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Abstract

Myanmar has recently positioned itself as the world’s newest frontier market, while simultaneously undergoing transition to a post-war, neoliberal state. The new Myanmar government has put the country’s land and resources up for sale with the quick passing of market-friendly laws turning land into a commodity. Meanwhile, the Myanmar government has been engaging in a highly contentious national peace process, in an attempt to end one of the world's longest running civil wars. The Myanmar government has aggressively pushed for foreign investment in large-scale private agribusiness concessions through the introduction of a new supportive legal framework, with regional, and to a lesser extent, global corporations signing concession deals, some of which are meant for biofuel production. Meanwhile, REDD+, Readiness, and other similar forest conservation funds have been committed by IFIs and UN agencies, targeting (post-) war high-value conservation forest areas. Climate change mitigation projects and large-scale land deals can instigate conflicts over land and resources, but not just as separate processes occurring in discrete geographies. Working at the intersections of large-scale land acquisitions and climate change mitigation strategies viewed through a landscape perspective, this research project and analytic provides a lens through which to study complex interactions among land-based deals within and across socio-cultural, ecological, conflict and institutional arenas. The Myanmar country case study clearly demonstrates the dynamic interplay of, and the social and ecological spill-over effects from, multiple layers of competing land conflicts — in this case, land grabs and climate change mitigation strategies. These conflicts are firmly embedded in the historical processes, institutional agendas, and environmental particularities in which they take place.

Introduction: An interactive landscape framework to land grabs and climate change mitigation strategies in Myanmar

Twenty years Large-scale land acquisitions ('land grabs') for a range of land management and uses necessarily shape land- and livelihood-based governance, with associated socio-economic, political and environmental impacts (Borras et al., 2011; White et al., 2012; Cotula, 2013). In particular, land use is increasingly being reallocated for climate change mitigation strategies, which in turn produces (trans-)local conflicts due to a reconfiguration of land use and access rights (Beymer-Farris and Bassett 2012). In particular, large-scale land concessions have been increasingly allocated for the industrial production of agricultural commodities (such as biofuel, as a low-carbon energy source) (Bailis and Baka, 2011). The Myanmar military-government has long pushed for biofuel production quotas through forced smallholder schemes and by way of large-scale agribusiness resulting in land grabs. Of these practices, land grabs have expanded considerably during the current neoliberal reform period, which specifically aimed to privatise the agribusiness sector (Woods 2013a; O'Tool 2013a; MSU and MDRI/CESD 2013). In addition to biofuel production schemes, carbon sequestration projects such as REDD+ (Reducing Emissions from Deforestation and Forest Degradation) also rely upon large-scale land- and forest-based interventions, this time for the purposes of conservation, which may exacerbate conflicts over resource use and access (Corbera, 2012; Phelps et al., 2010) - aptly named 'green grabs' (Fairhead, J., Leach, M. and I. Scoones. 2012). Myanmar has been developing its own REDD+ Readiness-Preparation Proposal (R-PP), and subsequently has identified several potential target areas for REDD+ activities (Sovacool, 2012). Several international conservation organisations have now secured funds through REDD+, sustainable forest management (SFM) programmes,[1] and/or from private donors, in order to implement large-scale forest conservation projects in Myanmar.[2] Large-scale hydropower dam schemes provide yet another mechanism to mitigate climate change, but which nevertheless has a long and chequered history of generating land- and water-based conflicts (Shoemaker et al. 2014). Myanmar's former military-government has previously tried to rush through several large-scale hydropower dam development schemes, especially in ethnic war zones; several of them never materialised due to problems with conflict, security, and international finance commitments (Simpson 2013). During the current reform period, however, Myanmar is being marketed as the region's potential new hydro-powerhouse (Aung Shin 2014).

Climate change mitigation strategies — biofuel production, carbon sequestration via forest conservation, and hydropower dam development — are specifically linked to land and water grabbing processes and outcomes in at least four ways: (i) large-scale land deals regularly involve biofuel feedstocks; (ii) REDD+ can result in "green grabbing": 'land grabbing for environmental ends', where local communities are dispossessed (Fairhead, J., Leach, M. and I. Scoones. 2012); (iii) prior experiences with land deals perceived as 'grabs' may create suspicion that REDD+ projects will follow the same pattern, making it harder for them to proceed in locally beneficial ways (Ghazoul et al. 2010); and (iv) REDD+ areas may be subject to overlapping claims, including large-scale land deals. The different types of large-

[1] These programmes are run through the World Bank's Global Environment Facility (GEF), and coordinated through UN agencies' regional office in Bangkok, Thailand.
[2] Interview, GEF Southeast Asia REDD+/SFM grants officer, Washington DC, September 2014; Interview, UN REDD+ Readiness regional officers, Bangkok, Thailand, 01 December 2014.

scale land acquisitions (for climate change mitigation measures or otherwise) do not often occur as separate processes in discrete geographies. Land- and water-based use and access right regimes operate dynamically across space and time, thereby embedding new large-scale land acquisitions. The intersections of these different yet overlapping land grabs can produce socio-ecological spill-over effects and chain reactions, which in turn can ignite new or exasperate old sets of competing claims and conflicts over resources – including outside the immediate area. For example, the social dynamics of conflict can move or spread as people are displaced and communities fractured, while the nature of the contested resources can also change due to ecological spill-overs (e.g., agricultural run-off, dams, or the concentration or displacement of such activities as fuelwood gathering). Thus, resource conflict does not simply erupt or escalate in a given place, but can also move across physical and administrative boundaries. A landscape approach is therefore the most appropriate analytical framework for capturing the dynamic spatial interplay embedded within the foundational matrix: land- and water-based use and access rights regimes, large-scale land acquisitions, and climate change mitigation strategies (Hunsberger et al. 2015). Moreover, the dialectical interplay necessarily manifest from complex interactions within and across socio-cultural, ecological, conflict and institutional arenas.

(Post-) conflict, so-called 'fragile' states (World Bank 2011) – the majority of which are agrarian societies and land and water grabbing hotspots (White et al. 2012, Mehta et al. 2012) – are particularly vulnerable to enhanced conflict from climate change mitigation activities. This is due to their lack of robust governance regimes, institutions, or the civil society needed to 'manage' associated risks in such land- and water-based deals (Deininger et al. 2011). Climate change mitigation projects may also provide an opportunity to challenge (pre-) existing land and resource use right inequities, and might therefore lead to enhanced cooperation and more socially inclusive outcomes (Muradian et al. 2010). That said, these interventions and outcomes – whether cooperative or conflictual – do not operate in a vacuum, nor are they divorced from (sub-) national governance realities. The land and resource conflict or cooperation triggered by new use and access right regimes under climate change mitigation strategies are borne of the land and governance regimes previously and now currently in place.

This landscape approach examines the dynamic intersections of land grabs and climate change mitigation strategies over time and space, as well as the resulting layers of conflict and potential mediation (Hunsberger et al. 2015).[3] This paper applies this framework to Myanmar by showcasing the multiple ways in which past and present land conflicts have become intertwined with biofuel agribusiness concessions and REDD+ / SFM-financed forest conservation projects within the same regional landscapes. At the start of the decade, Myanmar initiated a series of significant political and economic reforms that, by most accounts, use different tactics than the previous military authoritarian governance regime. The current political economic reforms under the military-appointed President Thein Sein have been nothing short of raw, quick-and-dirty neoliberal measures (Jones 2014), although

[3] This research project is supported by a consortium of international institutions and organisations and national partner organisations, and part of the "MOSAIC" project. MOSAIC is a multiple year programme funded by the Netherlands Organisation for Scientific Research (NWO) under their CoCooN's Conflict and Cooperation in the Management of Climate Change (CCMCC) Integrated Project. Funding for this particular research programme in Myanmar was provided by LIFT, a consortium of foreign donors in Myanmar focusing on improving rural livelihoods and food security.

powerful military-government actors have been foot-dragging on further reforms on personal and societal freedoms and human rights (Min Zin 2014).

This more robust governance regime is being implemented by different stakeholders for conflicting reasons: the military-led government does so in the hope for neoliberal economic growth fuelled by large-scale foreign investment; the international development aid community aims to enable global finance and business; and the Burmese civil society does so in order to hold their military and government accountable to its people, and past and present injustices. The new government has passed and is passing other, contentious laws and policies that together privatise land, agriculture and natural resource extraction sectors with particular preference to foreign investment (Buchanan, Kramer and Woods 2013). Building on past military-government endeavours to use Burmese 'crony companies' to produce industrial agricultural commodities for domestic use and foreign trade, the new land and investment related laws and policies have caused a substantial increase in land grabs for agribusiness (among which biofuel crops), especially for export to China (Woods 2013b). Much like the sudden growth in the private agribusiness sector, plans for large-scale hydropower dams are being dusted off and touted to regional investors, almost exclusively targeting ethnic territories just emerging from decades of civil war (Salween Watch 2014). Hand-in-hand with neoliberal land and water privatisation and resource extraction projects and practices, international conservation efforts in the country are being reinvigorated through international conservation finance mechanisms[4]. These mechanisms are the REDD+ future financing spearheaded by UN agencies and the World Bank's Global Environment Facility (GEF).

This framework is applied to the case of Myanmar by combining (sub-) national level trends in land grabs and climate change mitigation strategies and comparing two in-depth field research case studies at the landscape level. This is further supported by a deep familiarity with land- and water-related conflicts in the country, particularly in ethnic territories. The two selected landscapes are regions that have been most heavily targeted by *all* of the following: large-scale agribusiness concessions, hydropower dams, and forest conservation rezoning under REDD+ projects. The first landscape examined in this paper is made up of the North Shan State (bordering Yunnan, China), and to the northwest in Kachin State (bordering Yunnan to the east, Tibet to the north, and near to Northeast India to the west). This region has a number if distinctive features: nearly a dozen exclusively Chinese-financed mega hydropower dams already built or planned; the second highest concentration of agribusiness concessions, one of which is the country's largest concession for biofuel crop production for China's domestic market; and the world's largest tiger reserve and the Northern Forest Complex that dwarfs all other conservation parks in the country, even if on paper only. The other landscape region under study is the Tanintharyi Region (previously called Tenneserim) in the far south of the country, bordering Thailand to the east and the Andaman Sea along its long western coast. The Tanintharyi Region is the country's oil palm 'bowl', being by far the largest concentration of private agribusiness concessions as the world's newest biofuel frontier. The region's eastern edge with Thailand hold's the Mekong Region's last remaining large intact lowland deciduous forests, and as such has received the most attention from international conservation organisations aiming to rezone forests as REDD+ financed projects.

[4] These mechanisms are now able to enter the country due to the end of western-led sanctions.

Apart from land/water/green grabs for agribusiness, dams, and forest conservation, both regions have also suffered heavily from ethnic armed conflict against the Burmese military-government, under what has amounted to one of the world's longest running civil wars. Stretching along the Thai border, from the Karen/Kayin State down to the southern tip of Tanintharyi Region, the Karen National Union (KNU) has been at the forefront of ethnic armed rebellion against the Burmese military-government since achieving independence from the colonial British rule. Despite being one of the largest and respected ethnic rebel groups in the country, the KNU suffered repeated blows in the 1990s and 2000s (Smith 1999). KNU battalions and Karen civilians fleeing to the Thai border left large expanses of agricultural land open for oil palm concessions, and forests that were ripe for conservation endeavours (Woods 2015). The Kachin populations (in the Kachin State and the north of the Shan State) have similarly been implicated in decades-long civil war, although under somewhat different circumstances. The Kachin returned to waging a protracted war after the new Myanmar government took office, because the Kachin armed group (the Kachin Independence Organisation, or KIO) refused to turn their ceasefire contract into one that made them part of the military-government's armed forces. The KIO also went back to war in response to the nearly two decades long 'ceasefire capitalism' in their ceasefire territories, which had opened their areas to rampant resource extraction by Burmese and Chinese companies and greater Burmese militarisation (Woods 2011).

