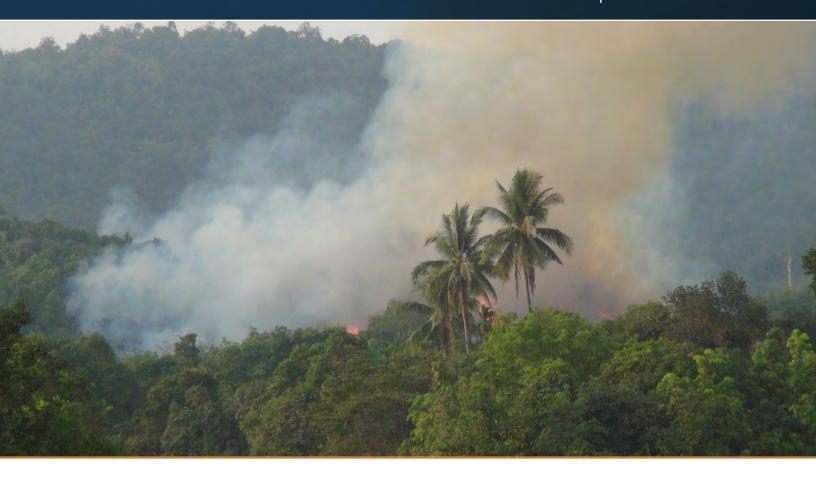
Forest Trends Report Series

Forest Trade and Finance

March 2015



Commercial Agriculture Expansion in Myanmar:

Links to Deforestation, Conversion Timber, and Land Conflicts

Kevin Woods



Cover image photo credit: Local researcher, Tanintharyi forest set afire in preparation for agribusiness concession

Commercial Agriculture Expansion in Myanmar:

Links to Deforestation, Conversion Timber, and Land Conflicts

Kevin Woods

March 2015



ACKNOWLEDGMENTS

The author, Kevin Woods, is grateful to Forest Trends for the opportunity to present this timely analysis, the result of several years of in-country research on agribusiness and timber production and trade in Myanmar. Several Burmese colleagues in Yangon and in the field regions, all of whom wish to remain anonymous, have been very generous with their time and knowledge. This report became much improved from the generous feedback of Kerstin Canby, Naomi Basik, Eve Richer, and Lina Scott of Forest Trends. Mathieu Pellerin assisted with making the oil palm and forest reserve maps for Tanintharyi. Melissa Tatge and Laura Golben completed the report design. The author takes full responsibility for the analysis presented in this report and any unintentional possible errors. This report was financed by the Forest Governance, Markets and Climate (FGMC) Programme of the UK Department for International Development (DFID).

ACRONYMS

BGF	Border Guard Force
EC	European Commission
EU	European Union
EUTR	European Union Timber Regulation
FAO	Forest and Agriculture Organization
FDI	Foreign Direct Investment
FLEGT	Forest Law Enforcement, Governance and Trade
GDP	Gross Domestic Product
HCVF	High Conservation Value Forests
IFC	International Finance Corporation
IFI	International Financial Institution
ILPA	Illegal Logging Prohibition Act, Australia
ΙΤΤΟ	International Tropical Timber Organization
KIO/A	Kachin Independence Organization/Army
LAUSC	Land Allocation and Utilization Scrutiny Committee
LSLA	Large-Scale Land Acquisition
LUC	Land Use Certificate
MIC	Myanmar Investment Commission
MOECAF	Ministry of Environmental Conservation and Forestry
MOAI	Ministry of Agriculture and Irrigation
MTE	Myanmar Timber Enterprise
NDA-K	New Democratic Army-Kachin
NLUP	National Land Use Policy
Non-PFE	Non-Permanent Forest Estate
PAS	Protected Area System

PFE	Permanent Forest Estate
PPF	Protected Public Forest
REDD+	Reduced Emissions from Deforestation and Forest Degradation
RWE	Roundwood Equivalent
SEZ	Special Economic Zone
SLRD	State Land and Records Department
SR 1	Special Region 1
UMEHL	Union of Myanmar Economic Holdings Limited
VFV Law	Vacant, Fallow, and Virgin Land Law
VPA	Voluntary Partnership Agreement
WWF	World Wildlife Fund

EXECUTIVE SUMMARY AND KEY FINDINGS

In Myanmar, as in other countries of the Mekong, it is widely acknowledged that the clearing of forests to make way for the expansion of commercial agricultural fields is increasingly the leading driver of deforestation, alongside legal and illegal logging, and the clearance of forest areas to make way for infrastructure projects such as roads and hydropower dams. While the conversion of forests for agricultural development has been occurring for many decades, it is the unprecedented rate of this conversion that is now so astounding — as well as the fact that the government is encouraging increasing levels of investment for large-scale industrial agricultural expansion when laws and institutions are not yet able to regulate these large-scale land acquisitions (LSLAs). National legal frameworks — laws, regulations, and enforcement bodies — will need to be improved so this development occurs in the context of sustainable and legal forest management and local communities are assured that they have secure land use rights and access to these agricultural and forested landscapes for their livelihood needs.

Despite national statements purporting to protect Myanmar's remaining forests, a new set of land and investment laws¹ are still facilitating the conversion of forests into private agribusiness concessions. Since Myanmar's President U Thein Sein took office in March 2011, the new reform-minded government has promoted industrial agricultural development as an attractive sector for both domestic and, increasingly, foreign investment.² In the forest sector itself, promising new reforms have been progressing, but so far have focused only on the managed timber estates under the direct control of the Myanmar Forest Department (which have been over-harvested for decades). The remaining natural forests in the country's resource-rich, ethnic-populated states are still left outside any effective forest management and are thus even more prone to extensive logging and forest conversion.³

In sum, each year Myanmar has been losing more than 1.15 million acres⁴ of forests — some of Southeast Asia's last remaining (sub-)tropical High Conservation Value Forests (HCVF).⁵ Hardwood log exports have been growing by volume, and even more by value, since the new government took office (Figures 1 and 2). Between 2011 and 2013, the volume of timber product exports jumped from about 2.7 to over 3.3 million m³, with values increasing from just over US\$ 1 billion to about US\$ 1.6 billion. Much of Myanmar's timber is no longer sourced from historical (over-cut) harvesting areas (government-managed timber estates predominately in the geographic center of the country). Instead, domestic private companies are clear-cutting HCVFs — for agribusiness, mining, and hydropower sites, and special economic zones (SEZs) — and producing Myanmar's,

¹ In particular, two new 2012 land laws (the *Farmland Law* and the *Vacant, Fallow, and Virgin Lands Law*), and a forthcoming *National Land Use Policy*, along with a *Foreign Investment Law* and an anticipated more comprehensive investment law.

