerns decisions about land tenure recognition. These issues predate REDD, but influence it significantly through things like law enforcement and limited livelihood options at the farm-forest edge. In Laos, as elsewhere in Southeast Asia, private property formalization has focused largely on urban, peri-urban and, to a limited extent, well-defined agricultural areas. Forests, uplands and the farm-forest matrix, meanwhile, have not only been excluded from these efforts (LCG 2002; Biddulph 2010; Hirsch et al. 2010), but have also been targeted for land concessions as de facto ways to "clarify" and enforce state property rights claims through the pursuit of economic development (Dwyer 2013, 2015b). The concession landscape in Laos has, however, been an unstable one, with three national

⁵ Interview, Vientiane, 2014.

concession moratoria issued since 2007. Tenure issues, long identified as a key to making the REDD equation work (Lestrelin et al. 2013; Sunderlin et al. 2014), are increasingly within the scope of Lao policy debates about how to make development more sustainable and inclusive. How the international community engages in the next few years on this point is likely to be of major importance. As the material below suggests, REDD provides a potential entry point into these debates.

This study draws on key informant interviews and document analysis conducted between late 2013 and late 2014. It builds on the work of others such as Chokkalingam (2010), Fujisaki (2012) and Lestrelin et al. (2013) who have carried out significant research on the REDD policy landscape and wider socio-political context in Laos. To some extent, this study brings their analyses forward in time, given the changes of the last two years (RRI 2012; Creak 2014; Vientiane Times 2013b-2015b). But our focus is also different: we examined the issues discussed above by examining REDD projects on the ground, as experienced and navigated by practitioners, rather than as indicated and discussed at the policy level. One of the major themes in both research and everyday conversation about REDD policy is its uncertainty; as with elsewhere in the Lao land and forest sector (e.g. Whitington 2014), ongoing ambiguity on key issues is almost the norm rather than the exception. Looking at the scale of projects provides insight into how the current balance of clarity and ambiguity is being navigated by REDD practitioners. As discussed in our concluding section, lessons from this scale suggest ways that concerned actors might move forward vis-à-vis key choices and tradeoffs which currently loom.

This study argues, in short, that REDD is currently at a crossroads in Laos, and that it needs to "think big", both to remain relevant and even to survive. To date, REDD projects have made relatively conservative choices on driver engagement, focusing on smallholder-related drivers like shifting cultivation and smallholder agricultural expansion, to the exclusion of drivers like agro-industrial concessions, mining concessions and energy and transportation infrastructure. While these choices have been based on calculated decisions made in the context of REDD project areas, they have created a pair of challenges that REDD practitioners must currently confront. The first is lost opportunity: by not engaging industrial drivers of forest loss, REDD misses an important chance to engage with high level economic decision making; this has implications not only for climate mitigation, but more importantly for current efforts to make Laos's current trajectory of natural resource-intensive development more socially, environmentally and economically sustainable. The second challenge is more immediate: due to the political-economic circumstances under which forest loss occurs, there is a significant gap between forest loss that is planned and forest loss that can be accounted for under REDD's "national circumstance" allowances for planned deforestation. This means that REDD's positive impacts on mitigating forest loss, to the extent that they occur, may be swamped by planned but unaccountable forest loss, and thus difficult or impossible to verify. Thinking bigger on issues from driver engagement to spatial planning and concession regulation to land tenure and rural livelihood possibilities thus presents not only a series of opportunities, but a series of imperatives.

2 REDD+ in Laos: The project landscape

This paper uses projects rather than policy as the entry point into policy-level choices and tradeoffs for REDD in Laos. As noted above, the REDD policy landscape in Laos has been reviewed in a number of good studies recently (Chokkalingam 2010; Fujisaki 2012; Lestrelin et al. 2013; Chokkalingam and Phanvilay 2015; also see Eickhoff et al. 2012; MAF 2012). These authors emphasize many of the same issues examined at the project level here, and note the importance of future decisions in clarifying uncertainties that exist about, among other things, oversight and coordination at various levels and sectors of government, methodology for measuring and verifying the impacts of REDD project interventions, and benefit-sharing policies such that interventions are effective, equitable and sustainable. At the level of REDD policy, there has been relatively little change on these issues in the last two years, in part due to the REDD mandate being divided between two relevant ministries which are still negotiating how to proceed (also see Section 3). Many of the core issues identified in earlier studies thus remain highly relevant.

Moreover, the literature on Lao development has long emphasized the distinction between policy and practice, and emphasized the need to study the latter in order to understand "reality on the ground" (e.g. Chamberlain 2001; Rigg 2005; Fujita and Phengsopha 2008; Baird 2010a). In some cases, policy is ignored outright; Hodgdon (2008) framed his analysis of the southern Lao forestry sector in the mid-2000s in terms of "policy versus reality," highlighting the disconnect between the top-down theory of power enshrined in official policy narratives, and the discretion of local authorities when it comes to managing forest resources. In the last few years, this acknowledgment has begun to appear regularly in official discourse as well, at least in its English language version (Vientiane Times 2012, 2013a, 2014a-h, j, 2015a, b). In many cases, however, the relationship between policy and practice is not one of outright contrast so much as of diverse and sometimes contradictory interpretations. Governmental practice on the ground thus often reflects unpredictable and heterogeneous interpretations of policy, stemming from a mix of local circumstances, political culture

and the (sometimes vested) interests involved (Evrard and Goudineau 2004; Ducourtieux 2005; Stuart-Fox 2006; Baird 2010b; Dwyer 2011). Sometimes this goes to the point of contradicting policy entirely although, as the example of "illegal" logging shows, links to infrastructure or other development efforts tend to blur the lines and raise difficult questions (see Section 5). Understanding the current landscape of policy choices and tradeoffs thus requires, paradoxically, less of an understanding of the current policy landscape per se than an understanding of the actual landscape over which different policies are "draped," so to speak, as they are translated from abstractions into concrete actions. The project landscape of REDD, as elaborated below, provides good access to this type of material.

REDD projects in Laos have been in operation since 2009, almost as long as "REDD readiness" activities have been pursued at the policy level. Figure 1 shows a rough timeline of REDD's roll-out in Laos, placing readiness efforts and projects (middle and bottom, respectively) in the context of REDD's evolution in the global arena (top). The projects listed at the bottom of Figure 1 are reviewed summarily here and elaborated (although selectively and sometimes anonymously) in later sections. Figure 2 provides a map of REDD project locations; details are provided in the text. Given the vagaries of project geography discussed in Section 4, the map in Figure 2 should be taken as indicative at best.

PAREDD: Laos's first REDD project was the Participatory Land and Forest Management Project for Reducing Deforestation in Lao PDR (PAREDD). Funded by JICA and based on a "detailed planning survey" conducted in early 2009, the project launched officially in August of the same year, targeting two districts in Luang Prabang province (JICA 2014). Illustrating the link between location and drivers elaborated in Section 4, PAREDD's geography and activities were a function of its focus on shifting cultivation stabilization as a remedy to deforestation and forest degradation. Xieng Ngun and Phonxay districts, both in Luang Prabang, are primarily upland areas with a history of research and development policy piloting (Ducourtieux 2005), and illustrate PAREDD's intent to pilot shifting cultivation-oriented REDD methodology for up-scaling throughout the

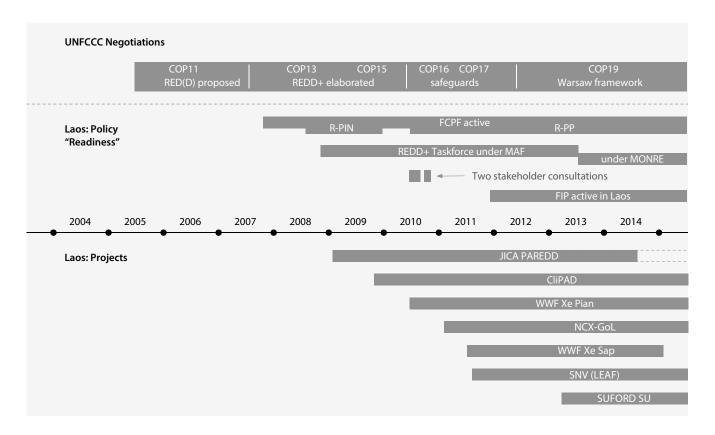


Figure 1. REDD+ timeline in Laos.

Source: Interviews, project documents, Chokalingam (2010), Fujisaki (2012) and Lestrelin et al. (2013).

north (JICA 2014). Project activities followed in the steps of PAREDD's larger predecessor FORCOM (the Forest Management and Community Support Project, implemented 2004–2009 in nine northern districts), and drew on a standard suite of upland interventions (cf. Baird and Shoemaker 2007; Lestrelin et al. 2011, 2012): community consultation, land-use planning, and efforts to incentivize alternative livelihoods to shifting cultivation. The project finished officially in August 2014, but was extended for a year so that its REDD component, still in development and/or peer review when the project ended, could finish the review process (JICA 2014).

CliPAD: The Climate Protection for Avoided Deforestation (CliPAD) project was created following a scoping survey in September 2009, just after PAREDD's official launch. Funded by a combination of German financial cooperation (from the development bank KfW) and technical cooperation (via GIZ), CliPAD, like PAREDD, sought to mesh a set of REDD-oriented criteria with an existing geography of donor project operations. Also like PAREDD, CliPAD sought to demonstrate the feasibility of REDD as pro-poor development, but departed from PAREDD's focus on the uplands

per se by prioritizing biodiversity conservation as well. Building on earlier project work by GIZ (then GTZ) and project partner the Wildlife Conservation Society (WCS), CliPAD chose the Nam Phui National Protected Area in Xayabouri province and the Nam Et Phou Loeuy National Protected Area, mostly in Huaphan province but also covering parts of Luang Prabang and Xieng Khouang. This first iteration exemplified a focus on National Protected Areas (NPAs) that would continue with other REDD projects (see below), but it also set CliPAD on a collision course with issues of technical and political feasibility which gave the project a very different geography in the final instance (see next section). The project's second generation is currently refocused on Huaphan province only, where it is pursuing a "jurisdiction-based" approach to REDD, pairing policy and institutional work at the province level (where emissions will ultimately be measured) with ongoing livelihoods-oriented work at the village level. This work is taking place in Hua Meuang and Sam Neua districts, both of which buffer the Nam Et Phou Loeuv NPA to the southeast (Figure 2), complementing additional work by WCS in the NPA to the west, as well as by the Dutch organization SNV in another NPA to the east of CliPAD's two target districts (see below).

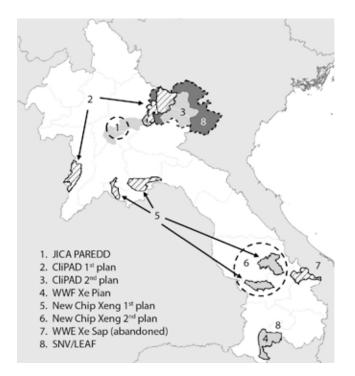




Figure 2. REDD+ projects in Laos, 2009-2014.

Source: Interviews and project documents.

WWF Xe Pian: In 2010, following several years of engagement in Xe Pian NPA focused on ecotourism, protected area management and corridor restoration, the World Wide Fund for Nature (WWF)-Laos, in consultation with WWF Austria and the Government of Laos's Department of Forest Resource Management (DFRM), decided to explore the possibility of a REDD project in order to secure long-term financing for the NPA through the sale of carbon credits. A feasibility study carried out by WWF and partnering agency, Austrian Federal Forests (ÖBf) in 2011; this determined that a REDD project for a subset of Xe Pian was feasible by a narrow margin, although it was limited largely by a lack of strong deforestation pressures. Due to high biodiversity and forest ecosystem values, as well as a desire to secure long-term funding for the conservation of these resources, WWF, ÖBf and DFRM agreed to prepare a project design document under the Voluntary Carbon Standards (VCS) methodology. In 2012, preparation of the Xe Pian REDD+ project document commenced using VCS methodology VM0015 (for unplanned deforestation), focusing on a subset of the NPA comprising approximately 60 percent of the total NPA area, excluding unthreatened core areas of the NPA and a militarized areas along the Cambodian border (also see next section). The project was built around carbon sequestration through improved protected area management via mapping, zonation and boundary demarcation (to restrict agricultural encroachment onto forest areas), improved

law enforcement (including patrolling of forest resource areas), and the promotion of sustainable livelihoods for forest dependent communities. The project document was completed and submitted in 2013. In 2014, the project was registered under the VCS and external validation began, using funding from WWF Austria and the Austrian Government.

New Chip Xeng: The New Chip Xeng (NCX) REDD project is a public-private partnership between the Lao Government and the New Chip Xeng Group, a Thai shipping company in joint venture with Honda in Laos (Lestrelin et al. 2013, 35). Endorsed by the Prime Minister's office in 2010, the NCX project initially prepared to work in four NPAs, two just outside Vientiane and two in the central Lao provinces of Savannakhet and Salavan (Figure 2). Following a pre-feasibility study in 2012, the project developers decided to focus only on the southern two NPAs, and conducted a biomass inventory and drivers analysis in late 2012 and early 2013. Since then, project activity planning work has been ongoing in response to the drivers analysis, as has more detailed forest inventory work designed to address the technical difficulties of measuring changes in central Laos's "open" (dry dipterocarp) forest landscape.