It is clear, then, that conflicts arising from land grabs and climate change mitigation measures must first be anchored in and understood by the particular ethnic armed political histories in the different regions of the country. The land and resource-related conflicts cannot be extracted from the armed conflicts in which they are implicated. Thus, the framework is no easily applied cookie-cutter model. Instead, it should help to unearth the multiple layers of different types of conflicts, in order to better understand (and therefore predict) avenues and degrees of compounding conflict or possibilities of cooperation that might result from climate change mitigation strategies. Applying the framework to Myanmar with two specific regional case studies highlights its analytic utility in exposing the conflict and cooperation context within which new land and water use right regimes get reconstructed.

Myanmar's 'crony capitalism' and land governance reform

The late 1980s and early 1990s proved a tumultuous period in Myanmar: a shift in China's foreign policy to do business rather than support foreign communist struggles; a related internal coup within the Myanmar Communist Party (CPB) and subsequent fracturing of non-state armed groups, many of whom then signed ceasefires with the Burmese military-government; and a national uprising in Myanmar in 1988 to overthrow the Burmese military-state (Smith 1999). Together these culminating political and economic currents, along with the Burmese military-government's reaction to them, changed the course of the country's political economy trajectory. Moreover these currents have shaped the neoliberal reforms currently underway, along with the mounting layers of land- and resource-related conflicts exacerbated by privatisation measures that were backed by "rule of law" and buttressed by 'might is right'.

In the early 1990s, as a response to the late 1980s' changing regional geopolitics, domestic political turmoil, and a failed national economy, the Burmese military-government began the country's slow road to industrialisation and liberal market reform. In part due to Myanmar's economic isolation at that time, and particular political business culture, the 'Road to Capitalism' (Mya Maung 1998) was to be implemented by Burmese (i.e., Burman and Sino-Burmese) businessmen with close relations with top military leaders (oftentimes through blood or marriage). One of the hallmarks of Myanmar's initial market experimentation was the attempt to overhaul of the smallholder agricultural sector, which was viewed as being the first of five policy objectives for achieving national industrialisation (Kudo 2002). Promoting the commercial industrialisation of the agriculture meant replacing tight state control of agricultural production and trade with government-favoured domestic private companies, or so-called 'crony companies'. With cronies providing the technical know-how and financial capital under the direction of the military-government, the country was to become more self-sufficient in key strategic crops (such as rubber, paddy rice, oil palm, *Jatropha*, and sugarcane for food and biofuel), as well as earn much-needed foreign currency from exports. The Ministry of Agriculture and Irrigation (MOAI) established a 30-year master plan (2000-2030) for the agricultural sector, with the aim to convert 10 million acres of 'wasteland' to industrial commercial agricultural use.

Beginning in the 2000s, gaining momentum through the decade as Myanmar transitioned to the current military-led government, the state allocated large land concessions to preferred Burmese business associates (the previously mentioned 'crony companies')[5] for logging, mining, and particularly agribusiness purposes (among which biofuel production schemes). Much of the land reallocated to the private sector had previously been forcibly confiscated by the military and left idle, as they lacked the capital or capacity to implement such projects. The farmers evicted from these lands oftentimes returned to farm the idle land as they had done before confiscation, sometimes even paying informal taxes to 'squat' on their former property. This land was partly handed over to business cronies in the 2000s (as part of Myanmar's privatisation scheme), but also often used as a type of payment to cronies for services they provided to the military-government (such as infrastructure development, arms procurement, etc).

In addition to Yangon-based crony companies participating in the country's unique 'road to capitalism', non-state armed groups have also played a pivotal role in the emergence of new market land-based opportunities (specifically in agribusiness ventures), in many cases profiting directly. This participation is not an example of 'turning battlefields into market places' (which happened along the Thai-Myanmar border in the 1990s after the first round of ceasefires) as it is a continuation of the land and resource conflict by and through emerging global markets. For example, in the Kachin and Shan States in the north, most agribusiness contracts are carried out by the local ethnic elite. Most of them rose out of the Burmese military's counterinsurgency strategies, by being selected as 'strongmen' against other ethnic armed actors fighting against the Burmese military-state. These local ethnic strongmen, backed by their own standing armies, switched from anti-state rebels to rogue armed

[5] The term 'crony company' is widely spread and used in Myanmar, referring to the handful of well-known but not well-regarded Burmese tycoon businessmen who profited immensely from close political and business ties to the former top military leaders. These same cronies are again cashing in on Myanmar's current economic reforms by winning joint ventures with regional and global investors due to their past and present political connections and access to land and resources.

businessmen. Over time, their initial illicit activities in the drugs economy increasingly fused with licit business – in this case agribusiness, and specifically biofuels (Kramer and Woods 2012). However, as the military-state gains in strength in ethnic areas, these more local/regional cross-border networks are beginning to be threatened by the Yangon-based Burmese crony companies, which are increasingly receiving logging and agribusiness concessions in these upland ethnic areas. These interactions illuminate the process and outcomes of military-state building using markets and land-based investments. Thus, the coming together of regional/global capital and Burmese politico-military-business networks arising out of historical armed conflict is an important force currently shaping the making of (agro-)capitalism in Myanmar and related land conflicts (Woods 2011a).

Land, water and resource-related conflicts in Myanmar have come to a converging point during the country's current political-economic opening to what have become global norms. In cooperation with global finance institutions (IFIs) (such as the World Bank and the Asian Development Bank), foreign governments (such as the EU and member states, US and Japan) and international development aid organisations, the new military-led government under President Thein Sein has been quick to institute sweeping neoliberal economic reforms. Burmese (ex-) military leaders and business tycoons are reinventing themselves in order to increase the country's political and economic legitimacy, and thus gain access to global finance capital and markets. Myanmar's military-business elite has forged new alliances and strengthened old relationships under the banner of 'democracy' to capitalise on the country's coveted geo-political position and natural resource wealth and land base. Land – in this case smallholder farmland and associated rural livelihoods that make up an estimated 75 percent of the population in Myanmar — has become a site of struggle for control over the country's most coveted resource. The new government reforms that have put land and resources on the global market happen to have coincided with the 2007/8 food and oil crisis that has led to a new spike in global land grabs and foreign investment in industrial agricultural production. In this context, the Burmese government has advertised Myanmar as Asia's 'final land frontier' (Woods 2013a). Land is being portrayed in laws and policies and in discussions with potential investors as 'wasteland' or 'virgin land' that is waiting for an injection of finance capital to finally awaken its productive potential.

The Myanmar government aims to build on the previous agricultural liberalisation with continued reliance on the private sector, this time with the hopes of more formal foreign investment. Overall, the current agriculture ministry's new mission during this reform period reads: "National companies and associations in the private sector are encouraged and granted rights to develop these areas for the cultivation of paddy rice, pulses, oilseeds, industrial crops, rubber, oil palm, etc" (DAP 2010a). The Framework for Economic and Social Reforms Policy priorities for 2012-2015 aims to boost agricultural production by increasing extension services and government loans, removing barriers throughout the supply chain, and promoting demand-oriented market support mechanisms (OECD 2014). These agricultural gains are being devised through a revision of agricultural and land related laws and policies that together make land into a commodity and the private sector into the engine of industrial agricultural production.

The first two laws that passed after Parliament took office privatised land and reallocated it to domestic and foreign companies, thus revealing the importance of agribusiness in the government's national economic growth model. The 2012 *Vacant, Fallow and Virgin Land*

Law (*VFV Law*) legally allows the government to reallocate so-called ‘vacant,’ ‘fallow’ and ‘virgin’ land – which is oftentimes cultivated by households for perhaps decades – to the private sector. This presents a problem with how smallholder cultivation is defined, which can lead to swidden fields (that often resemble agro-forests) being categorised as ‘vacant’ or ‘fallow’ land, and subsequently legally confiscated for a private concession. The *Farmland Law,* in tandem with the VFV Law, enables land to be legally bought, sold, and transferred on a land market with ‘land use certificates’ (LUCs).[6] Anyone without official LUCs no longer possess statutory land use rights, and therefore their land is liable for confiscation and reallocation (under the *VFV Law*). LUCs are gradually being issued, but titling all the land in the country will take decades, leaving untitled land at further risk of confiscation. The *Foreign Investment Law (FIL),* which passed half a year after the land laws, provides the crucial legal support for injections of foreign investment in land and resource-related sectors in Myanmar. A draft investment law is being finalised that would harmonise investment-related laws, and provide the foundation for a more neoliberal investment climate in the country.

Due to past land grabs under military authority and the ones currently using the ‘rule of law’ under the new government, land grabs and subsequent land-based conflict have ironically become the main factor holding back international investment in land and resource-based deals. Indicative of the scale of land grabs and aggrieved farmers, nearly half of all reported complaints to the Myanmar National Human Rights Commission (MNHRC) for 2012-2014 regarded land grab cases (Nobel Zaw 2014). Land grabs and related conflicts are, similarly, the most commonly reported issues to the Lower House Committee for the Rule of Law and Stability, headed by Daw Aung Suu Kyi. In the end, these land grabs have become the articulation of a fight between smallholder farmers and their labour-time, and the mechanised large-scale private agricultural estates absent of food producers, with land and livelihoods caught in the middle.

In response to problems with a rushed legal framework for foreign investments in land, resource extraction, and agribusiness, western government aid agencies have spearheaded a National Land Use Policy (NLUP) process. The NLUP, which was being finalised at the time of writing, is meant to streamline and harmonise land use management in the country on a more technically sound basis, and in some cases, to reassert the rights of more marginalised communities, especially upland cultivators relying on customary practices. And yet, its approach to land use rights still mainly amounts to enhanced security for agribusiness investors, at the expense of human rights and social justice. Tellingly, the policy frames land more or less exclusively an economic asset – little more than something to be used and exploited for ‘economic development’ – and not in social or cultural terms. Worryingly, like the draft investment law, the NLUP contains no reference to human rights or the terms social justice, redistribution, restitution, or accountability, but instead uses the word ‘investment’ a dozen times (TNI 2015).

Climate change mitigation mechanisms and the market during Myanmar's neoliberal reform period

[6] An important distinction for the Myanmar case is that the state still owns all the land; thus, land *use* rights are being bestowed instead of actual ownership.

Climate change mitigation measures are being overlain past and present land grabs and within the overhaul of the political economy. The resource governance reforms undertaken since the new government took office, as well as the corresponding new laws and policies that facilitate privatisation measures, enable new forms of climate change mitigation strategies in Myanmar. While the previous military-government kickstarted biofuel production schemes (e.g., *Jatropha*, oil palm), they were devised for domestic consumption for fear of further global isolation (ECDF 2008; ADB 2009). It is only through the current neoliberal reform measures that Myanmar can engage in *global* norms of addressing climate change and related market-based mitigation strategies (Igoe and Brockington 2007; Brockington and Duffy 2010). New land and investment related laws and policies are facilitating global investment in the country's agricultural sector (including biofuel production), and doing so in a way that will certainly dwarf previous military attempts relying on crony companies. Hydropower dam development is also poised to receive a big boost from regional and western-based investment as one of Asia's most untapped riverine systems. REDD+ schemes targeting carbon sequestration through forest conservation projects are also gearing up through INGOs, in part facilitated by Myanmar's REDD+ Readiness roadmap and related global REDD+ financing.