² Woods 2013a.

³ Woods 2013b.

⁴ This report lists all areas in acres rather than hectares to follow both Myanmar and USA common measurement standards.

⁵ This translates to an annual loss of 1.2 percent between 1990 and 2010, for a total of over 18.4 million acres (7.45 million ha), or 19 percent of total forest cover in just 10 years (FAO 2010). <u>http://www.fao.org/docrep/013/i1757e/il1757e.pdf</u>.

and some of the world's, most valuable "conversion timber."⁶ Forest Trends has estimated that conversion timber from these LSLAs now constitutes a significant portion of the Burmese timber being placed on the international market.

The legal frameworks for the large-scale conversion of forestland and the production of the re-sultant conversion timber remain weak and unclear. The laws, regulations, and procedures by which agribusiness concessions are allocated are not only spread across numerous government agency jurisdictions, but are also rife with legal loopholes, special permits, and/or exemptions (or may be missing entirely). Despite national policy dialogues and land tenure reforms⁷ that seek to overcome problems stemming from a lack of cross-sectoral coordination, the mandate to regulate and monitor these lands and timber harvests falls between various government institutions. The Forest Department, for example, effectively only manages the core managed timber estate areas (predominately teak), while many forest conversion areas, particularly in ethnic states, are essentially outside their power and authority and therefore the reach of the new forest sector reforms.

Without a fully functional forest governance system that reaches across the country and its land sectors, rentseeking behavior, further destruction of forests, and denial of local land-use and access rights will continue unabated. Land rights issues and related conflicts, for example, have become one of the most high-profile obstacles confronting the reform government, with the number and intensity of local land and livelihood conflicts increasing in areas where land allocations have been assigned to the private sector without recognizing local communities' statutory and customary land rights. Claims that agribusiness ventures bring employment and economic development to local communities are left as hollow promises when villagers' farming fields and community forests are confiscated, and a large number of these cleared lands are still not planted and are not being managed with any social or environmental safeguards in place.

This report makes clear that forests, agriculture, and land governance must be at the center of any land reform policy in order to properly address resource management and land conflicts.

Building on previous Forest Trends research,⁸ this report:

- Collates, for the first time, new quantitative and qualitative data on the extent and nature of the expansion of agribusiness into the forests of Myanmar, supplemented with two field case studies;
- Analyzes the role that current laws and policies, and revenues generated from the sale of conversion timber, plays in driving this expansion; and
- Summarizes issues related to the socio-economic impacts of this development and the institutions regulating both the process of conversion as well as the resultant conversion timber.

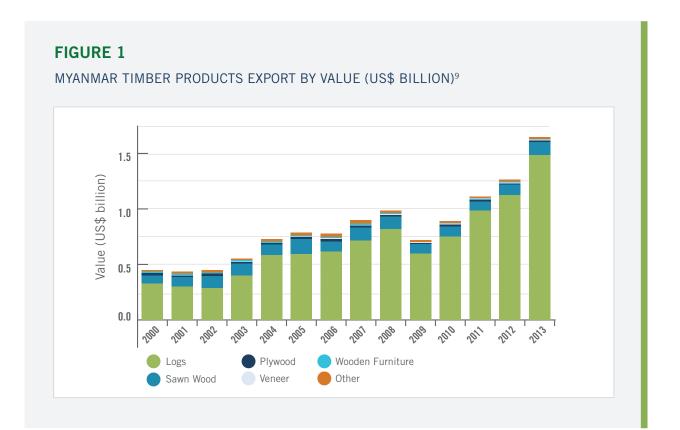
The report, using the government's own difficult-to-access and limited data, also shows that, between 2010 and 2013, the two remote regions where the government has allocated the most private large-scale agribusiness

⁶ Woods 2013b.

⁷ The Myanmar Union Parliament has established a Land Investigation Commission to compile an extensive report for the President on "illegal" land acquisitions in the country, which is to guide decision making on how to handle past "land grabs" (defined as illegal land acquisitions according to Myanmar's own laws and regulations) and mitigate future ones. In addition, a Presidential Land Allocation and Utilization Scrutiny Committee (LAUSC), previously headed by the current forestry minister, released a draft National Land Use Policy (NLUP) in late 2014 for public consultation with the hope to set the foundation for a holistic, cross-sectorial land policy reform, yet in line with a continued promotion of foreign investment in large-scale land-based projects.

⁸ This report follows the Woods 2013b Forest Trends report which identified conversion timber produced from agribusiness concessions in high-value forest reserves, predominately in ethnic states with latent political and land conflict, as the new primary driver of deforestation in the country.

concessions are also the two regions with the greatest extent of Myanmar's remaining carbon-rich and biodiverse forests, most heavily populated by ethnic minority groups, and the location of some of Myanmar's most violent conflicts over land. Yet these two regions — Tanintharyi in the southeast with its oil palm and rubber development, and Kachin State in the north with its rubber and biofuels — have differed in the extent to which land concessions for agriculture have been used to access high-value conversion timber for export markets. The report shows that these differences have been driven not only by the particularities of the agroecological landscape, but also by dynamic political contexts and the degree to which agribusiness concessions have been allowed to overlap with forest reserves (or forest reserves have been allowed to be degazetted into other land categories).



⁹ All trade statistics compiled by James Hewitt for Forest Trends. The government of Myanmar does not publish bilateral trade statistics. Consequently, importing country statistics have been used to assess Myanmar's exports. The sources of the trade statistics used include: General Administration of Customs of the People's Republic of China (for China), Eurostat (for imports by EU member states), Japan Customs (for Japan), Korea Customs Service (for South Korea), Tradeline Philippines (for the Philippines), Directorate General of Customs (for Taiwan), Customs Department of the Kingdom of Thailand (for Thailand), United States International Trade Commission Dataweb (for the US), and UN Comtrade. Vietnam chooses not to publish bilateral trade statistics other than in units of import and export value. Volumes and weights have consequently been estimated herein. Laos chooses not to publish trade statistics. Its trade in wood-based products with Myanmar is assumed herein to be zero. Source data for the imports of some countries during some years (e.g., Bangladesh 2008-2010 and 2012-2013, Taiwan 2013, and Vietnam 2013) have not yet been published but are estimated here.