WWF Xe Sap: In 2010, WWF-Greater Mekong and WWF-Germany initiated the "Avoidance of deforestation and forest degradation in the border area

of southern Laos and central Vietnam for the longterm preservation of carbon sinks and biodiversity," or CarBi Project, with financial support from the German Government's International Climate Initiative (ICI) of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) through the German Development Bank (KfW). Within this program framework, WWF and DFRM initiated a REDD feasibility study in 2011, carried out in cooperation with the consultancy company Forest Carbon Partners. VCS methodology VM0015 was selected during the early consultation period in order to assess unplanned deforestation and explore the possibility of a REDD project within the NPA. The feasibility study indicated that shifting cultivation constituted the major cause of unplanned deforestation within the NPA, though it was acknowledged that a number of other threats, not calculated under the selected VCS methodology, from hydropower and road developments near the NPA, as well as illegal logging, may cause substantial loss of carbon. The threat of significant deforestation from shifting cultivation was not, however, high enough to justify a REDD project. The feasibility study indicated that possible revenue from the sale of carbon credits may be sufficient to cover the cost of MRV but would not provide for substantial funding beyond the costs. In consequence, WWF and DFRM determined that REDD was not feasible for Xe Sap NPA and the proposed project was abandoned in 2012.

SNV: The SNV Netherlands Development Organization has been involved in REDD work in Huaphan and Attapeu provinces since 2012. Working with USAID's Lowering Emissions in Asia's Forests (LEAF) program and the German-funded ENRICH program, SNV's efforts are geared toward developing livelihood-related forest management and enhancing capacity at the district and village level for REDD-related forest measurement and monitoring. Efforts are focused in Huaphan's Nam Xam NPA and Attapeu's Sanamxay district.

SUFORD SU: The Scaling Up (SU) Participatory Sustainable Forest Management project began in 2013. Known locally as SUFORD SU, it replaced its predecessor, the Sustainable Forestry for Rural Development (SUFORD) project (2003–2008, extended through 2012). Funded by the World Bank and the Government of Finland, SUFORD SU is the third project in a lineage that dates back to the mid-1990s, when the Forest Management and Conservation Program (FOMACOP) attempted to develop village production forestry in central and southern Laos (Katila 2000). The transition from FOMACOP to SUFORD

saw a shift from villages to state production forests and their managers as the targets of cooperation and empowerment. The project's current phase continues this approach of attempting to balance "participatory" forestry (involving villages that occupy, but are not acknowledged to own the forest landscape) with state forestry based on state ownership of forest, but adds a REDD component aimed at making the project's institutions more financially sustainable in the longer term. REDD planning began during SUFORD's extension phase (2009–2012) and is continuing currently under SUFORD SU. The new project scales up the footprint of the earlier one, targeting over three dozen officially gazetted production forest units as well as a "landscape" region in northwestern Laos designed to allow the development of interventions in villages outside the forest estate as well (Figure 2, right side).

In aggregate, Laos's REDD projects cover a substantial portion of the national landscape (Figure 2). While these projects have hardly "done REDD" in all of these areas, their extent shows just how much land is in play when it comes to questions of development and conservation at the farm-forest edge. Figure 2 begins to indicate the magnitude of some of the issues that are examined in the sections that follow. Before getting to the three sets of choices and tradeoffs discussed in Section 1, Section 3 presents a historical genealogy of the key land units that underlie most of the REDD projects discussed above: conservation forests, also referred to as NPAs; production forests, sometimes called PFAs (production forest areas) and protection forests, so named because of their dual watershed protection and military-strategic mandates. Together, these comprise Laos's forest estate, or what Peluso and Vandergeest (2001) call the political forest: the extent of land claimed by forest bureaucracies regardless of their forest cover and land-use status. Looking at maps like Figure 2, one might get the impression that these forest units are well-defined and that making REDD operational is a matter of being guided by their topologies – their boundaries as well as the "insides" and "outsides" they create. As Section 3 shows, however, Laos's forest estate is better understood as something more fractal and contested, a set of proposed polygons that looks different at different scales and that involves not only different logics of administration, but various (and in some cases competing) institutions as well. Given this uncertainty, a genealogical rather than explicitly historical approach is warranted. Such an approach highlights the questions that are still unresolved (Dwyer 2013), the answers to which are likely to be part of the REDD equation – and the land and forest governance equation more generally – for Laos's foreseeable future.

3 "Forget all these maps": A genealogy of the Lao political forest

Like many other countries in Southeast Asia, Laos has a substantial area of its territory classified administratively as forest. As in Indonesia, Malaysia, Thailand and Cambodia, forest in the administrative sense may or may not be forested biophysically, despite frequent slippage in everyday and official use. It is therefore important to differentiate forest in the biophysical sense (however defined) from the forest estate or, as referred to here, administrative or political forest. Laos's forest estate is of relatively recent creation compared to many of its counterparts in the region. While predicated on the doctrine of state ownership that underlies a number of colonial era forestbureaucratic efforts whose legacies are still widely apparent elsewhere (Peluso and Vandergeest 2001), Laos's political forest has been gazetted essentially within the last 25 years, and much of it within the last ten (Figure 3).

The forest zones shown in the project map above have their origins in a series of gazettement efforts shown in Figure 3. These began in the immediate post-independence period of the late 1970s with state and foreign donor efforts to create a domestic timber industry through the vehicle of state forest enterprises.

These operated in key forest landscapes throughout the country (Figure 3, first map from left). This effort, while limited in both its formal demarcation efforts and its economic successes, helped create the infrastructure of the timber industry which, when mobilized under the decentralization policies of the mid-1980s, enabled the logging boom of the late 1980s and early 1990s (Anonymous 2000; Dwyer 2011). Efforts to gazette Laos's forest estate followed this boom, and began initially as a protective response. Following Laos's participation in the Tropical Forestry Action Plan initiative, the country's system of NPAs original called National Biodiversity Conservation Areas (NBCAs) – was initiated in 1993 (Figure 3, second map). Production forests followed in the earlyto mid-2000s, reflecting an effort to rationalize and formalize timber harvesting in Laos's substantial but decreasing forest areas (third map). Around the time that Laos's Forest Law was rewritten,6 efforts began to demarcate the third current category, protection forests, which refers to both watershed protection and national security (fourth map).

As with other forest estates (see e.g. Fay et al. 2000), lines on paper do not mean lines on the ground. Of

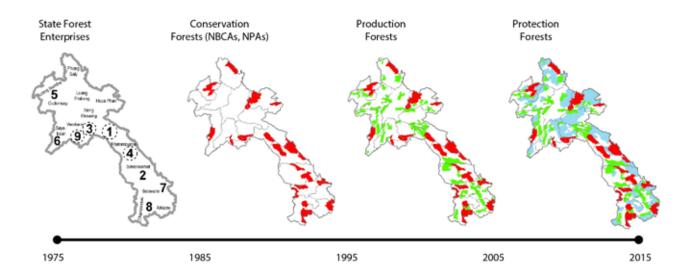


Figure 3. Development of Laos's political forest.

Source: Based on material in Sawathvong (2010) and Dwyer (2011).

⁶ This took place in 2008, and decreased the number of forest-administrative categories from five to three. The earlier (1996) Forest Law listed "regeneration" and "degraded" forest as legal categories as well.

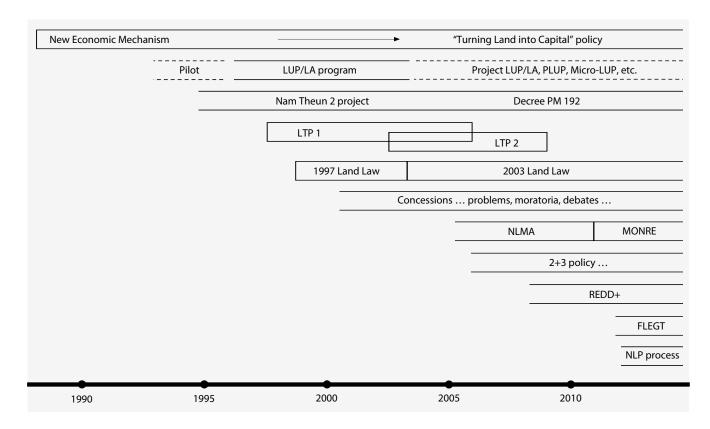


Figure 4. Key events since 1990.

the three forest categories shown in Figure 3, some NPAs and production forests have been partially demarcated, and many remain in various stages of demarcation. Protection forests are, by most accounts, generally un-demarcated or only in the earliest stages of demarcation. All three types of political forest are widely inhabited and farmed, with residents and land users numbering in the hundreds of thousands or more. In total, Laos's forest estate takes up roughly two thirds of the country's land area (Sawathvong 2010). Forest categories thus play an ambiguous role: insufficiently resolved to function as intended land-use categories, they nonetheless dictate, at least to some extent, where logging is illegal (namely in NPAs and, at least currently while management plans are being developed, in production forests). More often, despite being referred to frequently in the language of land use, their function is to divide administrative responsibility – or, put another way, regulatory turf - between different ministries and sub-ministerial offices.

In parallel to the macro-scale forest gazetting shown in Figure 3, a number of interventions were developed to govern land use closer to the ground (Figure 4). Among these, a tension has long existed between activities like land-use zoning and titling which endeavor to clarify and restrict what can be done where and by whom, and development mechanisms like state land concessions and compensation schemes, which are predicated on a significant degree of flexibility when it comes to mobilizing land for development. Activities like land-use planning and land allocation (LUPL/LA), piloted in the 1990s and subsequently up-scaled and adapted into project-specific variants, have been pulled in both directions. Sometimes they are interpreted as legal categories that constrain the land uses that can occur in a given location, while at other times they are treated as mere sketch maps or plans which are subject to adjustment if a "better" development option comes along (Barney 2007; Dwyer 2011). Land titling has played into this, at times unwittingly, by seeming to recalibrate the legal definition of private ownership while at the same time steering clear of concessiontargeted landscapes in favor of urban, peri-urban and to a limited extent lowland and non-forested agricultural areas (Hirsch et al. 2009; Thongmanivong et al. 2010; Dwyer 2013). Finally, as concessions have expanded over the last decade, policymakers and donors have stepped into the regulatory fray via a number of efforts aimed at alleviating concessions'

pressure on the rural land base. These include the remaining interventions shown in Figure 4, including the formalization of compensation regardless of title status (via prime ministerial decree 192, an outgrowth of the Nam Theun 2 hydropower project); trying to make land-use planning (LUP) either more participatory (Participatory LUP, or PLUP), or faster and coarser-grained ("micro" LUP); moratoria on land concessions in the agricultural and mining sectors (2007, 2009 and 2012); and the "2 + 3" policy (Shi 2008; Dwyer 2013, 2014), aimed at privileging contract farming over concession-based agribusiness investment.

This is the crowded landscape into which REDD has stepped. During this period, the institutional dimensions of this policy landscape have shifted in two directions at once. These are in tension with one another, and together, they are likely to determine the direction of land-related regulatory and development efforts, including REDD, in the coming years.

The first dimension concerns the regulatory mandate over the forest estate, which is currently shared between the Ministry of Agriculture and Forestry (MAF) and the Ministry of Natural Resources and Environment (MONRE). As the result of the 2011 decision to create MONRE (formalized in PM decree no. 435), control over conservation forests (i.e. NPAs) and protection forests passed to the new ministry (specifically DFRM), while control over production forests stayed with MAF. REDD was directly affected by this dissolution, in that leadership of the National REDD Taskforce passed to MONRE's DFRM, while most of the resources including the mandate to work with the World Bank's Forest Carbon Partnership Facility – stayed with MAF's Department of Forestry (DoF). This division has slowed the progress of the REDD Taskforce substantially. A number of informants consulted for this study described the reallocation of mandate as a hindrance, given its contribution of additional coordination and capacity issues to a field that was already challenged on multiple fronts.7

The question of the forest estate mandate is much larger than REDD, and concerns the division of regulatory responsibility between MONRE and MAF more generally. Before MONRE's creation, MAF was charged with managing all types of forest land,

7 Interviews, Vientiane, 2014.

albeit in coordination with local authorities. MAF thus represented the largest ministerial allocation of management responsibility under the 2003 Land Law, which divided land among eight categories: agricultural land, forest land, wetland, industrial land, communication land, cultural land, land for national defense and security, and construction land; and six ministries: Agriculture and Forestry; Industry and Handicrafts [now Commerce]; Communication, Transport, Post and Construction; Information and Culture; National Defense, and Security [or Home Affairs (see Land Law Articles 9 and 11). The law also envisioned a "national land management authority" (lower case) charged with, among other things, coordinating among these ministries and local authorities about the classification and management of land, and possessing the "rights and duties ... to allocate land-use rights, to lease or grant concessions, and to withdraw the right to use land" from existing users (Article 10). The 2003 law thus presaged the creation of the actual National Land Management Authority (upper case, NLMA) in 2005–2006, which was expanded and consolidated into MONRE in 2011. One of the key differences between the NLMA and MONRE, however, is that the former had a mandate of coordination and general oversight, while the latter has a territorial mandate as well. By receiving control over conservation and protection forests, MONRE has entered the fray of what scholars call ongoing state formation: the division of the state's development and regulatory mandate among particular institutions and actors.