Land grabs to save the climate: Private agribusiness concessions and biofuel production

While commercial industrialised agriculture is receiving a big push under the more liberal investment climate backed by the new land and investment laws and policies, its foundation had already been well established. By 2001 – a decade after private agribusiness was first promoted by the military-government – large-scale agricultural concessions totalled more than one million acres allocated to almost 100 Burmese private companies. By 2011, the number of companies more than doubled to just over 200; they were allocated nearly double the number of acres compared to a decade earlier, to reach about 2 million cumulative acres of private agricultural concessions. The Tanintharyi Region in the far south-east (for palm oil) and the Kachin State in the far north (for sugarcane and cassava as biofuels, as well as rubber for tires – all for China) together received over half of those concessions. The Kachin State and the North Shan State feature the highest concession increase rate in the country;. This has resulted from the significant increase in Chinese agribusiness deals, predominately for biofuel, and is supported by China's opium substitution program in northern Myanmar (Kramer and Woods, 2012) (see below).

In the last three years of the new President's term (between 2010 and 2013), and at the same time as the rising civil society resistance against agribusiness land grabs, land area allocated to large-scale private agribusiness concessions increased by 170 percent. Private, large-scale agribusiness concessions cumulatively totalled 5.2 million acres by mid-2013, up from nearly two million acres in 2010/11 (MOAI, 2012). Over 60 percent of the agricultural concessions (mainly biofuel and rubber) were located in just two states/regions by 2013: in the far south-east in the Tanintharyi Region (nearly 1.9 million acres exclusively for oil palm, or 36 percent of the country's total agricultural concessions)[7] and the Kachin State (nearly 1.4 million acres for rubber and biofuel, or 27 percent of country's total agricultural

[7] Data for Tanintharyi Region for 2013 is from the regional government which has much higher acres recorded than at the central level, with concession data to support their figure. Therefore regional government data for Tanintharyi Region is used here. Earlier data for Tanintharyi at the regional level is not available, nor is regional level data for other states/regions.

concessions) (MOAI, 2013). These two landscape regions were chosen as the study's two field site areas in order to better understand these dynamics, which are further explored in detail below. The two regions also have a long history of war and counterinsurgency (although operating under somewhat different political dynamics), and still suffer from violence (latent, in the case of the Tanintharyi Region) that currently feeds into the conflict resulting (and compounding) from biofuel agribusiness ventures. **Table 1** presents the country's agribusiness data trends since President Thein Sein's government took office.[8] These figures only represent acres of land reallocated to private companies as large-scale land acquisitions (LSLAs).

Table 1. Agribusiness Concessions in Myanmar by State/Region, 2010-2013

State/Region	Allocated 2010/11	Allocated 2011/12	Allocated	Planted 2012/13	% Planted
Naypyitaw	-	7,408	17,554	5,217	30
Kachin	596,180	1,396,575	1,381,165	172,348	12
Kayin	2,161	4,011	34,946	15,867	45
Kayah	-	-	-	-	-
Chin	-	1,542	1,743	118	7
Sagaing	100,057	259,273	533,406	19,543	4
*Tanintharyi**	671,594	993,887	1896970	359455	19
Bago	19,772	52,238	200150	91074	46
Magwe	202,492	211,292	219,578	95,949	44
Mandalay	10,300	6,262	56,046	14,497	26
Mon	-	-	-	-	-
Yangon	30,978	30,980	80208	76,243	95
Rakhine	-	7,826	131667	13,176	10
Shan	117,096	160,626	323833	120403	37
Ayeyarwady	193,353	285,844	335331	212,969	64
TOTAL	**1,943,983**	**3,417,762**	**5,212,597**	**1,196,859**	**23**

Source: Central MoAI, except for Tanintharyi 2012/13 collected from regional office.

Note: Data only includes agricultural concessions allocated by central govt.

[8] This data does not include, however, the agricultural production schemes that are done by smallholders or other modes of production — it only includes officially allocated private agribusiness concessions.

These two regions also, perhaps not coincidently, have the largest remaining high-value forest area in the country, and indeed in the whole Mekong Region; nevertheless, this forest is now under threat from current trends of converting forestlands into industrial agricultural estates. Forest conversion and the associated production and trade in ‘agro-conversion timber’ are strongly linked, whereby Burmese companies who obtain agribusiness concessions in forested areas legally log valuable hardwoods for lucrative profits, oftentimes without planting the intended agricultural crops (Woods, K. 2015). For example, 1.77 million acres (716,000 ha) of ‘Permanent Forest Estates’ (PFEs), which include both forest reserves and ‘Protected Public Forests’ (PPFs), were de-gazetted in 2004/5 alone for resource extraction, energy infrastructure development, agricultural expansion, and military compounds, according to government sources.[9] Over 800 domestic companies had been allocated a total of nearly 750,000 acres (300,000 ha) of forest land for industrial agricultural production, according to 2013 national government data (MSU and MDRI/CESD 2013). Nearly 11 million acres of forests (forest reserves, unclassified, and ‘other’) have been classified as available land suitable for agribusiness concessions.[10] One national government figure puts the volume of teak and non-teak timber harvested from oil palm and rubber concessions (and large-scale hydropower projects) under the authority of MOECAF at almost 125,000 m^3 only for 2011/12 (Woods 2015). Other government data highlight how nearly 70,000 acres of lowland forest had been legally cleared and/or burned in 2010/11 alone for oil palm concessions in the Tanintharyi Region.[11] Meanwhile, these same forest reserves are also receiving attention from INGOs and REDD+ processes for heightened forest conservation and related carbon sequestration (see below).

In addition to legal “log grabs” under the cover of agribusiness development, agribusiness concessions in some cases (especially along infrastructure routes and peri-urban zones) also provide a legal mechanism for land speculation. For these reasons, less than one-fourth of the total agribusiness concession acres awarded in 2013 have actually been planted, according to national government data (O’Toole 2013a, 2013b). In Tanintharyi, less than 20 percent of the nearly 2 million acres of oil palm concessions have actually been planted, and just over 10 percent of the nearly 1.5 million acres of agribusiness concessions in Kachin State have been planted by 2013 (see **Table 1**), despite this being illegal according to the 2012 *Farmland Law.*

Specific to the situation in northern Myanmar, China‘s opium substitution programme is a good example of a cross-border informal agricultural investment (predominately in rubber, but also rice, corn, sugarcane, watermelon and banana) that is facilitated by local companies, and therefore does not appear as FDI (but is recorded by other sources, such as the Chinese government) (Kramer and Woods 2012). This national Chinese programme was liberalised in 2006 and put under the authority Ministry of Commerce. It has provided subsidies and tariff-free agricultural commodity import quotas to qualifying Chinese companies. The Kachin and Shan States have since been heavily targeted by Chinese-backed, large-scale agribusiness concessions — none of which are through smallholder agricultural schemes. The agricultural concessions are not, however, accounted for as FDI in national Burmese statistics, but rather the concessions are granted to local elites (including armed actors, some of whom are

[9] Data collected from MOECAF, Naypyitaw.
[10] Data collected from MOAI, Naypyitaw.
[11] Data collected from MOECAF, Naypyitaw.

allegedly involved in the drugs economy). These elites are backed by Chinese companies (predominately from Yunnan) that receive opium substitution subsidies from the Beijing government (administered by the Kunming provincial government). The Myanmar government statistics on the extent of Chinese agribusiness in northern Myanmar offer little clarity, since they are 'informal' and of murky legality. According to Chinese provincial data, as of 2010 a total of over 90,000 acres of agricultural estates have been established in northern Myanmar (includes the North Shan and Kachin States) by Yunnan-based companies alone. The investment reached RMB 1.6 billion (USD$ 256 million) by 2011 for northern Laos (which also falls under this programme) and Myanmar together, totalling 3 million mu (nearly 500,000 acres) — most of which is for northern Laos (Kramer and Woods 2012).[12]

Chinese agribusiness investments that dominate northern Myanmar were first legitimised by both governments as 'alternative development' to assist ex-poppy farming populations, despite not operating in the locales of poppy production. Many concessions led to forced farmer displacements from their upland non-poppy swidden food production lands, and working with armed rebels-cum-businessmen who were/are mostly still involved in the drugs trade. In addition, the Chinese government and businessmen are increasingly deploying climate change discourses to promote their biofuel flex crops to the Myanmar government. In turn, the government promotes the projects to the farmers who are to be displaced, arguing that the agribusiness investment will help protect the climate and is therefore for the good of the nation and the world at large.

The 'greening' of green grabs: Forests, biodiversity conservation and REDD+

The MOECAF's long-held authority and control over vast areas of land in the country since the colonial British period was first challenged and undermined by the rise of the agribusiness industry in the mid-2000s. MOECAF rebranded since the new government took office in 2011, adding the function of 'environmental conservation' to further support their move away from past over-exploitation of forest resources. Pending this process, donors are quickly counteracting mounting challenges to protecting forest and marine habitats during the period of pronounced foreign investment by flooding the Forest Department with funds for environmental protection, and specifically forest conservation. Conflict between land, agriculture, and forest use – with farmers caught in the middle – has become one of the biggest governance challenges facing the current administration. The conflicts around conversion timber illustrate the tensions between the forestry and agricultural sectors, and the respective institutions which are increasingly competing for authority and control over land, resources, and revenue streams. This conflict focuses not only on saving the forests in the face of agribusiness expansion into forested landscapes, but also on how local communities can maintain their already extremely curtailed use of and access to these forests in the face of newly fortified forest conservation regimes. What will a resurgence of forest conservation and national parks mean for the case of Myanmar, when roughly 50-60 percent of the population depends on forests for their basic needs (FAO 2009), and the national forest laws and policies, borrowing from their colonial foresters, ban villager resource use in any state forest area?

[12] Collated from various Chinese language sources.