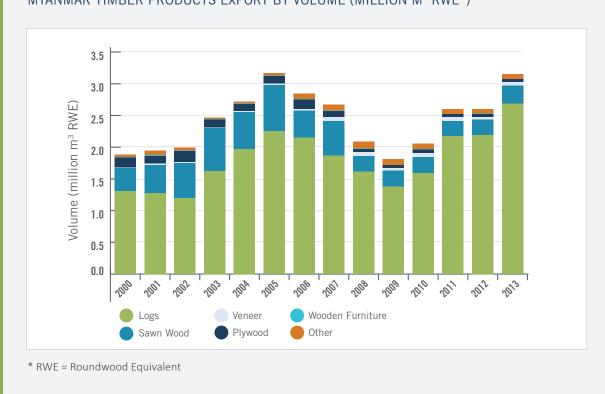


FIGURE 2 MYANMAR TIMBER PRODUCTS EXPORT BY VOLUME (MILLION M³ RWE*)

With this report, Forest Trends aims to catalyze dialogue and further data collection to more adequately capture the nature and geographic extent of forest conversion in Myanmar. The findings of this report should feed into discussions centered on forest and land policy reform that reaches more broadly beyond individual resource sectors and gives greater attention in securing land and forest use rights to people. The main findings of this report are summarized below.

1. Between 2010 and 2013, land area allocated for large-scale private agriculture concessions increased by an unprecedented 170 percent. According to official statistics, large-scale land acquisitions (LSLAs for commercial agricultural production increased from nearly 2 million acres in 2010 to 5.2 million acres by mid-2013 (Table 1). Official 2013 agricultural statistics show that the government allocated over 800 domestic companies a total of nearly 750,000 acres of demarcated forestland for industrial agricultural production.¹⁰ These figures are an underestimate, as they are based on agricultural concessions allocated only by central government agencies and do not include additional concessions allocated by provincial, military, and/or non-state authorities.

¹⁰ MSU and MDRI/CESD 2013.

- 2. While agricultural concessions allocated within forests between 2010 and 2013 largely resulted in forest conversion and timber production, less than one-fourth of total agricultural concession areas were actually planted with agricultural crops by the end of 2013. In Kachin State and Tanintharyi Region, the two areas of the country with some of Southeast Asia's last remaining HCVFs and the location of over 60 percent of Myanmar's agribusiness concessions, only 12 and 19 percent (respectively) of total agricultural concession acreage had been planted. Government data imply, and empirical data presented here support, the speculation that many of these concessions provide legal loopholes for companies to either (a) access valuable timber and undertake logging operations, bypassing the more difficult process (open mainly to a handful of political elites) to obtain a logging concession, or (b) engage in "legal" land grabs for land speculation purposes, with little intention of planting the promised agricultural crops.
- **3.** Most large-scale agriculture concessions have been allocated in forest reserves, which are often degazetted in anticipation of the LSLAs. From 2004 to 2005 alone, 1.77 million acres of forests (protected forest reserves, unclassified forests, and "other" forests) were de-gazetted to make way for resource extraction, energy infrastructure development, agricultural expansion, and military compounds, according to government data.¹¹ "Unclassified" forests, with typically less substantial tree cover, appear most targeted by agribusiness concessions, likely owing to their more ambiguous ecological function and jurisdictional control. Procedures for de-gazetting forest reserves may exist on paper, although no official contacted for this report knew of any written regulations nor did Forest Trends locate any such documents.
- 4. Myanmar government does not collect data on the volumes of timber cut from agribusiness concessions or on any other land category other than the core managed areas overseen by the Forest Department, with few exceptions. The Union Government of Myanmar does not differentiate timber according to source (e.g., natural forest, production forest, plantation, community forest, and forest conversion) and does not systematically document the production and trade of conversion timber. The little government data that exist are considered inaccurate and in any case only for internal reporting. The lack of a systematic method of issuing timber extraction permits and sound timber management plans throughout the country has resulted in the lack of consolidated accurate national forest and timber extraction data. Only two internal government data sets were obtained during the course of the study: one set documented 125,000 m³ of teak and non-teak timber harvested in 2011 and 2012 from oil palm and rubber concessions large-scale hydropower under the authority of MOECAF only.¹² The actual figure of conversion timber for that period will be higher once harvests from the agricultural concessions under agriculture ministry jurisdiction (the vast majority) as well as other land clearances (e.g., mining, or other infrastructure). The other data set documented nearly 70,000 acres of lowland forest cleared and/or burned in 2010 and 2011 alone only for oil palm concessions in Tanintharyi Region.¹³ The lack of systematic collection and availability of data hampers cross-sector land and resource management and planning.

¹¹ Data collected from MOECAF, Naypyitaw.

¹² Data collected from MOECAF, Naypyitaw.

¹³ Data collected from MOECAF, Naypyitaw.

TABLE 1

AVAILABLE CULTIVABLE LAND AND AGRIBUSINESS CONCESSTIONS IN MYANMAR BY STATE/REGION, 2010/11–2012/13 (IN ACRES, CUMULATIVE)

State/Region	Land Ma	rked Available for	Perennial Crop Cu	Itivation	Allocated	Allocated	
	"Vacant"/ "Virgin" Land	Reserve/ Unclassified Forest	"Other" Forest	Total Land Available for Cultivation	Anocateu	Anucateu	
		2010	2011		2010–2011	2011–2012	
Naypyitaw	_	—	_	_	_	7,408	
Kachin	428,000	—	_	428,000	596,180	1,396,575	
Kayin	945,790	—	-	945,790	2,161	4,011	
Kayah	_	—	_		—	—	
Chin	_	—	—		_	1,542	
Sagaing	_	49,000	_	49,000	100,057	259,273	
Tanintharyi	68,000	871,500	278,200	1,217,700	671,594	993,887	
Bago	57,509	_	_	57,509	19,772	52,238	
Magwe	148,545	2,597,701	_	2,746,246	202,492	211,292	
Mandalay	714,594	1,341,558	_	2,056,152	10,300	6,262	
Mon	_	206,010	_	206,010	_		
Yangon	7,657	3,240	266,811	277,708	30,978	30,980	
Rakhine	162,254	1,123,823	_	1,268,077	_	7,826	
Shan	3,646,004	2,439,326	1,309,108	7,394,438	117,096	160,626	
Ayeyarwady	_	333,386	_	333,386	193,353	285,844	
TOTAL	6,178,353	8,965,544	1,854,119	16,998,016	1,943,983	3,417,762	

Source: Central MoAI office, Naypyitaw, except for Tanintharyi 2012/13 which was collected from the regional head office.