This "regulatory turf" dimension looms especially large given what is perceived as the unworkability of current forest estate mapping from the perspective of local land use. This has significant implications for REDD. One informant explained this with reference to the protection forests shown at the right-hand side of Figure 3:

Take this six, seven or whatever million hectares of protection forest: in [one province], for example, there are [a few] districts that are *only* categorized as national protection forest – how should that work? The guidelines that have been put out, at least the English version, are not workable – really not workable. And even if you look at some of the *production* forest, [many] villages are entirely [inside this category], but there have never been any activities – it's all only on the map. The only areas where you can see any management activities are, in my understanding, the national protected areas and

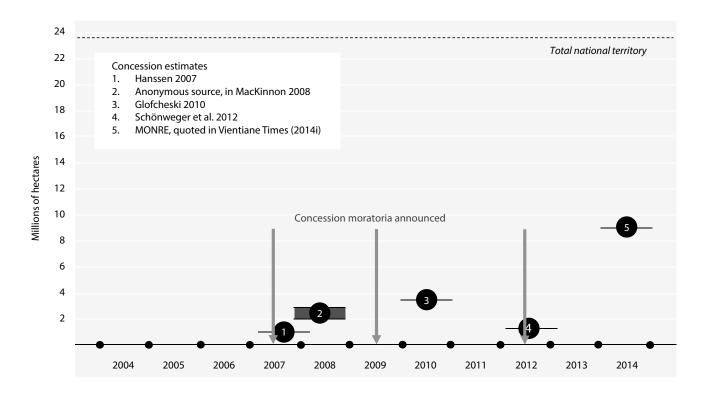


Figure 5. Published estimates of total land concession numbers for Laos.

some of the production forests that have been part of SUFORD – the rest is nothing. This is all about money. If they have the official mandate for this protection forest, even if everybody knows it's not manageable, every developer, everybody who's doing a project there has to go to the ministry – that's where the money is: Every hydropower developer in this area has to go to MONRE to get permits because of the land's legal status [as protection forest].8

The second dimension to present institutional setting concerns effort to address the *costs* of this struggle over regulatory turf by highlighting the bigger-picture conflict between smallholders and land concessions. The National Assembly has emerged as an increasingly important player in this regard, complementing the Prime Minister's Office and the Ministry of Planning and Investment in trying to operate strategically above the bureaucratic fray. The extent to which land concessions have been acknowledged as a mechanism in need of reform is illustrated by the issuing of three moratoria since 2007, as well as by the substantial uncertainty that has accompanied efforts to inventory land

concessions over the last few years (Voladet 2009; Dwyer 2011; Schönweger et al. 2012). Figure 5 shows a number of the total estimates, ending with one from late 2014 which was announced at a meeting of the Environment Sector Working Group (*Vientiane Times* 2014i). While it is difficult to discern a temporal trend from Figure 5 given that the estimates likely differ by scope (e.g. whether or not they include the energy and forestry sectors; see Schönweger et al. 2012; *Vientiane Times* 2014c), the recent, somewhat out-of-the-blue figure of 9 million hectares – suggesting that over a third of Laos's national territory is under concession – highlights the need to put inventory efforts on a more transparent evidentiary basis (Dwyer 2015a).

Over the last few years, the Lao National Assembly in particular has emerged as a vocal advocate for land governance reform. In 2011, assembly members began "a process of reviewing and revising various policies and legislation pertaining to land and natural resources" which culminated in the announcement of the National Land Policy (NLP) process in mid-2012 (RRI 2012). As some of the initial enthusiasm has been tempered over the last two years as the NLP process has become bogged down in debates (*Vientiane Times* 2013b, c), the Assembly has turned to the present unworkability

⁸ Interview, Vientiane, 2014.

of the forest categories. In August 2014, it issued Notice 273, which contained strong echoes of the pro-poor land rights rhetoric that accompanied the 2012 announcement of the NLP process (RRI 2012). The new announcement, issued shortly after hearings in July with MAF and MONRE, made it clear that the National Assembly sees a need to move beyond the institutional turf perspective outlined above and address the fundamental conflict over land use (rather than over regulatory mandate) that exists within the forest categories as currently demarcated. The Notice (a translation of which is reprinted fully as Annex 1) includes instructions to the relevant ministers and authorities to "re-survey and re-delineate the boundaries of the three [legally defined] forest types,

completely and with accuracy" in order to compensate for "areas that have been approved for other purposes" (e.g. concessions and infrastructure; see Section 5). It also advises state authorities to "give recognition to the rights to use these lands of the villagers [who live within the three forest zones as currently gazetted]" (see Section 6) (NA Cabinet Office 2014, points 1 and 3, respectively). The location of Laos's forest categories is thus currently in question, a development of which REDD practitioners have taken note. As the informant quoted above put it in reference to the images shown in Figure 3, "Oh, forget all these maps! ... This whole discussion – especially on protection forest – is far from over."

4 Choices and tradeoffs (i): Location and drivers selection

REDD is an explicitly spatial process. Like most natural resource management interventions, it addresses questions of not just what and how, but questions of where. Dealing with these requires access to spatially specific information which is sometimes difficult to get. It also requires decisions which carry a variety of spatial implications, both socially and ecologically. While REDD may be a win-win solution for global climate change in the abstract, addressing particular drivers of deforestation and degradation means describing and engaging the spaces in which these occur locally and regionally. This can have substantial tradeoffs when it comes to the on-the-ground realities that comprise the REDD landscape(s) described above (also see McShane et al. 2011; Hirsch et al. 2010). This section examines the relationship between driver selection and the REDD project spaces introduced above. Doing so shows the ways in which subjective social and political decisions lurk in the background of apparently objective ones. In highlighting the choices and tradeoffs related to driver engagement and project geography, this section points toward possible ways forward as REDD continues to navigate a complex development landscape.

One of the most striking features of the REDD project landscape in Laos has been its focus on NPAs. This focus is not exclusive, as illustrated by the PAREDD and SUFORD SU projects, but it is striking nonetheless. CliPAD, at least in its initial orientation, as well as NCX and both WWF projects all took NPAs as their target landscapes. This was largely by design. Both within the donor community and among host governments (in Laos and elsewhere), REDD has often been seen as a way to inject badly needed funding into protected area management. But as pointed out by a number of REDD practitioners, this has also meant deprioritizing the question of where the most deforestation is and what to do about it,10 and instead focusing on how to make REDD work in the context of NPAs. While not inherently bad, this has led to a focus on particular drivers and avoidance of others. One practitioner put it this way:

Perhaps it was a strategic decision by the government of Laos, but when all of these REDD demonstration projects came in, they were all directed to protected areas. In part, they probably knew that PAs were underfunded areas. But it's also [the case] that the only drivers that are particularly a threat to these protected areas are swidden agriculturalists, which you could also say are the low-hanging fruit, the easy ones to deal with: the opportunity costs are lower. So a lot of REDD [in Laos] and a lot of the experience to date means that there has been almost no engagement in terms of looking at some of the other drivers: infrastructure, large-scale concessions, that kind of thing. 11

In some cases, this focus on swidden agriculture to the exclusion of "the other" drivers was entirely by design. The PAREDD project, as noted above, picked its target landscape largely on the basis of trying to pilot REDD as a shifting cultivation stabilization mechanism. Whether or not this will be successful is still to be determined. The project is undergoing peer review, but an end-of-project review noted that land zoning efforts needed to be seen on a "middle- and long-term (by 2020) basis" since "villagers as well as staff of PAFO and DAFO [provincial and district agriculture and forestry offices] have struggled to achieve strict obedience to it" (JICA 2014, iv). In other cases, as this section elaborates in more detail, project geographies and driver engagement have been a more negotiated and iterative process. In all cases, however, driver choice and project geography have gone hand in hand, and the results to date have been an almost exclusive focus on what the practitioner quoted above called the "low-hanging fruit" of smallholder-driven forest loss.

4.1 Focusing on smallholders: Driver engagement by project

Both globally and in Laos in particular, scholars have noted the risks of focusing largely or exclusively on smallholders as agents of deforestation and degradation (Sunderland et al. 2008). Summarizing the (unpublished) national drivers study completed for Laos in 2009, one of the study's co-authors noted the implications of conflating agents with drivers: "Although the most important causes of deforestation are intensification of agricultural systems, transformation of natural forest land into industrial farming, and clear-cutting for earth metal mining or hydropower development, forest degradation is often blamed on the livelihood activities of these smallholder systems" (Hett et al. 2012, 391, citing Thomas et al. 2009). This pattern is supported by a project-by-project review of *drivers identified* versus *drivers engaged* in REDD efforts to date in Laos (Table 1). While most projects identified at least

one of the "other" major drivers – industrial tree plantations, infrastructure development, timber extraction, mining and hydropower – as important to their particular landscape of intervention, out of the projects that have selected which drivers to actually focus on, shifting cultivation and non-industrial (i.e. small-scale) agricultural expansion are almost exclusively the drivers with which projects choose to engage.

As is often noted by observers and practitioners, this may seem like an expedient approach to REDD – a way to fight deforestation and keep "opportunity costs" low, as the practitioner quoted above put it. But this approach carries a number of risks. As has

Table 1. Drivers identified and engaged by particular projects in Laos. Driver numbering follows Thomas et al. (2009), although project-specific variants are provided on the right side at the top.

Drivers Description by Thomas et al. (2000)	Other (project specific) variants
Drivers: Description by Thomas et al. (2009)	Other (project-specific) variants
1. Unsustainable wood extraction	Timber extraction; illegal logging; logging from production forest for government and household needs
2. Pioneering shifting cultivation	Shifting cultivation; upland rice cultivation; subsistence-based forest uses
3. Agricultural expansion	Land conversion for commercial agriculture; demographic expansion
4. Industrial tree plantation	Land conversion for industrial plantations; forestry plantation
5. Mining	
6. Hydropower	-
7. Infrastructure development	State infrastructure construction; road building
8. Fire	Forest fire
9. Urban expansion	

	Drivers identified											D	river	s eng	gage										
Project	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9							
JICA PAREDD	✓	✓	✓	✓				✓			✓	✓													
CliPAD Nam Phui	✓	✓	✓				✓	✓		None															
CliPAD Xayabouri JNR	✓	✓	✓	✓	*	✓	✓	✓	✓	None															
CliPAD Nam Et Phou Loeuy	✓	✓	✓		✓		✓				See next line														
CliPAD Huaphan JNR		Based on above								✓	✓	✓													
WWF Xe Pian	✓	✓	✓				✓				✓	✓													
New Chip Xeng	✓	✓	✓	✓		✓	✓	✓	✓	Ongoing															
WWF Xe Sap/CarBi	✓	✓	✓	✓	✓	✓	✓			None															
SUFORD SU	TBD												TBD												

^{*} Present in one district

Source: Interviews and project documents.

been widely pointed out by both defenders and critics of REDD, both globally (Alcorn and Royo 2007; Sunderland et al. 2008; Chhatre and Agrawal 2009; Phelps et al. 2010; McShane et al. 2011; Sunderlin et al. 2014) and for Laos (Mertz et al. 2009; Hett et al. 2012; Lestrelin et al. 2013), focusing on poor and socially marginal land users carries equity and justice implications, especially if REDD ends up further criminalizing livelihoods that are already marginal. There is a substantial literature on the social and political marginalization of swidden agriculturalists in Laos and Southeast Asia more generally (e.g. Dove 1983; Li 1999; Fox et al. 2009; Mertz et al. 2009), and it is but a small step to see how REDD can play into continuing efforts to sedentarize shifting cultivators, especially if it places the stamp of legitimacy on a mode of governance that has been widely criticized on both social and environmental grounds (Evrard and Goudineau 2004: Baird and Shoemaker 2007: Thomas et al. 2009; Fox et al. 2011; Mertz et al. 2012).

Equally important are risks related to effectiveness. In focusing largely on shifting cultivation and other smallholder-"driven" types of deforestation and forest degradation, REDD may ignore an opportunity for which, as a science-based intervention in an authoritarian context, it is highly suited given the alleged sensitivity of many of the "other" drivers in Laos. Indeed, many REDD observers and practitioners (e.g. the authors of the national drivers study cited above) would argue that this was in fact REDD's original goal. Even more than this though, there is a risk REDD may fail even on its own terms. Changing the behavior of smallholders is a difficult task (Ducourtieux et al. 2005; Fujita and Phengsopha 2008), and the approaches taken in REDD so far have tended to view smallholder livelihoods in relative isolation from the larger drivers of deforestation and degradation in which they are enmeshed. This is particularly difficult in settings where carbon prices are low (as in the current voluntary market), and where the technical challenges of measuring forest degradation in patchy, mountainous landscapes are abundant (as they currently are). As elaborated in this and the following sections, REDD has charted a relatively conservative course by focusing on smallholder livelihoods, but its ability to persist in this vein is questionable. Thinking bigger may not only be a way of avoiding lost opportunities; it may also be necessary for REDD's very survival.

The rest of Section 4 examines this selective focus in greater detail, first through the case of the WWF Xe Pian project, and then through the case of

CliPAD. Both projects show the interaction of driver engagement with the geography of the project areas, a theme that Sections 5 and 6 continue to develop. The cases differ, however, in how they arrive at the pattern illustrated in Table 1. The Xe Pian project more or less started with a conservative engagement, but even then had to adjust its project area after running into some of the more sensitive drivers of deforestation and degradation along the Lao-Cambodian border. CliPAD, on the other hand, started out more ambitiously, aimed at a suite of relevant drivers including the nexus of logging and infrastructure examined further in Section 5. But as the project evolved its current spatial configuration, it converged on the more conservative pattern of smallholderfocused drivers discussed above. Examining these trajectories provides a window into some of the challenges and tradeoffs examined in more detail in Sections 5 and 6.