The first *Forest Act* was enacted in 1902 and was most recently updated into the 1992 *Forest Law* and 1995 *Forest Policy*. It supports conservation, sustainable forestry, and socio-economic benefits to local populations. In addition, the 1992 law includes the rhetoric of decentralisation in forest management, to some degree, and encourages the private sector and community participation in forest management. In reality, the law is not followed unless it is advantageous for the military-government, and in practice follows a top-down centralised management regime that has been highly corrupted after decades of military rule (Woods 2013c). A new forestry law has been drafted and is still waiting to be debated by the Parliament after two years of internal negotiations; however, the law has excluded wider civil society consultation, and is expected to still prescribe to a centralised scientific forestry management regime.[13]

The authoritarian and corrupt governance of the country has permeated through the forest management system as a lucrative sector from which the military – by way of the military-controlled Myanmar Timber Enterprise (MTE) of the MOECAF, and through their preferred Burmese crony companies – have generate millions of dollars from the wholesale of famous Burmese teak and other hardwoods (Woods 2013c). Timber, as a revenue generating source for military officers, and forests, as a large-scale land rezoning that controls turbulent areas and restive ethnic populations, have therefore been plagued by corruption, top-down governance, and human rights abuses (EIA 2014). The *Forest Policy* (1995) includes a set target to expand what is referred to as the “Permanent Forest Estate,” or PFE, to 30 percent of the country’s total land area. PFEs include strictly protected forest habitats for conservation purposes, as well as managed forests for watershed protection, wildlife habitat, or — most significantly and prominently — for commercial logging. By 2011, the government declared that 31 percent of the country’s total land area had been demarcated as PFE, exceeding its stated target. There is no mention in the forest law or policy of conflict mediation measures, law, and policy enforcement, or of land tenure security for villagers living within designated forestlands. In addition to expanding PFE coverage, the government also has a target of 10 percent of the country’s total territory for their Protected Area System (PAS). There are currently 34 protected areas, including wildlife sanctuaries, bird sanctuaries, and national parks, amounting to 6.67 percent of the country’s total land area. This includes proposed new national parks, such as Lenya and Tanintharyi National Parks in the Tanintharyi Region (see case study below), even though they have not yet been officially recognised by the government. Out of the 34 protected areas, 20 are managed by the Nature and Wildlife Conservation Division (NWCD) under the Forest Department (FAO 2009). In addition, there are several new terrestrial parks in the Kachin and Kayah States and the Tanintharyi Region that have been proposed and appeared to obtain the provisional green light from MOECAF. Forest Reserves are the most common forestland state category (under PFE), which are in effect used for commercial logging, amounting to a staggering 18 percent of the country’s total land area. Forest reserves are also particularly targeted for allocating agribusiness concessions (Woods 2015). The Protected Public Forest (PPF) is another forestland state category that serves to restrict land use in non-reserved forested areas, which is then also used for commercial logging, agribusiness concessions, and/or forest conservation. The *Protection of Wildlife and Conservation of Natural Areas Law* (1994)

[13] It is expected that the new forestry law will put increased emphasis on conservation and community forestry. However, the Myanmar government is expected to still play a very dominant and top-down role in forest and land management in the country, raising questions to the extent of genuine community participation and forest access and use rights and access.

pertains to the conservation of wildlife and their habitats, and compliance with relevant international treaties such as CITES and the Convention on Biological Diversity (CBD). This law provides a land classification system for protected natural areas, but without much regard to community resource use rights (*Article 7*). However, the law does provide a mechanism for compensating individuals or communities who have existing rights to the land under relevant land acquisition laws (*Article 8*). It also allows the director general of the Forest Department to "make provisions for reasonable rights and privileges in respect of the affected rights of the people in the region" where the natural area is established (*Article 11*).

Local communities are largely excluded from any access and use rights to land categorised as forest reserves or PPFs, which is a legacy from the British era. A few exceptions exist, such as in village firewood plots, or if a special permit is applied for village use, such as for house building. The lack of forest use rights to non-corporate entities presents a serious human rights and livelihood concern. Partially in response to the very poor forest governance situation in the country, in June 2013 MOECAF passed legislation that bestows formal permanent agricultural use rights to qualifying villages that reside within forest reserves and have been cultivating in that area for generations prior to the establishment of the particular forest reserve (Soe Than Lyn 2013). This legislation was considered a key innovative piece of MOECAF's good governance reform. However, it must be permanent agriculture, and not shifting cultivation (which is what the communities mostly practice), and only holds for communities under fifty households. It is yet unclear, however, how well this will be implemented and honoured, and how resource use, access, and security will change for these communities on the ground. In addition, in April 2014 MOECAF enacted a log export ban. The anticipated forest law, which is expected to reflect this reform-minded reorientation in some ways, has not yet been debated in the Parliament — despite expectations that it would pass nearly two years ago. The lack of any broad civil society engagement on the updated future forest law and policy perhaps foreshadows continued forest governance problems in the country, although other donor-funded forest governance initiative are helping to facilitate civil society openings (as well as closings) to forest governance reform.

Just as the new Burmese government stepped into office in 2011, aggressively pushing industrial agribusiness as a preferred state-supported sector for foreign investment, the government of Norway funded the REDD-Readiness for Myanmar. Funds were awarded to The Centre for People and Forests (RECOFTC) – based in Bangkok and headed by a Burmese forester – as well as the Asian Indigenous People's Pact (AIPP) – based in Thailand and run by an ethnic Burmese exiled activist. The first objective of the REDD-Readiness programme was to draw up the REDD-Readiness roadmap for Myanmar in cooperation with the Burmese Union Government, and to impart capacity building to Burmese civil society and the MOECAF. The United Nation's REDD-Readiness programme[14] subsequently got underway in Myanmar from their regional Bangkok offices, in cooperation with RECOFTC and AIPP, regional UN agencies and relevant Burmese government departments (namely the Forest Department). The first REDD-Readiness meeting in Myanmar took place in mid-2012, after which – in 2013 – the UN's REDD-Readiness roadmap document was released to help guide REDD-Readiness preparation. The report suggests $USD 20 million to fund REDD-Readiness projects in the country; however, until

[14] The UN's REDD-Readiness programme brings together UNEP, UNDP and FAO to facilitate REDD-Readiness programmes in recipient countries, to prepare for eventual REDD+ financing.

the time of writing, there had been no action for administrative reasons within the participating UN agencies and lack of commitment from foreign governments, such as Norway.[15]

At least three forest conservation projects earmarked for Myanmar and linked to REDD+ have received incremental co-financing since 2014 from the World Bank's Global Environmental Facility (GEF) in Washington, D.C. The 2014 GEF-6 funding cycle has been renamed from the previous GEF-5's REDD+ to instead be called "sustainable forest management strategy" (SFM). The new name suggests that it still deals with carbon sequestration, but that it also addresses forest management principles – perhaps mirroring the World Bank's increasing scepticism about REDD+'s future.[16] The Wildlife Conservation Society (WCS), headquartered in Brooklyn, New York, received one such GEF co-funded grant, which is to focus on forest management in the Tanintharyi Region, to be administered by UNDP's regional office in Bangkok.[17] Fauna and Flora (FFI), headquartered in the UK, received over $USD 5 million GEF-6 co-financing for their proposed "Ridge to Reef" project in the Tanintharyi Region, with administration and project collaboration through UNDP's Bangkok regional office. FFI's project would be the expansion of the Protected Area System in Tanintharyi in both marine and terrestrial landscapes. The FFI project has to goals. First, it aims to make oil palm 'sustainable' by engaging in the controversial regional Sustainable Palm Oil Initiative (SPO) as the main threat to deforestation. Second, it aims to strictly protect intact forest ecosystems – which happen to both include agricultural and forest landscapes that have been implicated in counterinsurgency, land grabs and gross human rights abuses (see case study below). The UN's FAO office in Myanmar has been a recipient of GEF-5 REDD funds (of the previous cycle), to be implemented through both MOECAF and MOAI, with support from FAO's regional office in Bangkok; the aim of these funds has been to work on land use planning at the interface of agriculture and forestry.[18] In addition to the UN and international conservation organisations funded through REDD+ mechanisms, other international agencies, such as ITTO, along with foreign governments (Korea, Japan, EU member states, USA, etc.), have also begun to promote and facilitate processes and projects linked to REDD+.

Another prominent process underway in Myanmar related to forests and conservation is the EU's Forest Law Environmental Governance and Trade (FLEGT), which focuses more on timber trade legality and forest governance. The Burmese government began engaging with the EU's FLEGT process soon after reforms began. It has been mostly supported by Burmese civil society and international NGOs working on forest governance reform, as it offers a rare mechanism for civil society to be directly involved in what used to be a solely government (and male) arena. Whereas REDD+ processes do not (so far) address issues pertaining to the legality of forest conversion, timber production, and trade, nor even governance and rights, civil society representatives engaging in FLEGT have been squarely confronting these issues that previously were the strict domain of military leaders. While REDD+ processes concern keeping carbon in the ground for climate change mitigation

[15] Interview, UN-REDD Readiness officials, Bangkok, Thailand, 01 December 2014.
[16] Interview, GEF Southeast Asia REDD+/SFM grants officer, Washington, D.C., September 2014.
[17] Interview, GEF Southeast Asia REDD+/SFM grants officer, Washington, D.C., September 2014.
[18] However, by the end of 2014, GEF was still waiting for a fully developed implementation strategy from FAO. Interview, GEF Southeast Asia REDD+/SFM grants officer, Washington, D.C., September 2014.

measures, FLEGT deals with legality standards for countries consuming tropical timber, ensuring that they import legal and sustainable timber and meet agreed certification and verification standards. Both mechanisms, however, confront issues regarding trade — of carbon and timber — and the related dilemmas of inequitable spatial distribution of benefits and costs, albeit under very different terms. The mishmash of programmes, international processes and conflicting agendas has left the MOAI supporting agribusiness expansion, now one of the leading causes for deforestation in the country; the MOECAF's Forest Department promoting forest conservation through REDD+ mechanisms; the MOECAF's timber enterprise finding innovative ways to present their timber as legal and sustainable to western consuming countries; and Burmese civil society caught in the middle of the 'greening' of green grabs.

Hydropower dams, international investment, and militarised conflict

Large-scale hydropower dams provide another climate change mitigation strategy, in addition to biofuel production and carbon sequestration through forest conservation. As is the case for agribusiness expansion and carbon sequestration, hydropower schemes spatially overlap with other climate change mitigation strategies and related land, water, and forest-based generated conflicts. Dams that have been, or planned to be, built in Myanmar are predominately in ethnic conflict areas, replete with territorial contestations and armed confrontations between different ethnic armed groups and the Myanmar Army. Ethnic Burmese civil society groups have long argued, based on field data, that the Myanmar Army led targeted attacks in planned dam areas to clear out non-state armed groups and ethnic communities, with further militarisation from dam building (Myanmar Rivers Network 2011). The mounting attacks and militarisation linked to dam projects are thus threatening the ceasefire accords and national peace process (Gray 2014). Agribusiness expansion and forest conservation (and conversion) are also most concentrated in these same resource-rich landscapes scarred by decades of armed conflict over ethnic self-determination and resource wealth sharing. A landscape approach enables an examination of these overlapping, competing land and resource uses that converge as sustainable alternatives to a carbon economy, but which themselves trigger old and new forms of contestations over equity and justice.

At least eight dams on the Irrawaddy (or *Ayeyawaddy*) River – the ecological and cultural vein of the Bama (ethnic majority) civilisation and nation-state – and its tributaries in the Kachin and Shan States have had initial agreements by the previous military-government with Chinese state-backed hydropower firms. An additional six large-scale hydropower dam projects have been proposed by Chinese and Thai companies for the Salween (*Thanlwin* in Burmese) River that passes through the Shan, Karen and Mon States (Salween Watch 2014). The previous military-government has reportedly signed agreements for a total of sixty hydropower projects for the country to mostly Chinese firms, but also Thai and Indian, many of which never succeeded in clearing the high hurdles to realise such an investment in a challenging environment.

Since the new government took office – using different national economic development models, aspirations, and international backers – some controversial dams have been postponed or cancelled (Aung Shin 2014). The most high-profile dam suspension by the new government was the Myitsone dam at the confluence of the Irrawaddy River just north of

Myitkyina, the provincial capital of the Kachin State. The Chinese-backed dam, being planned in the cultural and spiritual centre of the Kachin society, was fiercely opposed by the Kachin both at home and abroad since its announcement in the mid-2000s. Only after the new government took office, and the Bama civil society networks based in Yangon took on the cause, did the new President temporarily suspend the dam during his term (*New York Times* 2011). Meanwhile, an additional six other Chinese-backed dams – in the Kachin State on the main tributary of the Irrawaddy River along the China border –are stalled due to war breaking out again between the Burmese government and the KIO.