Note: Allocated and planted concessions for Tanintharyi only includes oil palm (not rubber).

Data only includes agricultural concessions allocated by central government and does not include concessions allocated by provincial, military, and ethnic armed non-state authorities.

Allocated	Total % Allocated	Planted	% Planted
	2012–2	013	
17,554	0	5,217	30
1,381,165	26	172,348	12
34,946	1	15,867	45
_	_	_	_
1,743	0	118	7
533,406	10	19,543	4
1,896,970	36	359,455	19
200,150	4	91,074	46
219,578	4	95,949	44
56,046	1	14,497	26
_	_	_	_
80,208	2	76,243	95
131,667	3	13,176	10
323,833	6	120,403	37
335,331	6	212,969	64
5,212,597	100	1,196,859	23

- 5. The number and intensity of local land and livelihood conflicts have increased in parallel with the increase in the government allocations of agribusiness concessions to the private sector, with local communities unable to claim statutory or customary land use rights. No laws in Myanmar officially recognize the customary laws or practices upon which ethnic communities rely. Under current laws and regulations, no person or community has any land use rights or an ability to make claims within any lands categorized as state forest, agricultural "wasteland," or in an agribusiness concession. As a result, farmer-led protests many of which are violent are growing in number and strength across the country, challenging the new government's political legitimacy and more liberal economic model of development.¹⁴ Thousands of past and recent land concessions are now being challenged by forcibly evicted communities across the country.¹⁵
- 6. The legality of timber harvested from cleared lands is questionable and difficult to verify, with land concession allocations highly susceptible to corruption and patronage politics. The laws, regulations, and procedures by which agribusiness concessions are allocated especially those involving the degazetting of forest reserves or those simply located inside a forest reserve without being declassified are not only spread across numerous uncoordinated sectoral jurisdictions, but also rife with legal loopholes, special permits, and/or exemptions. Government authorities can relatively easily override any possible legal restrictions, creating a "rule by decree" governance situation conducive to rent-seeking behavior. Despite this weak governance context, land conversion can be considered technically legal according to Myanmar national law as long as the permits from relevant government agencies and authorities have been obtained. The conditions under which concessions are allocated, and whether social and environmental safeguards are properly implemented, is coming under increasing scrutiny.

Despite high international demand for Myanmar hardwoods that can be definitively verified as from a legal source, no attention has yet been given to delineate the laws, policies, and other regulations that could be used to establish the legality of conversion timber. The mixing of logs from different sources — natural forests, managed state forests, timber plantations, and land conversion — adds to the logistical and legal challenge to prove a clean chain-of-custody for legal wood products.¹⁶ A socially legitimate process to define the legality of land conversion and the resultant conversion timber would help to allay concerns that legal loopholes and corruption are being used to gain access to valuable Myanmar timber.

7. No study on industrial agricultural development as a driver of deforestation in Myanmar has been conducted, let alone one on the legality or social impacts of the land conversion. The surge in awards of agricultural concessions is unprecedented and has received inadequate attention and research given the extent of its reach and impacts, especially given the stated international and national interests in reducing deforestation in Myanmar. Donor programs conflict with stated international and national interests in reducing deforestation in Myanmar. Donor programs conflict with stated international and national interests in reducing deforestation in Myanmar (e.g., via REDD+ and FLEGT programs) when they simultaneously encourage large-scale agricultural development as a means of economic development but do not address the weak governance context and multiple, overlapping land-use conflicts that will ultimately threaten these programs as well.

¹⁴ TNI and BCN 2013.

¹⁵ Ibid.

¹⁶ Woods 2013b.

These findings are based on analysis from a two-year study relying on a literature review, the compilation of government data, and interviews with key stakeholders. The desktop study and interviews are complimented by extensive field-based research to present two exemplary regional field case studies, in this case in the Tanintharyi Region and Kachin State. Both regions are experiencing high levels of HCVF clearance for agricultural projects and increasing levels of social conflict. However, differences in the local political context, ecological landscape, and overlap of forest reserves and agribusiness concessions have also determined the degree to which land concessions have been used to produce high-value timber for export. Oil palm development in Tanintharyi Region has been a top-down, military-led operation to purportedly achieve domestic cooking oil self-sufficiency, but the domestic companies tasked with the nation's oil palm development program were primarily interested in land speculation and logging of the high-value forests. In contrast, in Kachin State local armed groups ("paramilitaries" and ethnic armed political opposition groups) and local political elites with business connections on both sides of the Myanmar-China border have been more interested in agribusiness development as a lucrative business venture in itself and less so in the consequential timber. To procure timber, Chinese businesses as well as Myanmar political elite have historically been able to secure a logging concession and therefore see little need to access timber through an agribusiness concession. Overall, resource extraction in Kachin State has been more closely tied to Chinese, rather than domestic, business interests in mining, timber, and more recently, agricultural commodities, the latter of which is an integral part of China's opium substitution support program. Both cases bring to light the role that large-scale agriculture concessions play in territorial rezoning that carries certain political and security implications in long-standing ethnic conflict zones.

BOX 1

Oil Palm Concessions in Myanmar

- 1.9 million acres 35 percent of all agribusiness concession area have been allocated to the private sector for oil palm development in Myanmar;
- All Myanmar's oil palm concessions are located in Tanintharyi Region, covering 18 percent of the region;
- Most oil palm concessions are located in forest reserves of high conservation value;
- Of the 1.9 million acres, only 360,000 acres (less than 20 percent) had been planted by the end of 2013;
- Nearly 70,000 acres of lowland rain forests had been cleared and/or burned in 2010 and 2011 just for oil palm concessions.
- Myanmar's palm concessions are owned by about 40 Myanmar businesses with strong ties to
 political and military leaders, the Ministry of Industry, and the Union of Myanmar Economic
 Holdings Ltd (a military conglomerate); and
- Many oil palm concessions in Tanintharyi, especially those closer to Thailand, are located on lands formerly inhabited by ethnic Karen populations who were forcibly evicted. Historical land-use claims by the Karen populations who wish to return to their original settlements since the tentative ceasefire with the KNU (armed Karen ceasefire group) present new challenges to the legality and ethics of oil palm production, rezoning for conservation, and resettlement of Internal Displaced Persons (IDPs) and refugees.