4.2 Selective engagement: The case of Xe Pian

The Xe Pian REDD project dates from 2010, when WWF began its REDD-specific consultations with Lao Government officials. These consultations indicated that subsistence-based forest uses and conversions were the primary drivers of unplanned deforestation, and led project developers to focus on areas within 5 km of existing villages, roadways and navigable streams. There was some deforestation as well in the northern part of the project area caused by foreign-owned plantations, but these were considered planned deforestation because they were authorized through concession agreements. Further, the project excluded areas in the core zone of the NPA, which was considered to be naturally protected by topography (steep slopes) and remoteness, and also outside the inability of project implementers to successfully manage and monitor activities there. Forest inventories carried out during project feasibility and project design phases resulted in a further reduction of the proposed project area to exclude problematic areas along the Cambodian border, where the assessment teams had been denied access by the military in 2011. Areas where military exclusion was only temporary, however, were retained within the official project area. 12 The final project area

¹² These temporary exclusions occurred in 2011, when survey teams were denied access for several months on the grounds that they would not be safe in areas where the military was clearing forests for purposes of road construction.

thus included 140,646 ha (roughly 60%) of the total NPA, and excluded core and militarized zones which respectively comprised approximately 52,000 and 47,000 ha (Figure 6).

This arrangement carries a few different sets of tradeoffs. First, project boundaries were initially chosen via the assumption that at-risk areas within the NPA were those that risked conversion to agricultural lands by subsistence farmers, a driver which was selected early in the project's life after consultations with government officials. As such, investigation activities during both the feasibility and project design stages focused attention on spaces within 5 km of settlements, roads and navigable rivers, and conversely excluded areas remote from villages or under direct control of state authorities. This resulted in the exclusion of the core zone, and it was thus something of a self-fulfilling prophecy that conversion for agriculture by local communities emerged as a key driver within the project. By contrast, consultation with communities inside the project area and within the project's reference region (a comparison area comprising most of the rest of Champasak and Attapeu provinces¹³) highlighted the role of state land concessions for commercial rubber and teak plantations as a cause of land scarcity

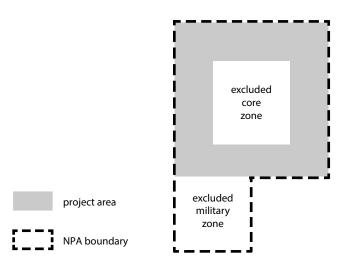


Figure 6. Schematic of Xe Pian REDD project geography.

Source: Authors' interpretation of project documents.

among local communities (WWF and ÖBf 2013). This meant that the project's intended activities – NPA management through mapping, zoning and boundary demarcation (to restrict encroachment onto forest areas); improved law enforcement, including patrolling of forest resource areas; and sustainable livelihoods promotion for resource-dependent communities – focused largely on proximate rather than ultimate causes. This exemplifies the combination of justice and effectiveness risks identified above.

Second, the focus on deforestation rather than degradation means that REDD's potential to address logging in the protected area is relatively low. In Xe Pian, as in many other protected areas in Laos, logging sits at the uneasy juncture of illegality and planned deforestation for infrastructure (FSCAP 2014; WWF 2014) Indeed, the distinction between the two may be in some cases a matter of perspective. REDD permits the exclusion of planned deforestation from carbon budgeting under the premise of allowing for "national circumstances" with respect to economic development (also see Section 5). It is relevant here in that the exclusion of the southern militarized zone from the Xe Pian REDD project is often framed in the same terms as the encroachment of plantations into the northern part of the protected area. Both are planned deforestation events, and are thus written into the baseline against which REDD activities' effectiveness is measured.

On the other hand, illegal logging is widely believed to be a key driver of change within the NPA, particularly within the militarized zone along the Cambodian border, where road building for purposes of national defense - formally justified under a 2011 prime ministerial decree (no. 111) – intersects with an extractive timber economy that is widely perceived as illegal. This perception is based on its occurrence inside one of Laos's most well-known NPAs, its heavy reliance on exceptional modes of state authority, and its involvement with international trade in rare, high-value and potentially endangered species like rosewood (EIA/Telapak 2008, 2011, 2012; Baird 2010a; Vientiane Times 2012, 2014b, e, f; Wadley 2014). According to local communities and forestry officials, this zone of exception exceeds the narrow border region permitted by the 2011 decree on security zones. Lao army logging camps and activities were reported to extend as far as 26 km from the border into the NPA, and to occur even inside village-owned community conservation

¹³ The reference region included the balance of the two provinces where Xe Pian is located, but excluded the highlands of the Bolaven plateau.

forest areas. 14 Although this potential for conflicting authority within the state was recognized and reflected in a "high risk" internal rating by the project, the lack of a mechanism for operationalizing degradation financially is particularly problematic for biodiversity values and community-level resource management given the association between illegal logging and wildlife poaching, and is potentially far-reaching via its impacts on local communities' resource tenure.

Taken together, these limitations mean that the economic benefits that REDD is able to mobilize are not only relatively limited in comparison to the actual deforestation and degradation, but also that when they begin to flow, they will flow to communities secondarily, if at all. Forest resources within Laos' NPAs are legally claimed by the state, which delegates usufruct rights to resident communities via the DFRM. As such, carbon resources in these areas are also claimed and allocated by the state, which formally serves as the project proponent. While these claims predate REDD's arrival, there had been little incentive for operationalizing this ownership previously in the absence of a market value for standing forest biomass. In the past, this has limited state intrusion into local livelihood patterns and the use of forest resources within these spaces significantly. The commodification of forest carbon resources within these areas thus potentially threatens local communities' already tenuous claims to resources. While the project was developed in such a way as to provide for at least minimal social safeguards for indigenous communities resident within and adjacent to the proposed project areas (necessary for all market-based carbon systems; see Smith and Scherr 2003), revenue streams from carbon sales will be structured such that they flow first to consultancy companies and international organizations to cover MRV costs, and then to the DFRM as the project proponent. Only after costs of management and administration are covered could benefits then flow to the communities who might otherwise be recognized as the resources' customary owners.

4.3 Relocating and rescaling: The case of CliPAD

More than any other REDD project in Laos, the CliPAD project exemplifies the tight link between target landscape and driver engagement. In the four years since its inception in early 2010, CliPAD has been transformed from a project aimed at two NPAs on either side of northern Laos into a single but multi-scaled project that operates at the jurisdictional scale in a single province and conducts localized work in roughly 70 target villages in two districts. In the process, the project has encountered a range of challenges, both technical and political, and has refocused from working within the Nam Et Phou Loeuy NPA to working in villages in its eastern border region. These transformations highlight the collision between REDD-in-theory and the realities of development practice, and show how one of Laos's most visible REDD projects has adapted to the challenges of trying to govern some of the more challenging drivers of deforestation and degradation. In summarizing this evolution of project geography and driver engagement, however, this section goes beyond replicating the narrative of conservative engagement described above. It also highlights the challenges that await REDD as an intervention that engages some drivers but must contend with others when attempting to measure its impacts.

CliPAD spent much of late 2010 and early 2011 getting established and launching field activities in its two intended target landscapes: the Nam Phui and Nam Et Phou Loeuy (NEPL) NPAs (see Figure 2, "CliPAD 1st plan"). Fieldwork in this context meant a mix of REDD-specific activities and more general development work. As the project began PLUP in various pilot villages, it also began the process of analyzing drivers of deforestation and degradation. These studies were completed in April and September of 2011, respectively, for Nam Phui and NEPL, and were followed shortly after by feasibility analyses (Moore et al. 2011a, 2011b, 2012; Travers et al. 2011). Project staff describe a chicken-and-egg situation in the process of melding REDD with project activities in areas where CliPAD had already committed to local and provincial authorities on the basis of a "pre-feasibility" analysis that had considered carbon stocks and the potential for deforestation, but had not actually examined the deforestation rates in either of the project's target areas. This came as "kind of a shock" to the consultants brought in to assess financial feasibility for REDD, and it meant that the actual feasibility analysis proceeded alongside the rolling-out of various pre-project activities like establishing field offices and hiring local staff.¹⁵ When the feasibility

Personal communication with second author, March 2013.

¹⁵ Interviews, Vientiane, 2014.

results came back, this created what one participant called "a moment of serious reconsideration" regarding the project's commitment to the NEPL landscape. ¹⁶ As another participant put it, "there was just no remarkable deforestation: no pattern of expansion, no frontier, no nothing – it looked like one gigantic noisy landscape from a remote sensing standpoint." ¹⁷

Around the same time, the Nam Phui feasibility study generated slightly more promising result. the project seemed, as one participant put it, "like it wouldn't get too far unless certain assumptions were made," but in Nam Phui at least there was a visible deforestation signature surrounding the largest enclave village in the northern part of the NPA, as well as a road running north-south through the NPA along which deforestation from the south could reasonably be expected to expand. This formed what the participant described as a thin but viable basis on which to proceed: "it was just [agricultural] expansion outside a single village – that's not driving global climate change." But it provided a way to keep moving forward in Nam Phui while figuring out what to do in NEPL.18

CliPAD's transformation from bi-locational "project-scale" REDD to single province "jurisdictional" REDD resulted from subsequent events. After a long process developing a methodological consensus about how to measure biomass based on Laos's earlier National Forest Inventory, CliPAD began the now "infamous biomass inventory" that took place – or rather, that began – in late 2011:

[This involved] a stratified random sample based on carbon pools and forest cover types, and kicked off in November, taking a 30-person field team of national, provincial and NPA staff out for a 2-week field training. It was really great – nice budget, all done in Lao language, and it got all the way through the training and was preparing to do quality control on five pilot plots. [The team] went out to do the first pilot plot, and everyone was exuberant, and then there was a phone call saying "you need to put things on hold for a minute." [A small group of project staff] went to Xayabouri city, and met with a high-up figure in the provincial military, who said in short "you

need to stop now: there's a new policy in effect, and it says that no foreigners can be working within 15 km of an international border." That killed the whole field season. ... After this, there was a very long engagement between CliPAD, the German ambassador, and the Lao Ministry of Defense, but in the end the Ministry of Defense said "the project needs to be cancelled" – done.¹⁹

As it turned out, this cancellation was not entirely final, and the project's hopes in Xayabouri were kept alive for a time by the development of "jurisdictional and nested REDD+" (called JNR within the REDD community), which came along internationally, right as CliPAD's project-scale problems were coming to a head. JNR refers to REDD interventions that are localized and measured, but are then accounted for at a larger (jurisdictional) scale like that of a district or province (FT/CF 2012). Throughout 2012, CliPAD applied the JNR approach to Xayabouri province as a way to place REDD more clearly in the hands – and interests – of provincial authorities, who were otherwise implicated in illegal forest clearing, especially in un-zoned areas (Eickhoff et al. 2012, 25).²⁰ The project's description of the JNR approach to Xayabouri echoes the history of the project's earlier challenges:

Under this new approach it will also be necessary for the GoL [Government of Laos] to take on a much greater role than under the previous projectlevel approach. Moreover, the Sayabouri REDD+ program must be seen as an approach demanded and undertaken by the Province itself and guided by the technical modalities and requirements of the INR and supported by CliPAD. For such an approach to work, CliPAD must break free of its "project" image, and be seen as supporting and backstopping a government-led initiative in a step-by-step way. This is especially true of provincial level authorities due to the need for provincial wide REDD+ implementation to achieve performance, including the need to develop province-wide REDD+ strategies. High levels of provincial leadership and ownership of this new approach are therefore necessary in order to achieve performance (Eickhoff et al. 2012, 7).

¹⁶ Interview, Vientiane, 2013.

¹⁷ Interview, Vientiane, 2014.

¹⁸ Interview, Vientiane, 2014; also see Moore et al. (2011a, 2012).

¹⁹ Interview, Vientiane, 2014.

^{20 &}quot;Uncategorized forest areas are ... highly susceptible to illegal or unmanaged logging and clearing for land concessions by investors and traders working together with local villages and provincial government actors."

Ultimately, negotiations with Xayabouri provincial officials broke down, and as of late 2013 CliPAD decided to focus its efforts exclusively on Huaphan. Here, just as it had offered a way around political problems in Xayabouri, JNR offered a way around the technical problems that had beset the projectscale efforts of CliPAD's first generation. By expanding the project's scale outward, away from NEPL exclusively, JNR allowed CliPAD to target the significant land-use change that was occurring outside the protected area, and that might in the future threaten its borders.²¹ In doing so, however, up-scaling to the provincial landscape introduced both new technical and political challenges. The first, as in Xe Pian, is that degradation is difficult to measure, especially in hilly terrain. As one practitioner put it, the interplay of topography and the vegetation turnover in small-scale agricultural systems is "such a messy thing," both politically ("is it forest or not?") and technically: "we looked at deforestation only because of methodological constraints – our belief is that degradation might be a bigger issue, but so far we have no tangible or credible methods to quantify that." And with REDD measuring deforestation only, the potential to finance sustainable development, in Huaphan at least, is "much, much less."²²

Moreover, the coordination involved in scaling up to a jurisdictional project is substantial. This can be seen as a challenge – which, of course, it is. But it is also the essence of the political process in many landscapes (Sayer et al. 2013), including those that contain Laos's significant land-based resources (see Section 3). The following summary of what jurisdiction-based REDD actually entails provides a fitting end to this section on project geography and driver engagement, and ushers in Section 5, which examines some of these coordination efforts as they apply to the setting of REDD baselines. The following section continues with the case of CliPAD, scaled up into the following context:

So one of the *huge* and perhaps I think underestimated challenges of going from a project-based to these jurisdictional based projects/ programs is the greater number of stakeholders, special interests, that you need to take into account. Because when it's based on the boundary of a protected area, it's very defined as to who's got management responsibility for that area: you're essentially working with one management body, and that just makes the decision making and the management a lot easier - even though that's [already] a big struggle. Now taking this to the provincial level, where you're going to have to get everyone's buy-in - ultimately it's the provincial governor that has to sign off on it, but you're talking about all the provincial departments in government, be it Agriculture and Forestry, Natural Resources and Environment, Planning and Investment, Energy and Mines, the military – I mean it's everybody: it's everybody, it's everybody.23

²¹ Interviews, Vientiane, 2013 and 2014.