This does not mean that the new government has decided to fulfil their expected massive surge in energy demand from non-hydropower sources. On the contrary, some members of Parliament and the Chamber of Commerce are promoting increased Chinese investment in Myanmar's hydropower dam industry (Soe Sandar Oo 2013). For example, two dams in the Kachin State and four dams on the Salween/Thanlwin River, all in areas controlled to varying extents by armed groups, are receiving renewed pressure from the current government to push ahead with construction plans (Yen Snaing and May Kha 2014). China has long looked to Yunnan and Myanmar (especially the Kachin and Shan States near its border) to offset its dependence on coal-generated energy, such as its plans to build a string of 13 dams on the upper reaches of the Salween/Thanlwin (*Nu* in Chinese) River and across its border with the Kachin State.

While the Kachin State has been the centre of China's dam industry in Myanmar, and consequently has received the most attention — and resistance — the North Shan State has also been a hotbed of China's regional hydropower dam development. Just a few hours' northeast drive from the area's urban centre, Lashio, is the Kunlong dam. This new dam project has been approved by Myanmar's Ministry of Electric Power, being undertaken by China's Anergy Group Holding, Ltd. and Myanmar's most infamous crony company, Asia World - whose origins are from the Cold War, counterinsurgency, and the heroin trade. A newly constructed road connecting Kunlong and the new dam site to the nearest Shan town has been contracted out to Asia World as well, which has affected over 20,000 people from over 60 surrounding villages, with no compensation awarded according to local researchers (Phu Murng 2014). Kunlong, a town famous for one of the most well-known and deciding wars against the Burmese communists and the Myanmar Army, straddles the Salween/Thanlwin River next to a WWII-era metal bridge. Perhaps more importantly, it is the gateway city to Kokang Special Region 1, an area that used to be controlled by a non-state armed ethnic group known for its involvement in the drug trade. When the armed group refused to fold under the authority of the new Burmese government, they were attacked with tens of thousands of refugees pouring over the Yunnan border - much to the displeasure of the Chinese government regarding border stability. At the time of writing, the rebel group was again being attacked, this time in a more sustained manner. Five battalions of the Myanmar Army were based in Kunlong, just below the dam site. In addition, there a string of repeated attacks by the Myanmar Army against the KIO and Ta'ang armed groups took place just west of the dam site, and was still continuing at the time. While the war targeting the KIO and Ta'ang is framed by a much larger political theatre, specific battles and strategies against these groups in the North Shan State are in part related to the Myanmar Army securing the route of the newly constructed Chinese oil and gas pipeline that passes through this territory on its way from the sea to China (Shwe Gas Movement 2011).

A similar militarised conflict situation has unfolded in KIO controlled areas that feature Chinese dams. Just after the new Burmese government took office, the regional military commander in the Kachin State was negotiating with the KIO and the state-owned China Datang Corporation to push ahead with the Taping 1 and 2 hydropower dams. Allegedly, the KIO would have been paid a handsome fee to push the project ahead; however, they were angered that the contract did not feature an electricity share agreement for KIO controlled territory. At the same time, the Burmese military was pressuring the KIO to become part of the Union Army, and tensions were high. More soldiers from both sides were being deployed at the Taping dams; meanwhile, the Chinese were allegedly not willing to pay the KIO taxes for operating in their territory. In short, the dam sites manifested the multiple layers of armed conflict and political and economic grievances – and, perhaps not coincidentally, were the site of the first cross-fires exchanged between the two sides that marked the KIO's return to war.[19]

The new Burmese government is still proceeding with Chinese (and Thai) backed mega-dams along its two most celebrated waterways, despite some back-pedalling for the most sensitive of dams or those located in war zones. However, a new strategy is brewing that signals even more large dams lay ahead. Since the reforms began, international financial institutions and global development agencies have been assisting the government in overhauling its outdated economy and jumpstart its growth engine – which includes provisions for massive energy generation. The World Bank, IFC, Asian Development Bank (ADB), and Japan International Cooperation Agency (JICA) have all pledged to assist Myanmar in reaching its energy growth targets by developing the country's energy policies and strategy plans, as well as funding extensive energy infrastructure projects. The Burmese reform government has made it clear that they are now more interested in turning to Western and Japanese companies to meet their energy demands (as opposed to China as their former heavyweight); more specifically, they would focus on companies that follow international, social, and environmental standards with reliable construction and financing. This geopolitical switch was made apparent at Myanmar's first international hydropower conference in the capital earlier in 2015, organised by the World Bank's IFC and the International Hydropower Association (Vrieze 2015).

According to the Director of the Department of Hydropower Implementation at the Ministry of Electric Power (MOEP), Myanmar has 24 operational dams and is currently constructing seven more, while preliminary agreements have been signed for 35 additional projects. Another four projects have been proposed by foreign hydropower firms. If all projects were built, it would raise the total amount of hydropower generated in Myanmar to nearly 44,000 megawatts, a significant increase from the currently meagre 3,000 MW. MOEP's newly planned hydropower dam projects are mostly associated with companies from Europe and North America. For example, the Shweli 3 dam project in the North Shan State is to be built by firms from the United Kingdom and France, the Middle Yeywar and Bawgata projects (the latter in the Karen rebel territory) will be built by Norwegian firms (who, along with the Japanese, are largely bankrolling the ethnic peace process), and the Middle Paunglaung project will be handled by Austrian or British firms (Vrieze 2015).

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[19] Interviews, KIO army battalion commander at the dam site, Laiza, Kachin State, April 2013.

Landscapes of layered intersections: Land grabs, climate change mitigation, and conflicts

Individual silos addressing climate change – such as biofuel, forest conservation and hydropower dams – eclipse their interactive nature and spatial overlap. The case of Myanmar showcases the need to take a landscape approach when examining the multiple and competing layers of historical land conflicts, climate change mitigation measures, and renewed conflict and cooperation over land and resources. The issue is not just that biofuel agribusiness ventures, forest conservation and dams – and their impacts – occupy the same areas, but also how they individually and cumulatively aggregate conflicts, or how they mitigate them by providing new innovative opportunities for cooperation to resolve them. Moreover, historical conflicts must be considered, as introducing new layers of land management interventions creates new tensions from old configurations. Agribusiness expansion is one such clear example of how new economic growth models and global finance and investment since the global economic crash of 2007/8 are contributing to further threats to the very forests relied upon by communities for their forest-based livelihoods. These are the same landscapes, such as in the Kachin State and Tanintharyi Region, which international conservation organisations and REDD+ funders are attempting to square off into national parks. In 2004 and 2005 alone, 1.77 million acres (716,000 ha) of permanent forest estates (PFEs) were officially de-gazetted to make way for resource extraction, energy infrastructure development, agricultural expansion, and military compounds.[20] Since then, the rate of agricultural estate expansion into previously forested lands has grown. The analysis of 2013 official agricultural statistics has shown that 822 companies or individuals had been allocated a total of 0.74 million acres (300,000 ha) from de-gazetted PFEs just for agricultural production (MSU and MDRI/CESD 2013), although the actual figure is expected to be significantly higher. In addition, some forest reserves and PFEs have been converted to non-forest land use without any actual change in official land classification, leading to further confusion for land use management and planning. The remoulding of landscapes to fit both old and new interventions affecting community land use and access rights is highlighted in this section through showcasing two prominent field research case studies in northern Myanmar (in the Kachin and north Shan States) and in the far southeast of Myanmar (in the Tanintharyi Region).

Military counterinsurgency, oil palm, and forest frontiers

Oil palm development in the Tanintharyi Region in Myanmar's far southeast showcases the intersection and competing claims of agribusiness, deforestation and related conversion timber, and carbon sequestration. The Tanintharyi Region, especially in the southern half where oil palm concessions are mostly located, has some of the most extensive lowland high-value conservation forests (HCVFs) in the country, largely under forest reserve protection, and with unparalleled ecological diversity and value. These protected forest areas also provide the central government with their annual log quotas, with the Tanintharyi Region's annual official quota marked at 30,000 cubic tons. The overlap of agribusiness concessions, logging, and HCVFs in the Tanintharyi Region has been further complicated – in terms of new sources of conflict and cooperation opportunities – by the recent introduction

[20] Data collected from MOECAF, Naypyitaw. Due to corruption and a lack of systematic data collection, it is expected that this figure underestimates the amount of actual forest conversion.

of international conservation projects in eastern Tanintharyi, in the same landscapes as oil palm and logging.

The oil palm industry is one of the global agricultural commodities that most significantly drives deforestation and conversion timber production (Hosonuma et al. 2012). Another major industrial agricultural crop promoted by the previous military regime since the late 1990s – now similarly promoted by the reform government – is oil palm. Oil palm crops are exclusively located in the Tanintharyi Region, predominately in its southern half. The intended initial goal in the early 2000s, when the programme began, was to plant 500,000 acres of oil palm: half for domestic demand, the other half for export (*New Light of Myanmar* 2002). This was in response to a full reliance on oil palm imports from Malaysia, with the military leaders feeling increasingly vulnerable and paranoid from international sanctions and further global isolation. In just one decade, the Tanintharyi Region has experienced nearly a 900 percent increase in oil palm planted since 2000/2001 (DAP 2010b), although annual increases are stagnating. According to township level government data, by the end of 2012/13 (after a seven-year oil palm development programme), a total of nearly 1.90 million acres had been awarded,[21] but only 360,000 acres (less than 20 percent) have actually been planted. Oil palm concessions now cover 18 percent of the land area of the Tanintharyi Region, predominately in the more extensively forested southern and eastern parts. Malaysian investors, and now Thai and Chinese, have expressed formal interest in further supporting the country's 'palm oil bowl' development. For instance, Malaysia's Felda Global Ventures Holdings Bhd (FGV) has already signed a Memorandum of Understanding (MoU) with the MOAI for oil palm processing and potentially also large-scale production in the future (Burnama 2012).

But in order to understand how the Tanintharyi Region was turned into deforested oil palm fields and logged out hills, events leading up to and enabling the country's largest collective land grabs must first be explained and contextualised. When the 'palm oil bowl' plan was conceived, large areas of this region were controlled by one of the country's best known and oldest non-state ethnic armed political opposition groups, the KNU. The KNU's 4th Brigade is roughly located in the eastern half of the Tanintharyi Region, which is almost exclusively populated by Karen people. A series of resource extraction and production endeavours carried out by the Burmese military regime at that time, along with a massive military offensive against the KNU's 4th brigade in 1997, has cumulatively contributed to a scarred landscape brimming with grievances and fear. REDD+ related projects co-funded by the World Bank's GEF feed into an existing post-war landscape that could very well trigger new grievances from a range of issues and unforeseen complications regarding the right to land and justice.

In the early 1990s, a consortium of foreign oil/gas companies signed a deal with the then Burmese military regime to allow an oil/gas pipeline to run overland across the northern portion of Tanintharyi to Thailand. The Yetagon/Yadana pipeline led to a military offensive to secure the area away from KNU, who had territorial control over the area. This resulted in gross human rights violations and forced displacements of villagers living in the area (ERI 2009). Land and armed conflicts were further aggravated by a Mon armed group pushing into

[21] The land was awarded to nearly 40 Myanmar companies, the Government's Ministry of Industry 1, and the Union of Myanmar Economic Holdings Limited (UMEHL, the military's conglomerate).

the area as they retreated from Myanmar Army attacks,: the Mon migrants planted rubber and even oil palm on what used to be Karen village land before the forced relocation.[22] Pressure from international civil society groups and corporate social responsibility (CSR) led the lead oil/gas consortium member, Total, to establish the Tanintharyi Nature Reserve in the vast surrounding forests of the northeastern Tanintharyi Region, which on paper still exists today (ERI 2009). However, the expansive forested area remains contested by the KNU, who despite being an armed rebel group has its own forest department and has long engaged in forest conservation before the Burmese government arrived.[23]

Despite the pledge of Total and the Burmese government to conserve the forests in the northern Tanintharyi Region as CSR, the Burmese government at the same time started to facilitate the allocation of logging concessions to Thai companies in the KNU 4th Brigade territory along the Thai border in Tanintharyi. This occurred, perhaps, due to the KNU 4th brigade being weakened from the attacks in northern Tanintharyi (which had been required to make way for the pipeline). It may also have resulted from the 4th Brigade officers watching their ethnic armed brothers sign ceasefires with the military and quickly turning to business. Thai logging companies were mostly connected to national political and military leaders at that time, and backed by Thailand's new Myanmar policy of "turning battle places into market places." They caused havoc on a fragile political environment between the Thai government and border policy, the Burmese military-government, and a very fractured KNU. Karen villagers were caught in the middle as their surrounding forests became logging concessions.[24] The logging concessions which were facilitated by a mixture of KNU leaders, Thai businessmen and state officials, and Burmese military-government officials, in effect further weakened the KNU territorial security, increased KNU corruption, and for the first time in these areas, enabled the territorial access of the Burmese military-government.