Conversion timber is an excellent illustration of the tension held between the forestry and agricultural sectors, and the respective institutions which increasingly are competing for authority and control over land, resources, and revenue streams in Myanmar. The recent developments and reforms in Myanmar have resulted in a growing institutional conflict between the Ministry of Environmental Conservation and Forestry (MOECAF) and the Ministry of Agriculture and Irrigation (MOAI) as they compete for different uses of forestlands — the MOAI for industrial agricultural expansion and the MOECAF for a more conservation-oriented forest agenda. With the prominence of large-scale agricultural development as the proposed driver of national economic development, the MOAI has risen in prestige and power, and MOECAF's long-held authority and control over vast areas of forested land in the country is now being challenged. Heavily compromised in technical capacity during the years of military rule, today the Forest Department has taken the lead in genuine attempts to reform into a well-governed and accountable enterprise.¹⁷ However, the carving up of forestlands under the MOECAF's jurisdiction into agribusiness concessions under the authority of the MOAI is presenting new territorial, institutional, environmental, and social challenges.

As the political and economic reforms in Myanmar have presented positive opportunities to potentially improve national economic growth and governance, ultimately long-term, inclusive, and sustainable growth will require the implementation of a broader range of policies and structural reforms. While the expected new Forest Law in 2015 will create a new and hopefully improved legal environment governing forests (including community forests), timber, and forest-based livelihoods in the country, there is no evidence that the issues raised here



Photo credit: Kevin Woods, MTE timber yard, Yangon

relating to forestland conversion and associated conversion timber will be addressed in the upcoming legislation. Processes such as the emerging Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreement (VPA) or forest certification standards will need to pay particular attention when hoping to demonstrate the legality of Burmese timber. These mechanisms must also address the problematic gap between what is considered "officially legal" and what is considered international best practice in terms of social legitimacy and the implementation of social and environmental safeguards (including the respect for land tenure security and use rights).

¹⁷ For example, the MOECAF now officially recognizes the "permanent" agricultural cultivation rights of villages (under 50 households) with cultivation claims predating the demarcated forest reserves in which they are now living (Soe Than Lyn 2013). This does not, however, extend to villagers who practice traditional rotational shifting agriculture.

TABLE OF CONTENTS

EXECUTIVE SUMMARY AND KEY FINDINGS	iii
BACKGROUND	
Global Production of Conversion Timber	
MYANMAR'S NEW OPENING: THREATS TO FORESTS	2
Data on Deforestation	3
Chain of Custody	3
Certification or Legality Verification	4
Institutions and Policies in Transition	4
MAKING CONVERSION TIMBER LEGAL IN MYANMAR	6
Forest Conversion Legal Analysis	6
Protected Forest Regimes	
De-gazetting Forest Reserves for Agribusiness	
Conversion Timber from "Other" Forestlands	
Land Use Rights in Forest Reserves Timber Extraction Regulations	
INDUSTRIAL AGRICULTURE AND CONVERSION TIMBER	
Background	
Growth of Agribusiness Concessions	
Government-Promoted Agricultural Commodities	
Rubber	
Oil Palm	
LEGAL ANALYSIS OF AGRICULTURE SECTOR RELEVANT FOR CONVERSION TIMBE	R 19
Provisions for Customary Law	
Contested "Wastelands"	
Discrepancies in Mapping and Land Categorizations	20
Resource Rights in an Agribusiness Concession	20
Size Regulations of Agricultural Concessions	21
Land Use Certificates (LUCs)	21
Foreign Investment in Land and Agriculture	

PRODUCING CONVERSION TIMBER	24
CASE STUDIES: THE CONTEXT FOR AGRO-CONVERSION TIMBER IN MYANMAR	. 26
Overview	26
CASE STUDY 1: OIL PALM CONCESSIONS AND CONVERSION TIMBER IN	
TANINTHARYI REGION, SOUTHEASTERN MYANMAR.	28
Background	28
Forest Area and Conservation Value	28
Forest Use Rights	32
Developing the Nation's Oil Palm Bowl	
Entities Involved	
Extent of Actual Planting Overlap of Oil Palm Concessions and Protected Forests	
Poor and Inconsistent Data	
Domestic Private Sector Involvement in Oil Palm Development	
Logging for Oil Palm Development	38
Rubber	40
CASE STUDY 2: AGRIBUSINESS CONCESSIONS IN FORESTED AREAS OF	
KACHIN STATE, NORTHERN MYANMAR	42
Background	42
Agribusiness Development	43
China's Opium Substitution Program	
Conversion Timber	45
Hkaya Agribusiness Concession, Southeastern Kachin State	46
Yuzana's Biofuel Concession in Hukaung Valley, Kachin State	47
Agribusiness, Timber Plantations and Conversion Timber in Special Region 1, Kachin State	48
CONCLUSIONS	50
BIBLIOGRAPHY	52

LIST OF TABLES

TABLE 1	Available Cultivable Land and Agribusiness Concessions in Myanmar by State/Region, 2010–2011/2012–2013 (in acres, cumulative)	viii
TABLE 2	The Current Status of Permanent Forest Estates (PFEs) in Myanmar	8
TABLE 3	Land Marked Available for Perennial Crop Cultivation (2010–2011, in acres)	15
TABLE 4	Main Planted Industrial Crops Growing by State/Region, 2012–2013	16
TABLE 5	Conversion Timber from Hydropower, Rubber and Oil Palm Under MDECAF Authority, 2011–2012	22
TABLE 6	Oil Palm Development in Tanintharyi Region, 2012–2013	28
TABLE 7	Oil Palm and Rubber Planted in Tanintharyi Region, 2008–2013	28
TABLE 8	Forest Clearance for Oil Palm Concessions, Tanintharyi Region, 2010–2011 (acres)	39
TABLE 9	Oil Palm Development in Tanintharyi Region, 2012–2013	41
TABLE 10	Agribusiness Concessions in Kachin State, 2010–2013	43
TABLE 11	Rubber Planted in Kachin State, 2008–2013	44
TABLE 12	Yunnan Companies' Opium Crop Substitution Plantations, Northern Myanmar, up to 2010	45