²² Interview, Vientiane, 2014.

5 Choices and tradeoffs (ii): Spatial transparency of development

As the CliPAD project rescaled itself from "project" scale to JNR, it also relocated its target activities from those focused on the NEPL NPA to roughly 70 villages in Hua Meuang and (after Xayabouri plans fell through) Sam Neua districts. In moving toward the protected area's southeastern flank (see Figure 2 for reference), the project moved away from a significant but potentially (politically) difficult source of deforestation and/or forest degradation: the "heavy illegal logging, especially for rosewood trees," that was occurring in the "southwestern section of the NPA" (Moore et al. 2012, 46). As in the Xe Pian case described above. this shift in focus not only cut out a problematic area from the project's target region, it also focused the project's interventions more squarely on an agrarian transition - in this case a maize boom that has been in effect for half a decade or more (Vongvisouk 2014). The expansive nature of this boom, targeting the growth industry of livestock feeding across the border in Vietnam, gave the project something to latch onto.24 CliPAD's interventions in these roughly 70 target villages – including PLUP²⁵, agricultural extension, an unspecified livelihoods component (to be designed based on the wishes of the community), and village forest management agreements²⁶ – target the farm– forest matrix for formalized land-use management and rationalization, and are at first glance fairly standard offerings for rural development in Laos's northern uplands. On top of this is the REDD component, a payment for performance process negotiated through and grounded legally in the village forest management agreements. This is

funded via a bridging mechanism in advance of firmer commitments on a future compliance market.²⁷

One of the challenges with REDD, however, is measuring the climate-related impacts of development interventions which are targeted at villages and households, yet ultimately compensated according to land-use patterns observed and measured at larger scales. While there are different approaches doing this, all converge on the idea of a validated differential between a projected baseline (a so-called reference level [RL] or reference emission level [REL]) and what is actually observed. REDD credits or payments for performance emerge as the difference between the two.

Measuring the effectiveness of REDD interventions is difficult enough at what is typically called the project scale. One practitioner described it this way, noting the potential mismatch between remote sensing and the complex reality of a typical rural landscape:

REDD is a construct from remote sensing engineers - let's call them foresters with a remote sensing background. ... When you want to construct a reference emission level for deforestation only, remote sensing is probably an appropriate tool because you can observe deforestation with a fairly high degree of accuracy. The problem is that there are other processes which are not adequately resolved with remote sensing - shifting cultivation is one: you can see current patterns, but you can't see the past [since] after one or two years, the field that was abandoned is no longer distinguishable from other types of forest or vegetation. [Similarly,] if your driver is about overgrazing, you want to do something about large herds of ruminants ... And

²⁴ Interviews, Vientiane, 2013 and 2014.

²⁵ PLUP was developed by GIZ, and is being implemented in CliPAD villages intensively by GIZ and local government partners in a small number of villages, and by government alone using via funding from KfW) in the remainder (Interview, Vientiane, 2014).

²⁶ Interview, Vientiane, 2013.

²⁷ As one practitioner described it, "what's unique about the CliPAD program is that for the first 2, 3, 4 years – depending on the level of performance – there's a set amount of money already set aside to pay for performance. So, in a way, there are 2 or 3 or 4 years of grant money that's essentially going to simulate the market as the project develops and hopefully gets to the point where it can then access the market, if and when it ever gets there" (Interview, Vientiane, 2013).

in practice, you often have multiple drivers, and they overlap – fuelwood, grazing, timber, charcoal making: these things can take place at the same time in the same place. The problem with remote sensing is that you can see the *effect* of these processes, but you do not *see the processes* – you are blind, all you see is what comes out at the end.²⁸

Teasing out the effects of driver-specific interventions is difficult enough at the project scale, and likely increases as REDD scales up to entire administrative jurisdictions. There is currently a range of opinions within Laos's REDD community on how best to deal with this. Practitioners interviewed placed themselves and other practitioners on different parts of the spectrum between, at one end, remote sensingheavy approaches oriented toward calculating a single national RL using satellite data and, at the other end, relying heavily on activity- (and thus driver-)specific documentation, which could then be combined with remote sensing "as a correlation or validation tool."29 Practitioners also expressed differences of opinion about whether up-scaling made driver-specific evaluation hopelessly complicated or increasingly useful in teasing apart the impacts of intervention in a complex landscape.

One area where the projection of past baselines into future counterfactuals is both especially important and especially difficult concerns spatial planning and, in particular, the planning and construction of rural infrastructure such as reservoirs and roads. As noted in Section 4, REDD language from the UNFCCC allows for "national circumstances" to create adjustments in the RL setting process through the exclusion of planned deforestation (see Angelsen et al. 2011, among others). For some this is a straightforward matter. As one practitioner put it:

There is a lot of deforestation [in Laos], but a lot of it is not unplanned illegal. My position is that these infrastructure projects – and in particular hydro reservoir development – are a national circumstance. ... Laos will get a lot of lenience when it comes to establishment of infrastructure to develop the economy and drag this country out of its current misery. The development of these hydropower reservoirs: that's not even going to be a discussion about whether it will be accepted as national circumstance – that's just a given.

Basically these reservoirs become black holes: they never enter the baseline.³⁰

As other practitioners noted, however, this process of writing planned deforestation out of the baseline may be theoretically defensible, but it nonetheless requires a significant degree of transparent spatial planning in order to deal with what is sometimes called the forest transition (Mather and Needle 1998; Angelsen et al. 2011):

When you set your reference emission level, it's not just a projection of the historical: it may be the opposite case, where you have a really low initial [deforestation rate] and you expect it to increase much higher based on certain drivers - and that's where your drivers analysis comes in. So if you're not properly accounting for population growth, if you're not properly accounting for infrastructure development, or other factors that you can model, you might be over- or under-estimating. I think it's [even] harder [if there is] a larger area of analysis [as in jurisdictional REDD]. And this is the inherent difficulty of Laos. If you're establishing a reference emission level, you need to know what's going to happen in the future, which requires a certain amount of foresight, planning, and it also requires sharing information. So if you are actually planning on putting in a dam somewhere that's going to inundate 20,000 hectares of forest, in order to establish a reference emission level that shows that you are performing, [REDD practitioners] need to know that that 20,000 hectares is going to go. But that means letting people know that that area is going to be inundated more than three weeks in advance issues like that.31

Roads tend to be even more complicated. As illustrated in Section 4, roads are often built to help secure areas that are deemed "sensitive," and this makes transparent planning of the sort required by the REDD RL process difficult. As one practitioner noted with regard to roads, "it's not like 'let's map this out and do a big EIA [environmental impact assessment].' It's like 'let's get a contractor to come in from China and let them figure it out, and then we'll give them all the land on that road, and they

²⁸ Interview, Vientiane, 2014.

²⁹ Interviews, Vientiane, 2014.

³⁰ Interview, Vientiane, 2013.

³¹ Interview, Vientiane, 2013. This point was echoed in other interviews in 2014.

can take anything else along it that they need."³² The same informant gave an example of how this sort of thing affected the RL process, as an unexpected road was built through the NEPL NPA after the CliPAD feasibility analysis was finished. This turned out to be a mixed blessing:

There wasn't [previously] a road in NEPL, but the road that ended up going in after [CliPAD] had decided to go ahead with the project ended up being kind of a kicker [an added bonus], in a way. It sort of helps justify the REL, but, on the other hand, if they're going to put a road straight through the largest breeding habitat of Indochinese tigers in mainland Southeast Asia - they're going to put a road right through that habitat area with WCS working in the park and not having ever informed them that they're going to do it – even though that might be part of the REL, in terms of actual emission reductions and the ability for WCS and GIZ to actually have any behavioral change capacities, is actually probably quite low. The REL might be quite high, but the perception of what you can achieve in terms of emission reductions is actually quite skewed.³³

This example points to the competing priorities and in some cases the distinct centers of authority that complicate and can even sink REDD projects. As noted in Section 2, the CarBi project failed to meet REDD feasibility requirements because it was forced to deal only with shifting cultivation despite the presence of a range of other threats to the transboundary forest landscape in which it operates. As one of its public summaries elaborates, calling these threats "planned" deforestation in the sense intended by international guidance on national circumstances stretches credibility:

Extensive field surveys in the CarBi domain have focused on areas vulnerable to *large-scale unauthorized logging hidden behind approved infrastructure projects, such as dams, roads and mining concessions.* The result has been the identification of illegal transboundary timber trade in the CarBi area, and the mapping of the primary destinations of wood products from Xekong and Saravanh provinces in Laos. ... [E] stimates indicate that the outflow of timber products (in round wood equivalent) from

Xekong during the 2010–2011 logging season exceeded the officially issued quotas by over 200%, and the actual volume of timber removed from the CarBi monitoring area (Champasak, Attapeu, Xekong and Saravan provinces) in the same season exceeded the officially registered production of timber by at least 110%. ... Prefelling inventories are lacking or incomplete, concession borders are neither demarcated on a map, nor in-field. Timber is harvested wherever logging companies find desired wood, whether inside or outside concession boundaries. Evidence of intentional undervaluation of the quality of harvested timber and subsequent understatement of payments and charges, and inadequate documentation checking at the Laos-Vietnam border were also revealed. There is currently a clear lack of appropriate control and no functional system in place to ensure compliance (WWF 2014, 12, emphasis added).

The numbers reported above are actually fairly conservative in the face of some recent estimates (FSCAP 2014), and qualitatively speaking, the resource governance situation described above is in fact widespread in Laos (Baird 2010a; Barney and Canby 2011; To et al. 2014). While themes like illegal logging and mismanagement by local authorities have been especially visible over the last year or so (at least in Laos's English language media), possibly as a result of REDD activities,34 the lines of authority over allocating forest resources for purposes of development have been contested for well over a decade (Anonymous 2000). Previously, land and resource struggles within the state (cf. Sikor and Lund 2009) played out in semi-concealed arenas like ministerial and provincial government decrees or announcements. Prime Ministerial Decree 3, for instance, issued in 1996 after a five-year effort to control the logging boom of the early 1990s, carried the express goal of formalizing the land concession process and halting the ad hoc process of "granting of land for construction" practiced then - and still practiced today – by local authorities throughout the country (Dwyer 2011, 2013; Vientiane Times 2015b). Increasingly, these sorts of dynamics are playing out publicly on the pages of the Vientiane Times (2014ah, j, among others). For example:

³² Interview, Vientiane, 2014.

³³ Interview, Vientiane, 2014.

³⁴ One practitioner interviewed for this study remarked hearing from colleagues that his project's frank discussion of illegal logging was helping to open space about this topic (Interview, Vientiane, 2014).

[A member of the Lao National Assembly] who is involved in monitoring the government and anti-corruption activities, said he had uncovered many things that were against the national interest, such as adoptions and decisions made by administrative bodies not legally authorized to do so. ... He expressed his concerns about district and provincial administrations making decisions on logging and mining, saying he has informed the government but no action was taken (*Vientiane Times* 2012).

The relevance of these resource struggles to REDD is debated, but is often shied away from because REDD is seen as something imposed by the international community rather than a potential governance mechanism to be used by Lao authorities – indeed, the "risk" that REDD could drive a wave of forest recentralization that was identified by Phelps et al. (2010) seems almost beside the point. As REDD has entered the forest landscapes of the Lao hinterland, its efforts to transform forest categories (protected areas and others) into more than lines on the map have bumped up against local authority – provincial authority in particular. One informant interviewed for this study recalled a relatively recent incident in which an area of protection forest was brought up by a central-level official to a provincial counterpart: "he was [almost] thrown out by the province; they said 'this is not protection forest – come on what are you talking about?"35 These internal struggles over what scholars call state formation shape the trajectory of development across the global south, often profoundly. The UNFCCC exemption for national circumstances implies that certain answers will not be dictated: Laos has wide latitude, as the informant quoted above put it. But in opening up the economic and financial questions about how to best use Laos's resource-rich landscape for purposes of development, REDD has inevitably become entangled in these questions. Thus far it has yet to put what many observers would call "serious money on the table"; even as exceptional projects like CliPAD have dedicated funds to pay for performance, these are relatively modest. Other projects (PAREDD and Xe Pian, for example), have looked to the voluntary carbon market. If a global consensus continues to emerge that low-carbon development is both necessary and potentially punitive to least-developed countries, and must therefore be significantly subsidized by the industrialized countries (GCEC

2014, 22–23), REDD could be a forum in which conversations about sustainable development at scale replace the more modest and conservative efforts that have emerged thus far.

These debates go beyond the struggles over resource rents among elites. As the member of the Lao National Assembly put it, these issues have a clear public-interest dimension as well. A final dimension of the spatial planning question concerns the interactions of forest extraction with smallholder livelihoods. This came up in the Xe Pian case in Section 4, it appeared in Nam Phui and NEPL (Eickhoff et al. 2012; Moore et al. 2012), and it appears to be a fairly general feature of Laos's REDD landscape. The following account, from an informant who observed a REDD project's return to the field *after* the initial round of driver analysis results had already been presented to local authorities, emphasizes the involvement of local villagers in forest extraction:

What was disturbing was that when we went back to the field to plan mitigation activities, most of what we observed was illegal logging, or rather timber extraction. One villager showed us his stock of rosewood: because he is in the trade, [he had] a stock of 30 thousand dollars' worth, and that was in a very poor village of [...] district ...