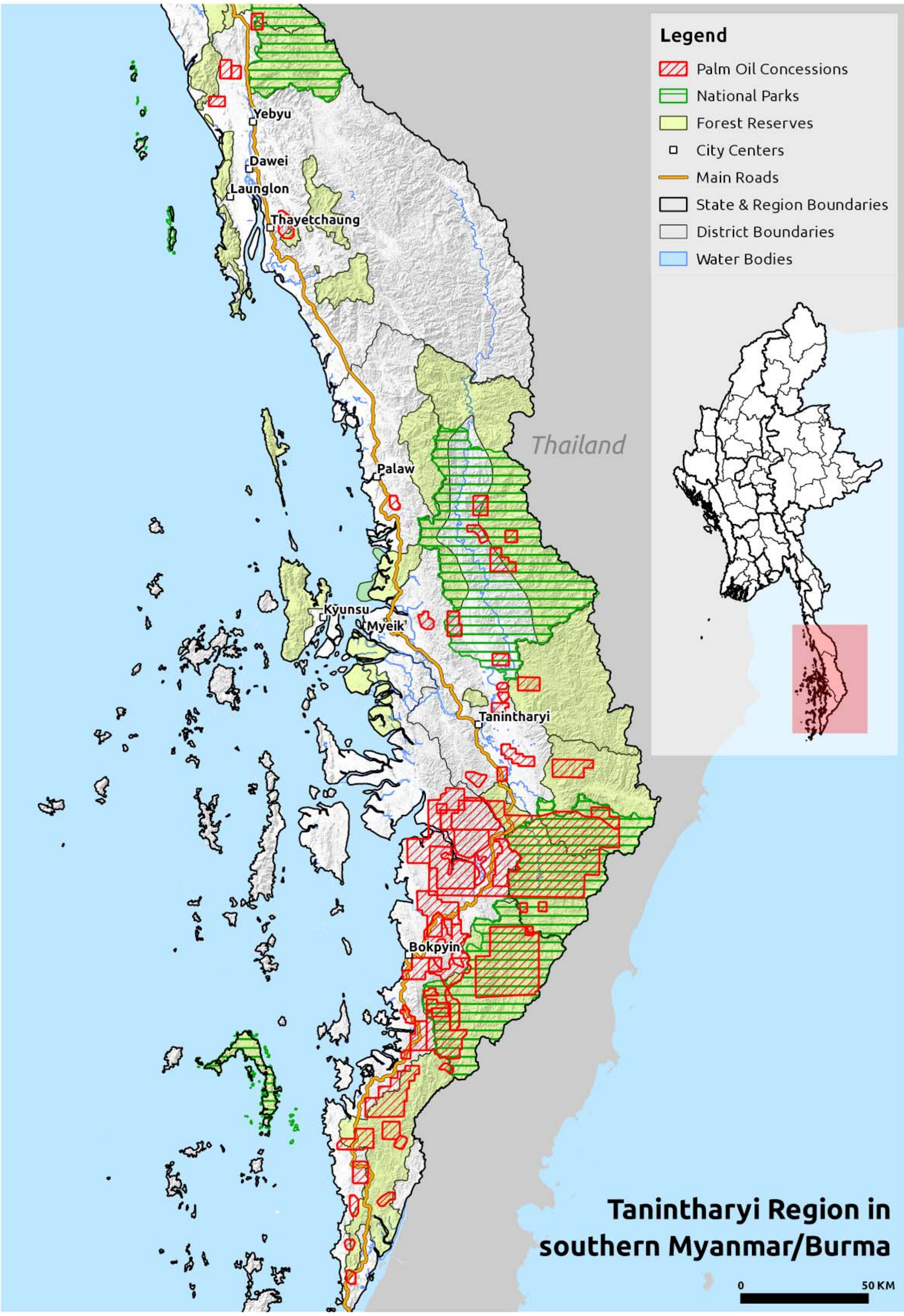
At the height of the border logging frenzy, when the KNU was being heavily pressured to follow suit and sign a ceasefire (like most groups in the early 1990s), and still reeling from the oil/gas pipeline cutting through their territory, the big 1997 military offensive happened. Partly as a result of having more military manpower available from shifting soldiers to areas controlled by armed groups who still refused ceasefire agreements, and perhaps further incentivised by the military-government making more inroads into resource-rich eastern Tanintharyi, the Burmese government pushed back the KNU to the Thai border. Karen villagers were left fleeing into forests as internally displaced peoples (IDP), and across the Thai border as refugees when their villages were attacked and they were ordered to leave. Remaining Karen villagers were resettled along the newly renamed, government-controlled Union Road that runs through the region from north to south (some forced, some voluntarily). After several forced portering incidents, Some of them soon left.[25] The situation remains the same today, though a number of factors are different – among which a new reform-minded Burmese government and the ongoing national peace process, which has included the KNU signing a ceasefire agreement. In this context, Karen refugees are being softly pressured to return at some point, and IDPs are reassessing going 'home'.

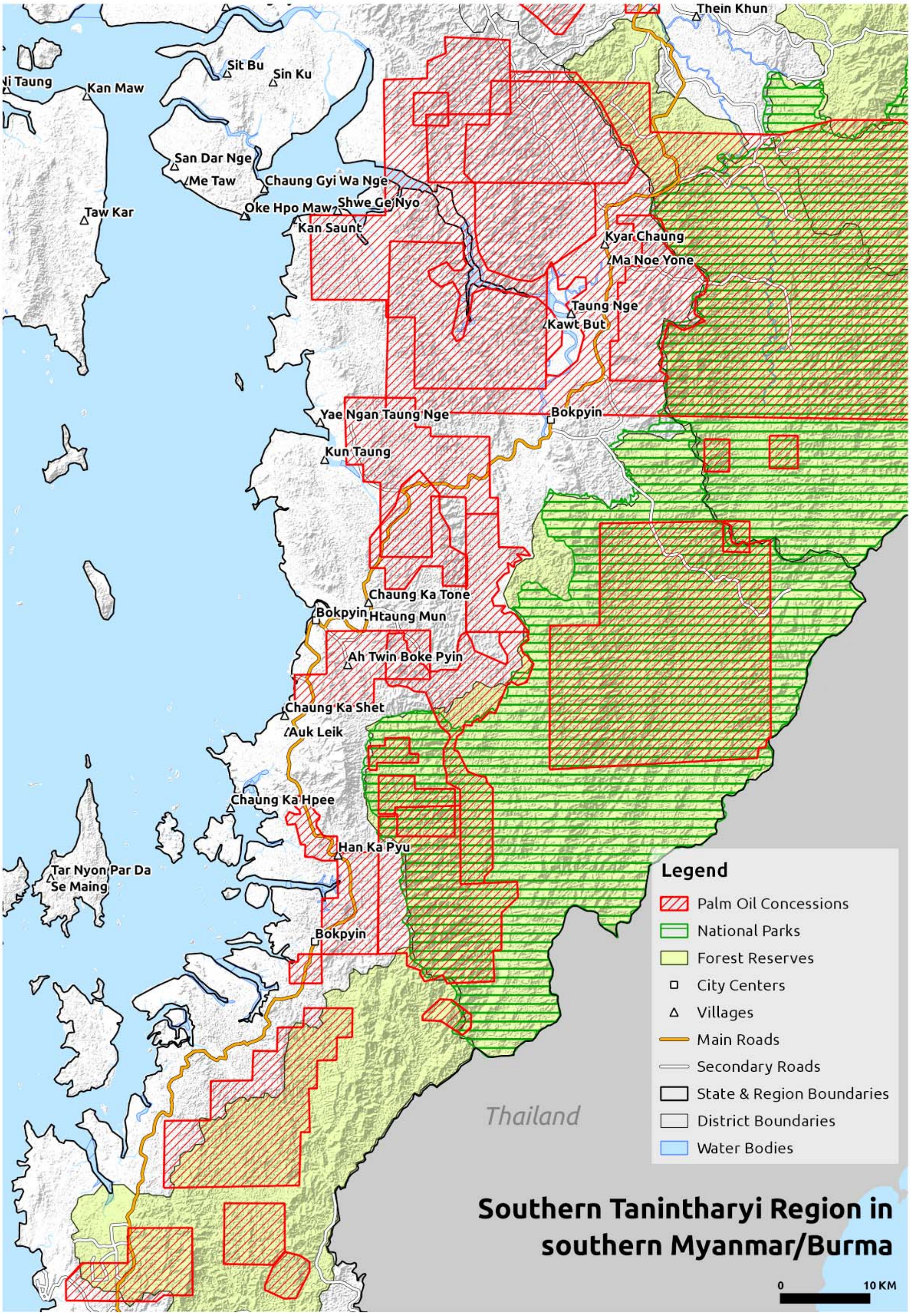
[22] Interview, Karen human rights advocate, Chiang Mai, Thailand, 15 April 2015.
[23] Interview, Karen environmental organisation, Karen human rights advocates, and KNU officials, 2014-2015.
[24] Interviews, Karen and foreign environmental rights experts, Chiang Mai, Thailand, and Dawei, Tanintharyi, 2014-15.
[25] Interviews, refugee camp on border with Tanintharyi, 2 April 2015.

That being said, those Karen villagers who have gone back to their original villages to check the local security situation have been confronted with an unexpected obstacle. In 1999, the Myanmar military-government launched its first seven-year oil palm development program, proclaiming the Tanintharyi Region to be the 'edible oil palm big pot of the nation'. The original sites of the cleared Karen villages have now mostly been allocated to private Burmese businesses as oil palm concessions. The oil palm estates are part forested hillsides, part overgrown swidden fields, and part hallows of a former lived village. Historical land use claims by Karen populations who wish to return to their original settlements since the tentative ceasefire with KNU present new challenges to the ethics of oil palm production, the legal weight of existing land claims, and the resettlement of IDPs and refugees.