LIST OF FIGURES

FIGURE 1	Myanmar Timber Products Exportes by Value (US\$ billion)	v
FIGURE 2	Myanmar Timber Products Exported by Volume (million m ³ RWE)	vi
FIGURE 3	Tanintharyi Region in Southern Myanmar	30
FIGURE 4	Southern Tanintharyi Region in Southern Myanmar	31
FIGURE 5	Tanintharyi Region in Southern Myanmar	35
FIGURE 6	Southern Tanintharyi Region in Southern Myanmar	36

LIST OF BOXES

BOX 1	Oil Palm Concessions in Myanmarx	i
BOX 2	Data Availablilty, Reliability and Clarity of Laws	ō
BOX 3	State Forest Categoried and Use Rights	7



Global Production of Conversion Timber

Forest conversion is defined as the clearance of natural forest resources from an area in order to convert the land for non-forest uses. Agriculture alone accounts for just over 70 percent of all deforestation across tropical and sub-tropical countries,¹⁸ along with other smaller drivers, such as mining (7 percent), infrastructure, urban expansion, and remaining activities (each 10 percent).¹⁹

Conversion timber is defined as timber that is harvested from forestland that has been converted to nonforest uses. It is highly likely that the majority of high-value tropical wood products, especially from Southeast Asia, on the international market are being sourced from land that is being converted to other non-forest uses. There is growing evidence that much of this timber may have been sourced from forestlands that were converted illegally. Issues which typically arise from illegal conversion timber, involving both private sector and government actors, have been categorized by Forest Trends as the following:²⁰

- Clearing forest without required corresponding clearance permit and/or without permission from corresponding ministry with jurisdiction over the area;
- Clearing forest in designated protected area or forest identified as HCVF, i.e., deep peat or riparian forest;
- Permit for conducting clearance was issued/obtained illegally, not following due legal process, i.e., through bribery or coercion;
- Permit for conducting clearance was issued/obtained without meeting pre-requisite conditions, i.e., approved Environmental Impact Assessment (EIA), forest inventory, or community consent;
- Failure to pay corresponding taxes for timber resources and/or for land acquisition;
- Failure to enforce/implement required environmental mitigation measures during forest clearance activities; and
- Failure to comply with provisions stated in contract.

¹⁸ Forest Trends 2014.

¹⁹ Hosonuma et al. 2012.

²⁰ Forest Trends 2013.

MYANMAR'S NEW OPENING: THREATS TO FORESTS

Myanmar's political reforms have been warmly welcomed by western governments that have been championing democratic governance institutions and full integration into the global economy. The new government has been rewarded — some argue too early — by the United States (US) and European Union (EU), both of which recalled financial and trade sanctions. Myanmar timber is one such commodity that is no longer sanctioned, with the Myanmar government and private sector timber traders anxious to have direct access to these potentially lucrative high-end tropical timber markets. Although the sanctions have been dropped, Myanmar wood products must still be able to demonstrate compliance with new regulatory requirements for all imports (not just from Myanmar) under the EU Timber Regulation (EUTR) implemented since March 2013, the US Lacey Act (as amended in 2008), and the Australian Illegal Logging Prohibition Act (ILPA). In addition, the Myanmar government has been discussing with the European Commission (EC) the possibility of formally negotiating a Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreement (VPA).²¹

While the political and economic reforms in Myanmar have presented new opportunities for economic development and poverty alleviation, increased government promotion and regional/global investment for industrial agricultural production is presenting new setbacks to forest conservation and land rights. Agribusiness has become a primary driver of deforestation of HCVFs and land rights abuses in the country.

Since President U Thein Sein took office in March 2011, the reform government has promoted industrial agricultural development as an attractive sector for both domestic and foreign investment.²² Two new 2012 land laws (the *Farmland Law* and the *Vacant, Fallow, and Virgin Lands Law*), supported by the *Foreign Investment Law* as well as a forthcoming more comprehensive investment law, have provided the legal provisions to spearhead agribusiness expansion by transferring smallholder farms and forests into private commercial agricultural estates. As the area of agricultural concessions allocated to the private sector has increased, so too has the severity and extent of land conflicts in these same areas. Subsequently, a very visible grassroots resistance against land dispossession, both from past and present grievances, has filled the more open political space.²³ Farmerled protests — some violent — are growing in number and strength across the country, challenging the new government's political legitimacy and economic model of development.²⁴

²¹ The European Union's FLEGT Action Plan sets out the European Union's (EU) commitment to promote a more sustainable global timber trade. Voluntary Partnership Agreements (VPAs) are among the primary mechanisms of the FLEGT Action Plan. A VPA is a bilateral trade agreement between a forest product-producing country, such as Honduras, and the EU. Its purpose is to support improved governance in the forest sector of the producer country and provide a mechanism to assure the legality of the timber products exported to the EU.

²² Woods 2013a.

²³ TNI and BCN 2013.

²⁴ Ibid.

Since the new government has taken office, there has been an exponential increase in large-scale agribusiness concessions, from nearly 2 million acres in 2010-2011, to about 3.5 million acres the following year, and then approximately 5.2 million acres in 2012-2013, according to official government figures (Table 1). The surge in awards of agricultural concessions is unprecedented and has received inadequate attention and research given the extent of its reach and impacts. The two most targeted areas are in the far north in Kachin State and the far southeast in Tanintharyi Region, both of which also (perhaps not coincidently) have the highest remaining extent of HCVF in the country.

The data highlight the significance of the agribusiness sector as a driver of deforestation and conversion timber production in Myanmar. The government data implies, and empirical data presented here support, agribusiness deals provide a legal loophole and cover for logging operations, where in some cases companies have little intention of planting the agricultural crop — one reason that explains the very low percentage of concessions actually planted.