[One day] in the late afternoon we crossed a convoy of 50 trucks with timber, I think it was all sawn timber felled by villagers who were provided with chainsaws. Of course, in the media, sometimes you see the trucks with roundwood, but [out here] a lot of wood is sawn directly on site into beams and then transported with Thai tractors. I'm sure these so-called furniture factories or sawmills [around the REDD project area] are just second landings for these rather small lots of beams – all with valuable species. Of course there were a lot of explanations the next day; we met [...] – and the explanations were like 'ah, this was timber from other provinces, this was timber from infrastructure projects, this was timber from other quotas. [And then] that same afternoon, [part of the team] met a convoy of ten Thai tractors with beams - in the middle of the day, the middle of the afternoon - they don't even hide it ...

Villagers always say it's the neighboring village – that's the standard story – but they openly talk about these things. I will always remember one discussion with a man, maybe 65 years old, who explained how in 1995 they were living in the

³⁵ Interview, Vientiane, 2014.

forest ... The first wave of development was illegal hunting, brought in by traders. And after that, around 2000, they started with logging. And of course this was the start of the money economy. But he also clearly said "we have rosewood for another two or three years, then *mai dou* and *mai deng* [two other valuable hardwoods] maybe for ten years, but then it's over. I don't know what we want to do afterwards." So he clearly had awareness of the future.³⁶

Experiences like these are genuinely troubling to practitioners who want REDD to be something other than the "green" grab that some critical scholars

have worried it would (or could) be. One key issue in sorting this out is land tenure. As illustrated above, policy decisions about land tenure are not merely about REDD's ability to distribute benefits to communities – the area in which they are often discussed (under the heading of "carbon tenure"). They are also about the capacity of REDD projects to engage the forestry version of what political ecologists call the simple reproduction squeeze (Watts 2002) – in this case, the drivers of deforestation and degradation that continue to operate because they provide opportunities for marginal land users to make their livelihoods a bit less marginal. These choices and tradeoffs are discussed in Section 6.

6 Choices and tradeoffs (iii): Property formalization

As elsewhere in Southeast Asia (and indeed throughout the world), property in Laos remains an area of significant contestation. This reflects not only the widespread conflict between de facto and legal norms of landownership (a fact widely noted by scholars and development practitioners), but also a significant, although lesser-known debate about what Lao law actually says. These two sets of conflicts wind their way through the REDD landscape in Laos at both the project and policy level, and highlight the extent to which questions of fundamental importance to REDD hinge on a series of larger governance issues.

It is common to come across statements like the following, which present landownership in Laos as comparatively straightforward, if highly problematic: "Under the Lao Constitution, all land in the country is the property of the state" (UNDP n.d.). This basic idea is echoed throughout the media, as in the statement by Radio Free Asia that "since all land in Laos is owned by the state, residents can be forced off their land with little or no compensation as they are pushed out to make room for development projects" (RFA 2012). State landownership has emerged as especially important in the age of economic land concessions, as the above examples attest. (The UNDP statement was also made in reference to a land concession – a now-infamous rubber project in southern Laos.) The problem is that statements like these are highly debatable, whether due to ignorance, a need to follow official rhetoric, or an interest in criticizing Lao law (and thus the Lao Government). The Lao Constitution is in fact quite strong in its defense of citizens' property, a reflection of both socialist ideals of smallholder ownership of the means of production and, perhaps more pragmatically, the government's efforts to reassure foreign investors. Much of the debate stems from how the Constitution is interpreted, in particular the phrase that "land is a national heritage" (Article 17). Thus the 2003 Land Law asserts that "Land of the Lao PDR is under the ownership of the national community as prescribed in Article 17 of the Constitution in which the State is charged with the centralized and uniform management [of land] throughout the country

and with the allocation [of land]..." (Article 3). Similarly, as Lestrelin et al. (2013, 24) note, Laos's "2007 Forestry Law establishes that all land classified as forest is owned by the national community and managed by the State."

Differing interpretations of what it means to "manage" land versus own it, legally speaking, have had significant impact on state and donor efforts to address the gap between de facto and de jure land holdings. Generally, approaches to this – whether involving land-use zoning or land titling – have focused on practices of formalization that elide the blurry terrain between formalizing something that already exists (e.g. a land-use category or property right) and introducing a new regime of governance or management in the guise of "mere" formalization. This has proven especially significant in Laos's Land and Forest Allocation program, where zoning efforts have often come into conflict with existing livelihoods – sometimes actively, but often passively. Land concessions, in turn, have converted a number of these passive land conflicts into active ones, as government officials charged with finding land for investors have sought to operationalize the State's legal mandate to "manage" land use, noted above (Barney 2009; Thongmanivong et al. 2010; Dwyer 2013). In some instances, this is supplemented with the argument that land is state-owned because it is untitled – a claim that, if true, nonetheless ignores the fact that titling has occurred only in a fraction of the country (Hirsch 2011; Dwyer 2013, 2015a; Vientiane Times 2014i). As this section elaborates, REDD sits within a much longer trajectory of efforts to confront questions of contested tenure in rural hinterland areas through a mix of zoning (focused on management) and titling (focused on ownership). These questions span both inter-institutional conflicts of the sort described in previous sections – both horizontally between ministries and vertically between different levels of government – as well as the more fundamental questions of politicaleconomic philosophy elaborated above. REDD's future in Laos is thus likely to be determined in large part by how these distinct, but intersecting sets of questions are addressed.

6.1 Zoning and titling: A genealogy of rural land tenure in Laos

The relationship between formalized zoning and land titling dates back to the early 2000s when, according to advisors who worked in the sector, there was an agreement of sorts between MAF and the Ministry of Finance (MoF). The former had been charged with conducting land-use planning and land allocation (LUP/LA) since the middle part of the decade. By the late 1990s, LUP/LA had emerged as a full-blown, if often thinly funded and quickly implemented nationwide effort. Like other agricultural sedentarization-cum-enclosure efforts that preceded it, LUP/LA sought to rationalize, stabilize and intensify shifting cultivation, as well as rein in provincial and district-level authority over land allocation "for development" at a time when it was increasingly problematic for centralized development efforts like hydropower (Dwyer 2011). Meanwhile, MoF had begun a land titling project in 1996, supported by the World Bank, Australia and Germany. While focused largely on urban, peri-urban and to a limited extent lowland and accessible agricultural areas, the Lao Land Titling project had identified rural land tenure as an issue of importance, and commissioned a study (LCG 2002) to evaluate the benefits and liabilities of expanding titling into more rural, upland and forested areas. The agreement between the ministries concerned a division of responsibilities: MAF would conduct zoning based on its technical expertise, and MoF would subsequently do the same with respect to land titling.³⁷

As it transpired, this plan came largely to naught. There is still significant uncertainty about precisely what happened, and where. LUP/LA statistics are generally circulated only in aggregate (Dwyer 2011), while field-level research conducted under the auspices of the titling project remains unpublished.³⁸ But the broad contours are relatively clear, in part due to a land conflict that erupted in mid-2007 and helped to trigger Laos's first concession moratorium (Baird 2010b). As titling operations scaled out through the Lao countryside, in many areas they focused on urban, peri-urban and lowland agricultural areas, and in the process missed entire districts – and in some cases entire provinces – where land concessions and other

6.2 REDD and land tenure: An open question

The Lao Land Titling Project ended, somewhat acrimoniously,³⁹ in 2009 with the World Bank and Australian Aid declining to fund a third phase of the project. German development assistance has nonetheless maintained a strong presence in the Lao land sector, and has provided a degree of continuity even as policy opinions about where titling should happen (and why) have begun to shift, in part due to GTZ's work (see Dwyer 2013). In parallel to the CliPAD efforts described above, GIZ has also been funding projects on land management for rural development which have in many ways been a continuation of not only earlier

plantation crop booms would subsequently emerge (Annex 2, cf. Barney 2007; Shi 2008; Kenney-Lazar 2012; Dwyer 2013). In other areas, however, titling and concessions occupied the same space, to a point: titling occurred in districts and even villages where plantation concessions were being developed roughly simultaneously. But despite being called "systematic," the titling operations that occurred tended to focus on residential land rather than agricultural land, likely due to a combination of reasons. In line with prioritizing the creation of cadastral maps for taxation purposes and formal collateral for lending to smallholders, titling teams were paid by the parcel, and thus incentivized to avoid larger and more complicated parcels. This included common lands which would likely have been excluded on legal grounds anyway, but it also excluded developed agricultural land. When the concession crisis erupted in May 2007, it was largely as a result of a Vietnamese rubber company in southern Laos bulldozing smallholder tree crops like coffee and teak that should have been titled under systematic titling efforts (Baird 2010b; Dwyer 2015a). In short, the plan to have titling follow zoning turned into something quite different: rather than operate sequentially, it created a series of largely separate zoning and titling processes which divided the landscape, almost fractally (i.e. at multiple scales), into a titled portion and an untitled portion in which zoning and concessions have combined to produce an ongoing contest between state and smallholder land claims. This second landscape - the untitled one is the area where REDD now operates.

³⁷ Peter Jones, personal communication, December 2006.

³⁸ Philip Hirsch, personal communication, December 2014.

³⁹ Interview, Vientiane, 2014.

GTZ rural development work, but also of policy-level inputs to the second phase of the Lao Land Titling Project. 40 As CliPAD has rolled out its development-oriented work in Xayabouri and Huaphan, another GIZ project has developed protocols for rural land titling, first at individual household scale, and more recently as a pilot for communal land registration in rural areas. 41 Complementing a series of other pilot efforts on communal titling conducted by the Nam Theun 2 Hydropower Project and the Swiss-funded Agro-Biodiversity Initiative (TABI) project, LMRED has contributed to efforts to create policy space for communal land titling that could be taken up by REDD in the months and years to come.

As described in one CliPAD report, land-use planning of the sort being undertaken by the project is a key first step toward communal titling:

Significantly, the PLUP process also allows for the issuance of individual and communal land titles. ... Community titles [in contrast to individual titles] can be granted on forest lands zoned as village sacred land, village use forests communal grazing lands and communal agricultural land but not village protection forests, village conservation forests and unexploited forest land that remain under the ownership of the State. Most importantly for a REDD+ project this means that the entire village swidden area can be given a communal title. While a communal title does not give the community the right to sell the land, it does give them greater ownership and control over these areas. It is hoped therefore that farmers will adopt more sustainable approaches to crop production and increase the value of this land. Few experiences to date exist with regards to land titling following PLUP. Therefore, while there is much optimism on the impacts this will have, it is yet to be seen how this will be implemented on the ground. Nonetheless, it was felt by both village and government staff that the current PLUP approach will go a long way towards reducing the need for additional land beyond the village boundaries. (Moore et al. 2011b, 23)

This PLUP-based approach is anchoring CliPAD's efforts to develop what the project calls village forest management agreements, which could ultimately form the basis for communal titles. Project staff, however, are quick to point out that "everything takes a long, long time here," and that developing a well-titled property system underneath the REDD project landscape is an aspiration that will likely not be met during the lifetime of the project. 42

Similar challenges confront other REDD projects. SUFORD SU, for example, has among the clearest commitments to strengthening the "tenure, access and resource rights" of the communities that live in and around Laos's production forest areas. The project's targets are ambitious; its inception document plans that:

Tenure, access and resource rights in PFAs will be strengthened by signing memoranda of understanding (MoUs) with [local] communities on forest management and rights and responsibilities therein; by providing collective leases to villages involved in forest restoration; and by providing community land titles in village-use forest outside PFAs. (World Bank 2013, 23)

The document elaborates plans to develop these at scale: by 2018, the project plans to develop 40,000 ha of forest leases, 45,600 ha of community land titles and just over 2.3 million ha of community MoUs (World Bank 2013, 17). One challenge of contemporary Laos's regulatory context is that the National Assembly instruction on re-demarcating the country's forest areas (see Section 3) threatens to create a chicken-and-egg situation vis-à-vis these tenure strengthening efforts, as they are predicated on knowing which villages are inside production forests and which ones are not. Perhaps more importantly, the modality of "tenure enhancement" that comprises the vast majority of SUFORD's plans in that area – the 2.3 million ha of community MoUs – face a stark challenge: they have to navigate the question of rights to timber rents in a landscape where production forestry for smallholder purposes has proven a consistently elusive goal in the face of state demands for revenues (Katila 2000; Hodgdon 2008; Barney 2009). On the other hand, if they fail to cut communities in on a significant portion of the revenues and/or provide meaningful new forms of livelihood, they face the threat of forest liquidation by the mix of "outsiders" and locals with limited options illustrated by the cases above.

⁴⁰ Between 2004 and 2008, GTZ produced, among other things, a set of 13 research studies on land issues in Laos (in both English and Lao languages) which are essential resources to anyone working in the Lao land sector.

⁴¹ Julian Derbidge, presentation at MRLG stakeholder workshop, 10 November 2014. This other project is the Land Management for Rural Economic Development (LMRED) project.

⁴² Interview, Vientiane, 2014.