This intractable problem of "whose land and for whom" does not just impact the oil palm sector. The Tanintharyi Region is home to the world's last remaining expansive and intact critically endangered lowland *dipterocarp* rain forests and high value conservation marine habitats. The region is predominately covered by different overlapping high priority "Key Biodiversity Areas" (KBAs), which are defined as areas holding significant populations of species of high conservation concern. In addition, the whole region has been identified as a Tanintharyi Range conservation corridor (WCS 2012). The world's largest international conservation organisations – with new branch offices in both Yangon and now Tanintharyi – have focused new conservation efforts in the Tanintharyi Region, all funded through REDD+ initiatives. Tanintharyi has been turned into a REDD+ target hotspot because over 60 percent of the region is under forest cover (approximately 6 million acres). Of the total land territory in the Tanintharyi Region, 31 percent is officially registered as a forest: either as protected public forest (PPF) and national forest reserve (both administered by the Forest Department), or as "unclassified forest" land (mostly administered by the MOAI). The 37 various sized protected forest habitats in Tanintharyi – ranging from a few acres to hundreds of thousands of acres in size – total 3.32 million acres. The Dawei District has the least area of protected forest (due to the lowest forest cover), at 116,000 acres, as well as the least acreage of oil palm concessions awarded. The Myeik District, on the other hand, has over 1.45 million acres of protected forest habitat, thanks in part to the Tanintharyi Nature Reserve (420,000 acres alone). The southernmost district, Kawthaung, has nearly 437,000 acres of protected forest reserves, owing largely to the Lay Nya National Forest and the Ba Kyan Forest Reserve – the former being pushed by conservationists for national park status, to help block deforestation pressures by logging and agribusiness companies. Only one protected area has been formally approved so far – the Tanintharyi Nature Reserve in the northern part of Tanintharyi. This occurred in 2005, thanks to pressure and corporate social responsibility (CSR) funds from the oil/gas consortium led by Total, in response to the constructed pipeline – which is now located near to the nature reserve. Three other terrestrial national parks await formal demarcation, although their fate remains very uncertain with oil palm and logging concessions being allocated in the same proposed protected areas. Overall, there is considerable spatial overlap between protected forest zones and demarcated oil palm concessions, particularly in the southern part of the Tanintharyi Region. **Figures 1** and **2** demonstrate this point, which highlights competing land uses among different agencies and global political economies.

Figure 1 and 2





Only in 2010/11, nearly 70,000 acres of lowland forest had been cleared and burned for oil palm development in the Tanintharyi Region by Burmese companies. About 1.15 million acres of categorised forestlands in Tanintharyi have been specifically earmarked as suitable for agribusiness concessions, according to government data. Meanwhile, forest hotspots along the region's eastern edge – including region(s) where most of the oil palm concessions have been allocated – are now being advised by international conservation teams to turn into nature reserves, with promises of REDD+ and SFM management funds, and potential future REDD+ carbon sequestration schemes. The question is, will earmarked REDD+ funds from GEF and western government donors address the threat of oil palm to forest integrity, and the human rights abuses and land confiscations? And what about hopefully returning Karen populations wishing to settle back in their original villages, which are now fenced off oil palm concessions and threatened by further national forest protection measures?

Biofuel, tigers and forest conservation

The other most forested region in the country is on the opposite corner of Myanmar, in the Kachin State (in the far north, next to Yunnan, China). Much like the Tanintharyi Region, the Kachin State has been heavily targeted by agribusiness, amounting to over one-fourth of the country's total agribusiness concessions (second only to Tanintharyi Region). The Burmese military and the KIO – one of the most prominent ethnic armed political opposition groups in the country, alongside the KNU – have been embroiled in armed conflict for decades in the Kachin State and the north Shan State. A nearly two-decade ceasefire with the KIO starting in 1994 led to expansive resource extraction by both sides, but did not result in any genuine political settlement, instead leading to conditions of 'ceasefire capitalism' (Woods 2011a). Soon after President Thein Sein took office, the Burmese military annulled the ceasefire agreement; the renewed war continues to this day (TNI 2013). Agribusiness development in the Kachin State evolved in a more regionalised manner, particular to resource relations with neighbouring Yunnan. The relations were less strong (at first) with the Burmese military-state, which was less able to exercise political authority and control in many areas of the Kachin State due to the KIO. As such, mainland Chinese business interests in mining, timber, large-scale hydropower dams, and now agricultural commodities, have greatly influenced the resource economy and local political and economic grievances and land conflicts, further contributing to the armed conflict.

That being said, the region's history actually starts with forests and tiger conservation. The first international non-government organisation (NGOs) in the reclusive military-controlled country was a well-known American conservation organisation, Wildlife Conservation Society (WCS), from the late 1990s. In 2004, Myanmar's Ministry of Forestry agreed to expand the original 6,400 km^2 Hugawng Valley Wildlife Sanctuary to cover almost the entire Hugawng Valley in western Kachin State, an area of nearly 22,000 km^2. This new conservation park established by WCS became the largest tiger conservation area in the world, and one of the world0 largest forested protected areas. The Hugawng Valley Tiger Reserve is part of the 30,000 km^2“art of the 30,000 kmon as devised by WCS, which encompasses most of western Kachin State, bordering northeast India and Tibet. In mid-2010, WCS was successfully able to expand the tiger reserve to include nearly the entire Hugawng Valley, despite human settlements, farming, and the KIO holding claims to the area. An estimated 50,000 people lived in the Hugawng Valley when the park was demarcated (Pollard 2005), although the population is expected to be higher, especially if gold mining migrants are included.

Alan Rabinowitz, the executive director of the WCS Science and Exploration Program at the time and the foremost international conservationist working in Myanmar, summarises the common position of international conservation organisations working in the country as followed: “WCS does not sanction forced relocation or killings but we have no control over the government. We are in Myanmar because it is one of the highest biodiversity countries” (Harrison et al. 1997). However, Rabinowitz has also highlighted certain advantages of working on conservation with an authoritarian regime: “It's much harder to get conservation done in democracies than in communist countries or dictatorships; when a dictatorship decides to establish a reserve, that's that” (Shnayerson 2005). Moreover, Rabinowitz advocates a top-down conservation approach which matches dictatorship-controlled countries well: “Biodiversity conservation is doomed to failure when it is based on bottom-up processes that depend on voluntary compliance…I would advocate a top-down approach to nature conservation — contrary to much contemporary political and conservation rhetoric — because in most countries it is the government, not the people around the protected areas, that ultimately decides the fate of forests and wildlife” (Rabinowitz 1999). Rabinowitz confirms that one of the reasons the Burmese regime was so enthusiastic about the Hugawng Valley Tiger Reserve was the opportunity to engage in negotiations with the KIO, who controlled around 80 percent of the Hugawng Valley at the time of the conservation land concession (Graham-Rowe 2005), including a major KIO military base located in the valley. During one visit, a KIO commander interviewed in his headquarters in the proposed tiger reserve proudly claimed: “This is our land” (Rabinowitz 2004). Rabinowitz supports this assertion in his National Public Radio interview, declaring, “The KIO/A rules this valley; they have autonomy over this valley” (Montagne 2004).

In the mid-2000s, when the Burmese military government signed the Hugawng Valley over as a tiger reserve – at a time when the military-state still only had nominal control over the politically contested landscape – there were little official government presence or strategic interest in that part of the Kachin State. Before the conservation rezoning, the Burmese government had little presence or de facto control over this vast lowland forested area. However, after WCS instilled national pride in the military leaders and Forestry department head over the Hugawng Valley – as yet not much administered by the military-state – the regime perceived this vast land as national territory to be controlled, patrolled, and used. Once WCS provided the military-state with a conservation ethos to legitimise their control over the indigenous territory, the military realised its economic and militarily strategic importance. The Forestry Department even created a corps of some 60 ’wildlife and conservation protection police’ for the tiger reserve, subsidised by the WCS.[26] These officers allegedly accepted bribes from locals seeking to continue their subsistence NTFP collection.[27] This overall militarisation and government centralisation over the valley has directly and indirectly led to unprecedented levels of conflict for the Kachin villagers living in it and for the KIO who previously considered this precious landscape under their control.

Since the tiger reserve’s set-up in the mid-2000s, the valley has been largely piecemealed into resource extraction concessions, floods of migrant workers arrive who eat forest wildlife to survive, roads are built and maintained by military government contracted out to Burmese businessmen, and new national military battalions are established (KDNG 2007). A few years

[26] Interview, WCS office staff, Yangon, 2004.
[27] Interview, Kachin community development worker, Myitkyina, Kachin State, 2007.

after the initial wildlife sanctuary was established, the Burmese government allotted large-scale alluvial hydraulic gold mining concessions to Chinese companies, representing acts of military territorial expansion and control over this politically contested territory (KDNG 2007). A few years after the gold mining concessions, the Burmese regional military leader jump-started agribusiness in the Kachin State to capitalise on to capitalise on China's massive potential overland market, with biofuels (and rubber) as the entry points.

Agricultural development (for rubber and biofuels for the Chinese domestic market) has been fuelling land conflicts and livelihood dispossession for local villagers since the mid-2000s. This process of reallocating land rights from villagers to businessmen has been led by the local political elite and/or armed groups (both "paramilitaries" and ethnic political opposition groups) who maintain business relations on both sides of the Myanmar-China border. However, since Chinese logging firms have been operating at a considerable scale in the Kachin State since the late 1990s (Global Witness 2005; Woods 2011b), agribusiness concessions have not been needed as a mechanism to access timber, and so pose a lesser threat as a deforestation driver. Agricultural projects are also potentially more profitable as an enterprise in itself, due to financial support from Chinese government programs such as China's national opium substitution programme for Myanmar (and Laos) (see below), with short-distance access to regional and global agricultural commodity (biofuel) markets across the border with China. With its abundant water resources and 'wastelands', the Kachin State is being positioned by the Burmese government as the next national and regional frontier of agribusiness development. This may not only hinge on developing an agricultural frontier, but (some argue) also function as part of the state's military-territorial expansion strategy into areas contested by the KIO (Woods 2011a).

By 2012/13, nearly 1.4 million acres of agricultural concessions had been awarded in the Kachin State (27 percent of the national total), but less than 175,000 acres (12 percent) have actually been planted. The MOAI lists Kachin State as having over 2.5 million acres of "vacant, fallow, virgin or wasteland," of which 430,000 acres have been earmarked as suitable for agribusiness production. Much of these 'wastelands' cover forested areas as well as areas actively used by local communities for swidden agriculture and for other livelihood uses. For example, in the Mansi Township of Bhamo District (in southeastern Kachin State, on border with Yunnan), the government's agricultural township authorities have mapped out the so-called 'wastelands' available for large-scale private agricultural concessions. However, many of the mapped 'wastelands' in fact overlap with forest reserves mapped by the township's Forest Department.[28] Conflicting government maps and land use zoning and management regimes are contributing to the invisibility of the farmers who are already cultivating that land. This is a common problem in the country, especially in ethnic upland areas with agro-forested landscapes that rely on customary land management regimes (Oberdorf 2012).

The country's most well-known and largest agribusiness concession for biofuel production for the Chinese market was allocated in 2006, in and along the world's largest tiger reserve in Hugawng Valley in the western Kachin State. The Yuzana Company, owned by Htay Myint (who features prominently in the oil palm sector in Tanintharyi), was granted a 200,000 acre agricultural concession to cultivate cassava and sugarcane from the northern military

[28] Mansi township wastelands and forest reserve maps on file with author.

commander at the time (KDNG 2010).[29] While Yuzana Co. may be serious about developing their concession, only about 20,000 acres of it has been planted so far according to township authorities, which contravenes national land laws to plant the entire concession in under five years (not to mention the size of the concession is against law too).