Data on Deforestation

According to the United Nation's Forest and Agriculture Organization's (FAO) more conservative estimates, Myanmar lost an average of 1.15 million acres, or 1.2 percent of its total forest cover, per year between 1990 and 2010, for a total loss of nearly 20 percent of its total forest cover over that period, or about 18.4 million acres.²⁵ The World Wildlife Fund's (WWF) Greater Mekong Ecosystems Report, released in 2013, found forest loss to be more severe based on satellite imagery: between just 2002 and 2009, forest loss in Myanmar was 17.3 million acres, a decrease from 121.1 million acres to around 103.8 million acres of forests, representing a loss of 15 percent of the country's forests. The report warned that up to a third of the country's remaining natural forests could be lost within the next two decades if current rates continue.²⁶ The University of Maryland Landsat data records Myanmar's existing forest cover (2012) at just over 100 million acres.²⁷ And according to an agribusiness think tank in Myanmar, forest cover loss was primarily due to forest conversion (and associated timber production) from the expansion of agricultural areas from 19.8 million acres to 30.9 million acres from 1988 to 2006.²⁸

One measure of the sustainability and health of the forestry sector is the composition of commercially valuable growing stock in natural forests, such as teak (known as "*Kyun*" in Burmese) and and ironwood (*Xylia xylocarpa* or *Pyinkado* in Burmese), among others. These valuable and high-demand species decreased in terms of both absolute and relative volume from 1990 to 2000. Moreover, the top ten species with the highest share of composition also dramatically decreased from 1.34 billion m³ (nearly half of total growing stock) to 560 million m³ (almost 20 percent of total growing stock).²⁹

Chain of Custody

The lack of clarity on the source of wood once ready for export, whether from state-managed teak plantations, natural forests, private tree plantations, or from a land concession such as forest conversions, presents a major obstacle for any due diligence, legal verification, or certification scheme in the country.³⁰ Based on interviews and ground-based knowledge of the logging industry, significant volumes of timber originate from natural

²⁵ FAO 2010.

²⁶ WWF 2013.

²⁷ www.globalforestwatch.org/country/MMR

²⁸ OECD 2014.

²⁹ FAO 2009.

³⁰ NEPCon 2013.

forests that are not specifically managed by the state. The MOECAF itself estimates that nearly 20 percent of forests categorized for managed timber extraction have no management plan whatsoever and instead are just logged.³¹ The International Tropical Timber Organization (ITTO) estimated that this figure was over half of the so-called "managed forests."³² These figures, however, are only referring to the core forest managed areas predominately in central Myanmar; they do not include the natural forests outside the control of the Forest Department or those in ethnic states that have long experienced armed conflict in opposition to the government where logging concessions generally do not have forest management plans.³³

Certification or Legality Verification

Myanmar is not yet included under any internationally recognized forest certification standard, nor has it developed an official national certification standard. However, the country has had a long history of scientific forest management and has initiated several national initiatives; it has also engaged to some degree with regional certification-like initiatives that could serve as a positive foundation for a future legitimate certification program.³⁴ It is important to note, however, that these existing systems have focused on timber products sourced from officially designated forest production areas. Conversion timber — likely the largest single source of natural high-value timber in Myanmar — falls outside the Forest Department's management plan and therefore would not have such assurances. According to personal communication with the European private timber sector liaison (in 2014), new initiatives are underway, in cooperation with international organizations, to achieve certification of sustainable forest management and/or legality verification for Myanmar timber exports, spearheaded by pilot projects. They may or may not directly address issues which are specific to conversion timber.

Institutions and Policies in Transition

The MOECAF's long-held authority and control over vast areas of land in the country since the colonial British period is now for the first time being substantially challenged and undermined. The country's forest sector has been its most internationally well-regarded and capable sector since the British colonial period, but over the past several decades its human resources, technical capacity, and political mandate have been heavily compromised by military rule. Since the current government took office, however, the forest sector has taken the lead in genuine attempted reform to become an accountable and well-governed enterprise. For example, the MOECAF — rebranded since the new government took office in 2011 with the additional term "environmental conservation" to further support their reorientation away from past over-exploitation of forest resources — enacted a log export ban in April 2014³⁵ and now recognizes cultivation use rights for permanent agriculture to villages (under fifty households) that have cultivation claims predating the demarcated forest reserves in which they are now living.³⁶ The anticipated Forest Law 2015, which is expected to reflect this reform-minded reorientation, has not yet been debated within parliament — despite expectations of passage nearly two years ago.

³¹ Khin Myo Thwe 2012.

³² ITTO 2006.

³³ Woods and Canby 2012.

³⁴ Ibid.

³⁵ Ferrie 2014. Although based on other country examples of enacting a log export ban, this may not have been a smart move in terms of achieving the desired goals (see Forest Trends, Forthcoming).

³⁶ Soe Than Lyn 2013.

Therefore the reforms have resulted in institutional conflict between the MOECAF and the MOAI as they are competing for different uses for forestlands: the MOAI for industrial agricultural expansion and the MOECAF for a more conservation-oriented forestry agenda. Conflict among land, agriculture, and forest use — and 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 held between the forestry and agricultural sectors — and the respective institutions which are increasingly competing for authority and control over land, resources, and revenue streams.

Land, in short, has become the theater of reform for Myanmar — which matters greatly for the country's forestlands and the rural majority population in Myanmar that depend on these resources for their livelihoods. Approximately three-fourths of the country's population live in the countryside and rely on access to agricultural fields, (agro-)forests, rivers, fish ponds, and other resources for their livelihoods. According to a study by the FAO (2009), roughly 50-60 percent of the population of Myanmar depends on forests for their basic needs, and some 500,000 people are estimated to be directly employed by the forest industry.³⁷ The stripping away of land and land use rights from rural communities — whether lowland irrigated agricultural land, mixed agroforestry use, pristine or degraded forests, or upland swidden fields — profoundly affects rural communities' livelihoods and their socio-economic well-being.

BOX 2

Data Availability, Reliability, and Clarity of Laws

Myanmar is a country beleaguered by poor data availability and reliability. There is not yet any publically available data on size and location of large-scale land acquisitions despite central and regional government offices recording land concessions data. Calls from civil society and the donor community to make this data available to the public in an open and transparent manner have been growing, however, in order to ensure better land use planning and management. The only publically available data for agricultural concessions is the overall acreage per state/region, as published in this report.

In other cases, the government does not collect data necessary for better land use decisions and management. For example, the volume of timber harvested from converted lands is not distinguished within national timber production and trade statistics.

The data that is available to the public, or that was obtained by Forest Trends, is not overly reliable. The Myanmar government after decades of military mismanagement and a regime of fear created a culture of "half-truths" in order to please higher officials who needed to provide empirical evidence of the successes of the leader's benevolent development. The government data presented here – despite their limitations – still give a rather alarming depiction of the extent and severity of forest conversion and associated timber in the country, despite their shortcomings and obstacles to obtain. The case studies based on extensive field research are thus relied upon to help empirically prove on-the-ground realities.