7 Conclusions and recommendations

As REDD has gotten closer to the ground, it has looked less and less like the efficient offset mechanism imagined back in the mid-2000s (Stern 2006) and more and more like a serious effort to engage fundamental questions of economic development. Can the urgencies of climate change provide a way to weaken the historically tight linkage between deforestation and development in poor countries? Can infrastructure building and resource use in these countries be made more sustainable, and is it possible to measure the impacts of improvement efforts? Can existing forest tenure insecurity be alleviated in a way that local communities are able to manage forests sustainably rather than participate in their degradation and loss?

This study has taken stock of efforts to implement REDD in Laos to date, and has found that a mix of factors – some within projects' control, others far outside it - have pushed REDD toward the urgent need to confront challenges related to the questions posed above. Together, these issues - choices related to driver engagement and mitigation planning, spatial transparency and planned deforestation, and the land tenure issues which cross-cut a number of REDD's core features - suggest that REDD currently sits at a crossroads. On the one hand, REDD proponents could pack up and try something else: many observers of REDD have become cynical, given the scale of the challenges it faces, and some believe the best option is simply to walk away. A second option, favored by many, is to keep trying to "muddle through" the landscape of institutional, governance-related and politicaleconomic challenges described above, but to work on incremental improvements and rest assured that non-climate-related "no regrets" interventions such as biodiversity conservation and livelihoods development justify project expenses. This approach has the safety of the familiar, but as outlined above, it avoids dealing with major drivers of deforestation and forest degradation, and is subject to the vagaries of impact measurement. We propose a third option, elaborated below, that would pursue a series of policies and partnerships that are practically adequate to the scale of the challenges that REDD - and indeed, given their systemic nature, Laos as a whole currently confronts. This approach is predicated on

the seriousness of climate change, as well as on the belief that Laos, however small vis-à-vis the global landscape, is a landscape of significance nonetheless for both REDD and development simultaneously. Our recommendations follow from this belief.

1. Lay the groundwork for engaging directly with infrastructure and industrial-scale agriculture.

As shown above, REDD projects in Laos have thus far tended to engage smallholder-related drivers of deforestation and forest degradation (namely swidden agriculture and small-scale agriculture) rather than more industrial drivers such as infrastructure and large-scale concessions for agriculture and mining. Sometimes this occurs at the project design phase (e.g. in the PAREDD project), but in many cases it occurs later, as projects encounter industrial drivers but choose not to engage them (see Section 4). While this avoidance has been for understandable reasons, REDD projects now face two challenges as a result: first, a lost opportunity of using a science-based process to tackle some of the toughest questions of forest governance and national development; and second, the operational challenge of trying to quantify the impact of REDD interventions in landscapes where industrial drivers create significant land use change that, due to the way that much infrastructure is built, is difficult to measure. Planned deforestation, in this context, is a lose-lose for REDD: it contributes to the avoidance of industrial drivers at the project design stage, but it then hampers the baseline (REL) process when these allegedly planned processes prove difficult to quantify. As a result, there is a serious risk that REDD's positive impacts, to the extent that they occur, will be swamped by the deforestation and degradation that result from activities that are seen initially as "planned" but are ultimately not quantifiable as such.

Engaging rather than avoiding the industrial drivers of forest loss provides a pathway to addressing this pair of challenges. Such an engagement would be difficult but ultimately useful, we believe, on the grounds that REDD provides not only a science-based framework for addressing difficult political-economic issues, but also because REDD's key pieces – locally specific drivers analysis, mitigation activities, MRV, development-adjusted RELs, and safeguards –

are sufficiently broad to engage the full dimensions of the challenges that REDD confronts. REDD, in short, contains an analytical framework that is practically adequate to the scale of the problem. Mobilizing this framework to actually *engage* the industrial drivers of forest loss, however, requires a number of additional steps.

1.1. Build greater shared interest with government partners by framing REDD through the language of economic development. A key opportunity for improving REDD's traction on industrial drivers of forest loss stems from the fact that the challenges associated with these drivers are of significant concern to central government actors trying to mitigate revenue loss due to timber "leakage" and improper concession regulation. The findings presented above complement other recent research (FSCAP 2014; Chokkalingam and Phanvilay 2015; Thomas 2015) suggesting that forest extraction as currently practiced in Laos tends toward the "low quality" end of the investment spectrum: it adds to GDP (OECD 2013), but often takes more than it contributes to the domestic economy.⁴³ By highlighting REDD's capacity to contribute to current government interests in improving investment quality and increasing investment's contribution to gross national income (GNI, or the fraction of GDP that stays in country), REDD's proponents could find allies among government sectors charged with improving economic management of the country's resources. Such an approach would continue to recognize REDD's conservation goals, but would also add economic development, management and regulation to the suite of governance issues toward which REDD is addressed.

1.2. Cultivate dialogue with new partners at the level of strategic economic planning. Efforts to develop REDD to date in Laos have worked mostly at the technical level, focusing initially on MAF/DoF, and after the shift in REDD's institutional mandate in 2011 (see Section 3), expanding to MONRE/DFRM. As REDD project efforts have progressed downward toward on-the-ground implementation, they have been forced to address coordination across a number of relevant sectors, especially with the strategic economic decision making that operates at the provincial level. As shown above, this has brought

REDD into conflict, both directly and indirectly (e.g. via changes in project geography), with other economic priorities (see Section 4). Expanding the framing of REDD to include economic priorities of the type described above should, we argue, come with an expansion of dialogue to include partners like the Ministry of Planning and Investment (MPI) and possibly other institutions in the Lao Party-state (phak-lat) structure that are concerned with long-term strategic economic research and planning. Strategic economic thinking within the Lao Government is currently looking to a horizon of fifteen years in addition to the standard five-year planning process, and is increasingly focused on questions of how to make investment better serve the needs of the rural population (Sisouphanthong 2014; Pravongviengkham 2014). Given the challenges currently confronting the forestry sector, the mechanisms that REDD offers – in particular for dealing with planned deforestation – should appeal to economic planners because they can help close the gap between centrally planned forest loss and forest loss that is locally authorized but not captured in official plans, budgets and tax rolls. Better accounting for planned forest loss via concessions and infrastructure should thus appeal to central-level economic planners because it helps to address the "leakage" of forest resources, not simply via corruption, but through local authorities' longstanding practice of allocating land for development in ways that elude central oversight (Dwyer 2011).

1.3. Increase coordination between REDD and FLEGT to better regulate "planned" forest loss. The latitude that currently exists within officially authorized forest loss makes "planned" deforestation significantly larger than deforestation which is "accountable", both for REDD purposes and otherwise. This stems from state authority often relying on ad hoc interpretation of laws and Party-state authority, as well as reliance on provincial and district-level instructions, notices, etc., in order to accommodate local circumstances and competing priorities (Ducourtieux et al. 2005; Wong 2006; Baird 2010a; Dwyer 2011). As part of Laos's commitments under WTO accession, however, the government has embarked on a muchpublicized effort to develop a legal sector master plan and make Laos a "rule of law state" by 2020 (Vientiane Times 2013a, 2014d). While there has been some hedging on the precise date by which (full) rule of law will actually occur (Vientiane Times 2014d), the importance of illegal logging as both an economic development issue (FSCAP 2014;

⁴³ The UNDP's former chief resident economist in Vientiane defined quality investment as "investment that contributes more than it takes from the country" (Glofcheski 2010: 2).

Chokkalingam and Phanvilay 2015) and a credibility issue vis-à-vis the public (Vientiane Times 2014b, c, e-h, j, 2015a) make the forestry sector a key area for strategic improvement. A key challenge is that "illegal" logging is in some cases locally authorized, and dealing with it is thus not simply a matter of prosecuting criminals, but also of changing the way state authority works. This, however, is precisely the regulatory terrain where REDD offers benefits for economic planners (see above), and where REDD and FLEGT could profitably operate together – REDD from the perspective of planned versus unplanned forest loss, FLEGT from the perspective of legal versus illegal activity. This could help integrate both REDD and FLEGT into strategic economic management of the type described above, and would use FLEGT's focus on legality to sharpen the definitions of planned deforestation.

1.4. Commit resources that are adequate to the scale of the problem. International experts often point to the lack of political will when it comes to strengthening forest governance, but it is essential to note that the industrial drivers of forest loss are deeply entwined with the political economy of development in contemporary Laos. Since the 1990s, timber has played an important if often opaque role in development, as a national-level budgetary stopgap (Anonymous 2000), in feeding provincial and district-level economies and patronage networks (Hodgdon 2008; Baird 2010a; To et al. 2014), and as part of the ways in which local authorities allocate land in exchange for infrastructure like roads and buildings (Dwyer 2011; cf. Vientiane Times 2015b). "Conversion timber" from infrastructure and concessions is thus currently believed by many in the sector to be the primary source of commercial timber produced in Laos today (Barney and Canby 2011).

Engaging the industrial drivers of forest loss thus means thinking big, and in particular, thinking as big as the economic processes that currently drive forest loss. This means developing partnerships of the sort described above, which are necessary to help REDD shed its image of donor-driven governance reform and instead speak to core strategic concerns of economic planners within government. But it also means bringing resources to the table that extend beyond the knowledge and technical expertise that is often put at the forefront of donor contributions. Technology transfer (e.g. the skills to measure forest loss and gain in degraded landscapes, or develop realistic counterfactuals against which to measure programs' impacts) are

important, but the importance of capital resources cannot be understated. The development policy framework under which many of the processes discussed above are rationalized – from the use of timber to fund infrastructure, to the granting of mineral development leases, to the use of concessions to develop undeveloped resources at all levels of government – is, after all, called "turning land into capital" (han thi din pen theun, literally using land as capital). This has been official policy since at least the mid-2000s (Dwyer 2007), and reflects a longer trajectory of development efforts under adverse conditions and limited options (Walker 1999; Rigg 2005; Dwyer 2011).

The urgencies of climate change provide a strong rationale for greater international efforts to expand this limited set of development options, both in Laos and other forest-rich but economically poor countries, at levels not seen since the Cold War. As the authors of a recent study on "The New Climate Economy" describe, the shifting to low-carbon modes of development is both an economic and biophysical necessity. It will be politically difficult everywhere, they note, but especially so in low-income countries where development rather than conservation or efficiency continues to be the overriding priority. The authors – a group of eminent economists, business leaders and former heads of state - point to the need to engage and in particular to *finance* greener forms of infrastructure and industrial development, arguing that "the developed world has an obligation to provide developing countries with additional financial, technical and capacity-building support to enable them to finance lower-carbon and more climate-resilient investment strategies" (GCEC 2014, 23). In reminding wealthy countries of "their agreed goal of mobilizing USD 100 billion per year in public and private-sector finance by 2020" (GCEC 2014, 23), they suggest that the "billions and billions" of dollars conjured for REDD a few years ago⁴⁴ were not far off the mark after all.

On this basis, we outline a series of areas where re-framing, re-engaging and up-scaling of the sort discussed above might reasonably be negotiated.

2. Concession reforms. Over the last few years, the Lao Government has undertaken a number of efforts to improve the governance of the concession process across multiple sectors. Since mid-2012 there has

⁴⁴ Interview, Vientiane, 2014.

been a moratorium in effect on new concessions for rubber, eucalyptus and minerals. This has proven prescient in light of the recent fall in rubber and mineral prices. At the same time, the government launched the National Land Policy process which, despite the delays mentioned in Section 3, is still in process and in need of inputs.⁴⁵ In the forestry sector, building on earlier efforts to establish forest inspection capacity, there has been a ban on logging in national production forests, as well as an effort to inventory timber stocks in various industrial processing facilities throughout the country (Vientiane Times 2014b, f, h, j). Taken together, these processes suggest that governance reforms are indeed being considered at the central level. We suggest two areas with significant possibilities for collaboration.

2.1. Gazetting. One area where concession governance could be especially improved is by requiring that concessions go through a process of gazetting, or public posting, similar to laws. Under WTO accession commitments, Laos has made its official legal gazette into an online portal. From 2015 onward, all laws are required to be posted there in order to be legally valid. 46 Requiring something similar of concessions – specifically a public display of their intended geographic target region, ideally as part of the approval process – could provide a more efficient alternative to the current system, where central government researchers attempt to gather data from provincial- and district-level administrative and technical offices, but frequently run into an array of bureaucratic and logistical hurdles (Schönweger et al. 2012). Shifting the burden onto local authorities and private developers could help make the concession process more transparent during the time it is transpiring (also see 2.2 below), and would serve the interests of central-level economic planners, forest managers and rural communities alike.

2.2. Surveying and impact assessment. A second and related area where concession governance could be improved in ways that serve both economic development and sustainable forest management is through improving the surveying process. Although concession maps are often in short supply, even within government (Schönweger et al. 2012), many

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concession projects conduct extensive surveys – sometimes involving multiple visits to the same place (Laungaramsri 2012) - in their efforts to find land for projects (Thongmanivong et al. 2009; Dwyer 2013). The problem is that the survey teams employed for concession projects often look for land that is "available" biophysically (i.e. that is not under *production* at the time of the survey) but that is not *socially* available. Surveys thus target fallow and grazing lands for conversion to commercial plantation crops, sometimes explicitly in order to avoid putting agribusiness projects in forested areas (Dwyer 2011). The problem, however, is that as described in Section 4, rather than creating the intensification of production or "modern" production that is hoped for, this can instead displace existing smallholder livelihoods into forest areas, either through direct land clearance or via participation in timber-based livelihood alternatives (see Sections 4 and 6). The need for more accurate surveys has been articulated by Lao Government leaders for a number of years, beginning with the country's first concession moratorium in 2007 (Dwyer 2007, 1) and continuing subsequently. Providing alternative sources of funding, so that concession surveys are not forced to rely on the support of actors (e.g. companies) that stand to benefit from the results, could reduce conflicts of interest, make surveying more accountable to government planners and local communities alike, and create an arena for collaborative regulatory reform. Alternatively, embedding surveying within larger processes of environmental and social impact assessment (ESIA) across a range of sectors (mining, agriculture, infrastructure, etc.) – could help improve current practices by creating a layer of independent research,

3. Tenure enhancement. As discussed in Section 6, REDD currently confronts a social landscape in which land and forest tenure among smallholders is highly insecure. While this is the result of a series of policy choices over the last few decades, it is of increasing urgency today. Improving the tenure security of communities who live at the farm-forest edge through a mix of policy and formalization mechanisms can, we suggest, help strengthen smallholder livelihoods and reduce forest degradation and loss due to a shortage of viable livelihood options. While tenure is not sufficient, it is arguably a necessary component of alleviating forest loss of the type that is currently occurring in Laos's REDD landscape.

even if the process is ultimately funded by developers.