Infrastructure development was promoted as part of the agribusiness expansion into the valley, such as the infamous WWII Ledo Road connecting China to India through the Kachin State, which cuts through the tiger reserve and Yuzana's concession. Yuzana also built utility roads to access its concession. This resulted in further land confiscations, however. Yuzana contracted a China-based company, Mein Guan, to develop the infrastructure (e.g., a bridge) in the Yuzana concession as well. Mein Guan was also granted a land concession by Yuzana within their concession area as payment for their services to Yuzana. Mein Guan then cleared selected forested parts of the land, subsequently producing conversion timber, and then planting paddy for the Chinese market. Part of Mein Guan's concession area included an official 2,500 acre community forest. This caused conflict with the villagers, as their community forest was supposed to be legally protected against confiscation. After dialogue and negotiations between community leaders, company representatives, and local military-government officials, the villagers were able to retain part of their community forest, now surrounded by Mein Guan's agricultural concession. At the same time that the Myanmar military commander of the Kachin State at the time granted Yuzana the concession, Jadeland Company (the most prominent Kachin company) also received a 200,000 acre concession in the same valley, bordering Yuzana's concession. Some of their concession had high-quality forests containing valuable hardwoods, which were allegedly targeted for clear-cutting by contracted companies by Jadeland.[30] Jadeland sold part of the concession to a mainland Chinese company with the intention of planting corn and rubber, but which appears to have resulted only in the harvesting of conversion timber. The Hukawng Valley Tiger Reserve Police prematurely stopped the operation, but the company allegedly managed to harvest 160 tons of timber.[31] Jadeland did not adequately pursue agricultural development, perhaps because the Jadeland owner's home village is located in his concession and he did not want to anger local residents. As a result, 50,000 acres of this concession was ceded over to National Progressive Company, owned by the son-in-law of one of the country's highest military authorities. This company allegedly continued to cut valuable hardwood trees and constructed a road in order to plant some of their concession with biofuel crops.

Land confiscation and forced resettlement was widespread to accommodate Yuzana's concession. Reportedly, nearly 15 villages are included in the concession area (including the additional expanded area), with an estimated 5,000 villagers just in the middle project zone alone (KDNG 2010). According to a Kachin environmental NGO, by 2010 163 of about 1,000 households in a total of 6 villages had already been forced off their lands and relocated to a Yuzana 'model village' (*Sanbya Kwye Ywa*) with poor farming land without fishing grounds (KDNG 2010). The report documents 3,600 acres of land confiscated in the surrounding 11 villages by mid-2010 (KDNG 2010). This is in addition to the land and livelihood

[29] The two had fostered close relations when the commander had been posted in Tanintharyi (where Htay Myint is originally from and thus Yuzana's prominent role in oil palm), before his posting to the Kachin State.
[30] Interview, Kachin researcher, Myitkyina, Kachin State, 2013.
[31] Interview, Kachin researcher, Myitkyina, Kachin State, 2013.

infringements that have occurred from the tiger reserve for the villages that were included within the reserve boundaries and no longer allowed to hunt, bear arms, or carry on their traditional livelihood practices. The biofuel concession therefore aggravated an already fragile situation for local communities from the initial 'green grab' that then seemed to have facilitated future grabs.

In the present day, the Hugawng Valley is embroiled in another layer of conflict, this time armed. The KIO and the Myanmar Army broke their ceasefire in 2011, and have been at war ever since. Military manoeuvres on both sides have taken place in and around the valley, jockeying for power over territory, resources, and populations. While renewed armed conflict is curtailing conservation priorities and outreach, the rush of conservation organisations to Myanmar – the largest of which are backed by REDD+ related project funds – is providing new conservation opportunities in the Kachin State. While the Tanintharyi Region has received the bulk of the conservation organisations' attention (see previous case study), the Kachin State – with its expansive sub-Himalayan, semi-deciduous forests west of the border with China – has also piqued much interest for future conservation activities (were it not for the war currently being waged). Nonetheless, future conservation plans are scheduled for implementation once the active fighting subsides. Moreover, the war has not deterred some international conservation organisations from work beside the armed conflicts to protect wildlife and even promote eco-tourism in the face of a war-generated humanitarian crisis. Partly due to REDD+ project funds criteria, and partly due to more recent studies finding tiger populations in the tiger reserve to be nearly, or already, extinct, focus is now being more heavily placed on sustainable forest management to maximise carbon sequestration and ecological integrity. Plans are underway, for example, to reinforce forest conservation regimes for the Northern Forest Complex that includes the Hugawng Valley Tiger Reserve and several other nature reserves in the northwestern Kachin State, butted up against Northeast India and Tibet. One international conservation organisation intends to negotiate with a Kachin paramilitary organisation (which has been accused of rampant logging and being involved in the drug trade) to make part of their border territory into a conservation nature reserve.[32] Meanwhile, the Chinese dam industry is eager to push ahead with the slate of large-scale hydropower dams in eastern Kachin State, which have been suspended in part by the Burmese President, and in part by war-related logistical hurdles. Forest conservation, biofuel production schemes, logging, and dams have spatially converged in time and place within a landscape under attack – and all of them disregard the human rights violations and past injustices suffered by those trying to maintain their livelihoods.

Concluding remarks: Compounding conflicts, innovative cooperation

The Kachin State and Tanintharyi Region case studies make it clear that the convergence of multiple layers of conflict across space and time compounds existing tensions. Conflict drivers interact with each other and the socio-cultural, political-economic, and agro-ecological systems within which they are operating. For the case of Myanmar, the foundation in which these layers are being embedded in is one of the world's longest civil wars, which continues to this day. The new conflict drivers are not just building on decades of armed conflict, forced displacements, and fear, but are themselves, in some cases, further contributing to militarisation, counterinsurgency, and repeated forced displacements.

[32] Interview, international conservation practitioner, Yangon, Myanmar, April 2015.

However, these conflict drivers – old and new – are also creating innovative conflict mediation opportunities for communities under duress. The set of neoliberal laws and policies that facilitate the legal transfer of land from farmers to businessmen conversely also provide new legal mechanisms for protecting smallholder land use rights by offering legal mechanisms to justice. Certain articles in the *VFV* and *Farmland* laws provide regulations by which companies must conduct themselves; if not, they are liable to lose their private use rights. For example, *Article 45* of the bylaws of the *Farmland Law* states that, if the company does not put all of their concession land into productive use after 4 years (reaching yearly percentage targets), then the concession is liable to be cancelled. Moreover, a parliamentary *Land Investigation Committee* was established by the President to inform national policy on how to solve the country's protracted land-related problems. These regulations and bodies offer an opportunity to displaced communities to use the country's new commitment to "rule of law" approach recover their lan and see justice be served. However, to the best of knowledge, few, if any, lawyers have successfully used the new land-related laws to win a case on behalf of their clients in court (however, see example below). In the case of *Article 45*, the land would revert back to the state (as the owner of all lands), not the actual original occupants.[33] Moreover, MPs have accused the *Land Investigation Committee* and the President of avoiding the issue and not properly solving the submitted cases (Ei Ei Toe Lwin and Noe Noe Aung 2014). This does not offer much hope for land rights defenders and farmers, especially for the cases when a crony company got transferred land from the military that itself was previously grabbed or obtaining their land concession through using the new set of land laws. Nonetheless the same principles of following a robust rule of law offer civil society innovative legal approaches to fight for justice in the courts.

Other policy directives are in the process of being implemented and fought over in Myanmar's urban spaces. Laws and policies are being crafted to both reinforce the country's commitment to neoliberal economic growth while at the same time offering clauses that can be seen as either softening the blow to communities, or as safeguarding the futures of those potentially negatively affected by such developments. For example, the country's National Land Use Policy (NLUP) comes out of a process in response to harsh criticisms of Myanmar's two land laws for their potential negative impact to smallholders, especially ethnic upland farmers. The draft NLUP has sought to streamline and harmonise land use management in the country on a more technically sound basis. And Iin some cases, it has tried to reassert the rights of more marginalised communities, especially upland cultivators relying on customary practices - but not without backroom government manoeuvres to stymie such progressive measures. And yet, its approach to land use rights still only amounts to enhancing the security of agribusiness investors, at the expense of human rights and social justice (TNI 2015). The final land policy and civil society's response to it is yet to be seen, as are its potential uses as a tool to obtain justice for past and future rights abuse. However, a more worrying new law is also in the process of passing, one which could very well nullify NLUP's potential steps forward in protecting smallholders land use and access rights. The new investment law draft includes the right for companies to file for international arbitration in the event of the companies' potential profits being stymied by national laws or regulations, in this case clauses in the future NLUP that protect smallholders (Woods and Aguirre 2014).

[33] Although lawyers have won cases where land was forcibly confiscated *before* the current government took office and the correct protocols at that time were not properly followed.

Meanwhile, the UN 's FAO *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of Food Security* ("Voluntary Guidelines") is being applied specifically to Myanmar, offering potential new avenues for civil society to further challenge injustices.[34] Legal battles appropriating the same instruments used against communities – configuring resistance as walking along a double-edged sword – are in the midst of being fought, using laws, policies, lawyers, and legally literate community leaders.

While only in rare cases has a court judge has ordered a company to return land received from the military-government to the original owners (whether villagers or the state), there are many documented cases of returning land to the original occupiers through personal and government contacts. One such noteworthy and very recent example is in southern Tanintharyi Region, where villagers used the new land laws to legally confront the infamous Yuzana Company's oil palm concession that includes their land. A local social network composed of self-styled activists sprang up from within one of the country's largest land grabs located in their village territory since 1999. The local land rights defenders – led by one of the affected villages' government-nominated headman – appropriated the very land laws that give further legal precedence to the concession to recover their land. The network and village members convinced the local officials of the Forest Department and Settlement and Land Records Department of the Ministry of Agriculture that the company was not abiding by current laws in their slow progress to plant, and therefore the villagers had the right to have their land returned to them. Through the cooperation of local authorities and the social network, new land was demarcated and officially titled within the company concession (although not their exact former land, as this was already planted in oil palm). This was done for all the villagers in the surrounding villages who wished to be resettled, much to the dismay of Yuzana, which initially threatened to sue the villagers for their actions.[35]

In another notable case, this time in the North Shan State, very near the border with China, Kachin villagers mobilised in innovative ways to challenge a potential massive biofuel agribusiness concession to an ethnic para-military operating in the area in cooperation with a national Chinese company.[36] Kachin social activists living in part of the area targeted for the concession mobilised through existing Christian church structures and community development networks. Church groups, CBOs and NGOs active in North Shan State came together to strategise, and soon even Kachin in Yangon were informed of the situation by word of mouth. Instead of using the 'rule of law' to block the concession (which was illegal, at 600,000 acres), Kachin community members combined strategies. They drew on their moral authority as Kachin living in a war zone, and applied pressure to well-placed sympathetic government officials. In so doing, they convinced state level officials in the provincial capital to drastically reduce the concession size (down to 60,000 acres).[37]

Grassroots-led resistance movements against land grabs deploy an arsenal of mechanisms: mobilising over traditional socio-cultural identities, applying the same laws that are used to legally dispossess smallholders, and innovatively mitigate conflicts by relying on new state structures and officials. Moreover, global institutions and governance mechanisms recently

[34] http://www.fao.org/nr/tenure/voluntary-guidelines/en/
[35] Local researchers, Dawei, Tanintharyi Region, April 2015.
[36] Initial MoU with the armed group and Chinese company on file with author.
[37] Interview, Kutkai, North Shan State, March 2014; Local researcher, Lashio, North Shan State, March 2015

operating to varying degrees in Myanmar – IFIs, the ‘rule of law’ and legal justice organisations, CSR advocates, transparency initiatives, the UN FAO’s Voluntary Guidelines, REDD-Readiness, etc – play a duplicitous role by instigating dispossessory processes while also providing new avenues to resist them. Just as the multiple forces driving land grabs work in tandem with pre-existing layers of conflict, so too do time-tested and new innovative strategies of perseverance, empowerment, and movement building jointly working to defend land rights.

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