⁴⁶ Interview, Vientiane, 2014. The URL for the gazette is laoofficialgazette.gov.la.

- 3.1. Policy-level mechanisms. As discussed in Section 3, smallholder tenure remains an important policy issue. While questions remain about the National Land Policy process, these may represent an opening to engage high-level policy makers on as-yet unresolved issues of tenure. Moreover, the National Assembly's instruction to develop "appropriate management mechanisms" with which to recognize and sustain local communities' rights to use land for agriculture and community forestry (NA 2014, see Annex 1) signal an important policy opening. Given the challenges of titling-based tenure enhancements, in addition to locally specific property formalization of the type described below (see 3.2), it is important to pursue approaches that address tenure more generally at the policy level. Such approaches might include legal and regulatory-level recognition of customary land and forest use, recognition of management rights on village territories that have already been formally demarcated, and improvements of existing grievance mechanisms that seek to provide access to justice for smallholders involved in land conflicts.
- 3.2. Land and forest tenure formalization at scale. The Lao Government has an expressed interest in expanding its land titling efforts to include rural areas which have been thus far excluded from access to title (see Section 6). There is significant possibility for donor or lender engagement here, given the increasing acknowledgement of a substantial gap between titled land and land under legitimate use (Vientiane Times 2014i), coupled with a shortage of available government funding with which to close this gap. 47 While substantial debate still exists on which types of titles should be pursued, the tradeoffs associated with issues of scale (communal versus individual), salability, and precision are being increasingly discussed. If a policy consensus around these can be built, another source of funding (in addition to the climate-related funding discussed above) could potentially be the International Land and Forest Tenure Facility (ILFTF) which is scheduled to come online in 2016 (BBC 2014). While this type of funding would probably require government commitments on tenure of a more smallholder-friendly variety than have appeared in recent drafts of the National Land Policy, the types of instructions given recently by the National Assembly (2014), coupled with increasing awareness of the economic costs of tenure insecurity, whether

47 Comments made at the Natural Resources and Environment sector working group meeting, Vientiane, 4 November 2014.

to smallholders directly or via unacceptably high risk to investors (see de Leon et al. 2013), could create the type of opening to address the tenure insecurities discussed in Section 6. In the months and years to come, the international community would do well to monitor the debates on this front.

- 4. Project-level adjustments within REDD. As the policy framework for REDD continues to develop (Lestrelin et al. 2013; Chokkalingam and Phanvilay 2015), and as other options for engaging the industrial drivers of forest loss are explored (see above), REDD efforts at the project level could help "go bigger" in an incremental sense in at least two ways: through the field survey process, and through carbon prices.
- 4.1. Expanded field surveys. Field surveys have figured centrally in REDD projects' efforts to conduct biomass inventories in proposed project areas and, in the process, to learn more about local drivers of deforestation and degradation. Given that REDD is ultimately not simply an accounting system but an effort to create on-the-ground change that can be accounted for, the field presence begun during the biomass inventory process could have positive impacts in a number of areas if it was continued and even expanded. One area is through helping to refine local drivers analyses so that the relationship between drivers is better understood. This has particular relevance to smallholder livelihoods (see Section 6), but applies more generally as well. Related, expanded field surveys would generate better data on local forest conditions and degradation patterns. Together these could help bring forest degradation, which is currently outside the boundary of most economically feasible measurement, into REDD calculations, expanding the biomass pool that REDD efforts have to work with. Finally, greater field presence, even if conducted for biomass inventory and ongoing drivers analysis, could "trickle up" into institutional and policy efforts surrounding law enforcement and forest definitions, two issues that are laden with tradeoffs but that ultimately connect local landscapes to REDD efforts at the national (and even global) levels.
- 4.2. Safeguards. REDD safeguards, while not discussed explicitly above, provide a number of avenues into the issues discussed here. Two in particular are worth emphasizing. First, greater engagement with industrial drivers of forest loss necessarily means engaging infrastructure and concession processes, both of which have already

proven significant and controversial vis-à-vis their impacts on smallholders. Safeguards oriented toward social and environmental protection provide a direct and obvious way to ensure that engagements with industrial drivers are productive and sustainable not only vis-à-vis carbon accounting, but with respect to rural and forest communities as well. Second, safeguards oriented toward preventing reversals or displacements of emissions will almost certainly have to address forest loss from concessions and infrastructure, simply from the perspective of mitigating financial risk to the Lao Government. The mechanisms associated with these safeguards thus provide logical points for engagement between the high-level discussions proposed above and project-level REDD activities, both currently and in the future.

4.3. Higher carbon prices. One area where REDD has, in our view, sold itself short thus far is by taking prices from the voluntary market rather than really testing the possibilities for forest governance in a carbon-limited world. With voluntary market prices as low as they are (in the range of USD 5/ton CO₂), REDD practitioners could do well to use the current shift toward fund-based financing to actually pilot REDD's key operating assumption: that a carbonconstrained future is going to exist *economically*, not just biophysically. Rather than simply taking voluntary market prices plus or minus a bit (as tends to be the case in most REDD pilots in Laos), REDD projects might experiment with higher carbon prices presumably in the range of tens of dollars per ton of CO₂, but subject to a range of possibilities. While this is not likely to "change everything", it would complement the expansions of REDD suggested above by bringing more money per unit CO, into the discussion. Together with the efforts described above, this would help recalibrate REDD to a scale and regulatory context that is more adequate to the governance challenges that must be confronted, and helping to pilot REDD, however difficult, in a more realistic manner.

5. Long-term regulatory capacity. An essential piece of engaging the industrial drivers of forest loss in a way that serves development both nationally and locally is through cultivating adequate regulatory capacity. While much has been done so far at the institutional level, both within government and to a lesser degree within higher education, both of these should be expanded so that REDD can be

engaged fully by its Lao stakeholders, and discussed, planned and ultimately conducted by them in all of its complexity: its connections across scale, its tradeoffs, and its ambition. This is certainly a medium-term engagement, but it seems logical to expect that the current young generation may be less conservative when it comes to engaging forest loss drivers than most REDD projects are currently. As the global community becomes increasingly engaged with climate change as an urgent issue, the Lao population will need a larger educated group of researchers and regulators who can debate the merits of different forest definitions, carbon values, REL adjustments and the like. If REDD is to embrace its mandate as more than just carbon accounting, it must do so at the institutional level as well.

6. The culture of research and policy dialogue in

Laos. Such a long-term view is consistent with recent events. In December 2014, a two-day forum on National Research for Development brought together over 200 participants from Vientiane's research and policy communities, and planning, environment, agriculture and forestry staff from the central and provincial levels. The forum was held at the National University of Laos, and featured sessions on forests and climate change; concessions, livelihoods and the environment; resource development, food security and livelihoods; and regional trade, integration and macroeconomic policy (among others).⁴⁸ Unlike many other research-related events, the NUOL Research Forum was conducted almost entirely in Lao language and featured mostly Lao presenters; translation was available but discrete, and moderators prioritized discussion and debate among Lao participants. The event generated much discussion about the need to continue this type of research-policy dialogue as a way to both encourage researchers to venture into the realm of policy debates, and to cultivate uptake of research by decision makers at all levels. This type of event, and in particular the capacity building and project work that goes into making it possible, should be continued and expanded. The issues discussed above are difficult, systemic and involve substantial choices and tradeoffs. As REDD strives to think bigger, the culture of research and policy dialogue that is currently emerging in Laos needs to be cultivated and expanded, so that bigger thinking and local demands for sustainable development go hand in hand.

⁴⁸ The full program, including keynote speeches from MPI and MAF representatives, is available at research-forum.blogspot.com.

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Annexes

Annex 1. Lao National Assembly Cabinet Office Notice 273, 21 August 2014

Unofficial translation

National Assembly Cabinet Office

No 273/ຫສຊ.ກສກ Vientiane, dated 21 Aug 2014

NOTICE

To: Ministers, Heads of Cabinet, Office of Government, with respect

Subject: The review/consideration, for endorsement, of the three forestry categories (Protection Forest,

Conservation Forest and Production Forest)

• In relation to Article 78 of the Forestry Law, the 2008 amendment.

- In relation to Proposal Letter of the Prime Minister No. 179/DE, dated 3 December 2013 regarding the proposal to review and endorse 49 National Protected Forests, 24 National Conservation Forests and 2 connecting areas throughout the country.
- In relation to the Agreement of the National Assembly Nr. 06/NA, dated 25 July 2014 regarding the endorsement of reports on the implementation of Social Economic Plan and State Budget Plan, revision of State Budget Plan for fiscal year 2013-2014 and indicative plan for 2014-2015.

The Cabinet Office of the National Assembly with highest respect would like to report for your notice the outcome of questioning about the 3 types of forest in the 7th National Assembly General Meeting as follows.

Propose to the Government to direct/instruct relevant Ministries to conduct the re-survey and re-delineation of the boundaries of 3 forest types, completely and with accuracy, namely:

- 1. Re-survey/delineate-zone the three forest types, for areas that have been approved for purposes other than extraction (of the Forest), and if necessary, make a survey of new areas to compensate for this loss.
- Survey and zone the "condition" of the forest in the 3 forest types to ensure it is clear, and define zones
 where the forest is still rich/good in order to look after and conserve, totally forbidden to destroy, and
 for areas that have been damaged or degraded, then make zonation and plan to regenerate or zone as
 community forest.
- 3. Re-survey/zone agriculture production land of citizens living within the 3 forest zones including residential areas, by giving recognition to the rights to use these lands of the villagers as agricultural production lands and extract from the area of the 3 forest categories.
- 4. Survey and Zone communal forest of the village and communal forests and also develop appropriate management mechanisms for the same.
- 5. Investigate and develop financial mechanisms to ensure that the income from the forest must be reinvested/used for the purposes of forest care and management, based on the participation of the villagers that live in the forest areas.
- 6. Review to develop measures and mechanisms for the private sector to participate in forest management and development.

Therefore, this notice to inform you and for your consideration of the contents and intent.

Yours sincerely,

Head of Cabinet Office of National Assembly

Annex 2. Titling coverage in Laos before October 2008

This table describes the number of villages where "systematic" (sic) land registration took place in Laos prior to October 2008.

Province	Number of villages titled by Lao LTP & LTP2 before 1 October 2008			
Vientiane municipality	340	villages in	8	districts
Champasak	304	villages in	10	districts
Savannakhet	245	villages in	10	districts
Luang Prabang	194	villages in	7	districts
Vientiane province	154	villages ins	5	districts
Salavan	119	villages in	5	districts
Khammuane	106	villages in	4	districts
Xayabouli	74	villages in	4	districts
Bolikhamxai	60	villages in	4	districts
Attapeu	20	villages in	1	districts
Sekong	11	villages in	1	districts
Bokeo	10	villages in	1	districts
Oudomxai	8	villages in	1	districts
Luang Namtha	6	villages in	1	districts
Huaphan	0	villages in	0	districts
Xiengkhuang	0	villages in	0	districts
Phongsali	0	villages in	0	districts

Source: Land Titling Project, Second Phase, adjudication progress monitoring data, shared by anonymous informant, August 2011.

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CIFOR Working Papers contain preliminary or advance research results on tropical forest issues that need to be published in a timely manner to inform and promote discussion. This content has been internally reviewed but has not undergone external peer review.

To date, REDD+ projects in Laos have made relatively conservative choices on driver engagement, focusing on smallholder-related drivers like shifting cultivation and small-scale agricultural expansion, to the exclusion of drivers like agro-industrial concessions, mining concessions and energy and transportation infrastructure. While these choices have been based on calculated decisions made in the context of project areas, they have created a pair of challenges that REDD+ practitioners must currently confront. The first is lost opportunity. By not engaging industrial drivers of forest loss, REDD+ misses an important chance to engage with high level economic decision making. This has implications not only for climate change mitigation, but more importantly for efforts to make Laos's current trajectory of natural resource-intensive development more socially, environmentally and economically sustainable. The second challenge is more immediate. Due to the political-economic circumstances under which forest loss occurs, there is a significant gap between loss that is planned and loss that can be accounted for under REDD's "national circumstance" allowances for planned deforestation. This means that REDD's positive impacts on mitigating forest loss, to the extent that they occur, may be swamped by planned but unaccountable forest loss, and thus difficult or impossible to verify. Thinking bigger on issues from driver engagement to spatial planning and concession regulation to land tenure and rural livelihood possibilities thus presents not only a series of opportunities, but a series of imperatives.



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