³⁷ FAO 2009.

MAKING CONVERSION TIMBER LEGAL IN MYANMAR

Forest Conversion Legal Analysis

Protected Forest Regimes

This section examines the 1992 *Forest Law* and 1995 *Forest Policy* (the most current forest legislation) in detail to better understand different forestland classification schemes and their related legality of timber extraction, specifically for conversion timber, and forest use rights granted (or withheld). The expected *Forest Law* in 2015 will create a new legal environment governing forests (including community forests), timber, and forest-based livelihoods in the country, although the issues raised here relating to forestland conversion and associated conversion timber are not known to be addressed in the upcoming forest legislation; instead the new law is expected to use the current forest law and policy as a continued benchmark.

The first *Forest Act* was enacted in 1902 and most recently updated as the 1992 *Forest Law*. It supports conservation, sustainable forestry, and socio-economic benefits to local populations. In addition, the 1992 law includes the rhetoric of decentralization in forest management, to some degree, and encourages private sector and community participation in forest management. The spirit of the law is rarely followed in practice, however, after decades of military rule without technical, financial, or human capacity support. The implementation of the 1992 *Forest Law* has been facilitated by the 1995 *Forest Policy*. A new forestry law has been drafted and is still waiting to be debated by Parliament after two years of internal negotiations, which have excluded wider civil society consultation.³⁸

The *Forest Policy* (1995) includes a set target to expand what is called "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. As illustrated by Table 2, by 2011 the government declared that 31 percent of the country's total land area had been demarcated as PFE, reaching its stated target.

In addition to expanding PFE coverage, the government also has a target of 10 percent of the country's total territory for its Protected Area System (PAS). There are currently 34 protected areas, including wildlife sanctuaries, bird sanctuaries, and national parks, amounting to 6.7 percent of the country's total land area, which do not adequately cover or represent the country's different biodiversity hotspots. However, this count includes proposed new national parks, such as Lenya and Tanintharyi National Parks in Tanintharyi Region, that have not yet been officially recognized by the government — which would decrease the total land area percentage by about 1 percent if omitted. Out of the 34 protected areas, 20 are managed by the Nature and

³⁸ 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 use rights and access.

Wildlife Conservation Division under the Forest Department.³⁹ In addition there are several new terrestrial parks in Kachin and Kayah State and Tanintharyi Region being proposed that appear to have received provisional approval from MOECAF.

BOX 3

State Forest Categories and Use Rights

Permanent Forest Estates (PFEs) can be sub-categorized into three types:

- 1. Protected Area System (PAS): This strict conservation category includes national parks, nature and wildlife reserves, and other conservation areas. These conservation areas do not permit any resource use except for conservation purposes. The protected areas under the PAS are, however, continually under-managed and under-staffed and often as a result operate as "paper parks."
- 2. Forest Reserve: This multiple-use category includes both conservation and sustainable forest use in principle. Forest reserves are established for watershed management, management for commercial logging, as well as local wood supply reserves for village use. Community forests could also be designated in these areas, in theory. This is the most common PFE category by overall area at 18 percent. Forest reserves are particularly targeted for allocating agribusiness concessions, whether degazetted first or not, with resulting conversion timber from clearance. While forest reserves have been increasing in acreage over the past two decades, their ecological integrity is increasingly compromised from mismanagement, the allocation of economic land concessions inside, infrastructure development, and further fragmentation.
- 3. *Protected Public Forest (PPF)*: This category is an alternative to forest reserves for protecting trees and restricting land use in non-reserved forested areas. Commercial logging is also possible in this forest land category. Despite allowing commercial logging, PPF are intended more for conservation purposes compared to forest reserve areas. PPF tend to be better demarcated on maps and on the ground, so less discrepancy problems are encountered compared to forest reserve lands. Community forests could also be designated in these areas, although this is not usually the case. This is the least common category of PFE, at just 6 percent.

The other major category of forestland is known as "Non-Permanent Forest Estate", or non-PFE, which includes two sub-categories.

- 1. Public Forest (also known as "unclassified forest" or "other woodland area" or "virgin land"): This category describes forestlands outside of PFE under the MOECAF but which are at the "disposal of the state." This forestland category is often quite degraded but sometimes still has some limited tree cover. Villagers can harvest timber and non-timber products for subsistence (not for commercial purposes, however), unless a certain action is specifically prohibited by law, such as cutting state "reserved tree species" (e.g., teak). However, these regulations can be overridden with special permission from high-level authorities. Public forest is used as an extension of reserved forests to help protect forestland areas around an existing forest reserve, in theory. This is also a common land category to be converted into an agribusiness concession.
- 2. *Wasteland*: This land category is without clear delineation on purported use or institutional control. This land category is often used by the MOAI to allocate agricultural concessions (see agriculture legal analysis below for further discussion), although standing trees under this forestland category are under the jurisdiction of the Forest Department, MOECAF.

³⁹ FAO 2009.

TABLE 2

The Current Status of Permanent Forest Estates (PFEs) in Myanmar

Category	Acres	% of Land Area
Permanent Forest Estate	48.90 million	30.7
Forest Reserve	30.11 million	18.0
Protected Public Forests	10.12 million	6.1
Protected Area System	8.68 million	6.7

Source: Forestry in Myanmar Bulletin, 2011. Forest Department, the MOECAF, Myanmar.

De-gazetting Forest Reserves for Agribusiness

Based on interviews, limited government data, and case study research presented in this report, forest reserves have been heavily targeted for de-gazetting, which would allow for the forest to be legally cleared for other uses, particularly agribusiness concessions. The production and sale of conversion timber would be the first profitable operation of the concession, happening before the possible planting of the agricultural crop.

In 2004 and 2005 alone, 1.77 million acres of PFE, which included both forest reserves and PPFs, were officially de-gazetted to make way for resource extraction, energy infrastructure development, agricultural expansion, and military compounds.⁴⁰ Due to problems including corruption and a lack of systematic data collection and corruption, it is expected that this figure underestimates the amount of actual forest conversion. Since that time, the rate of agricultural estate expansion onto previously forested lands has grown. Data analysis based on 2013 official agricultural statistics has shown that 822 companies or individuals had been allocated a total of 0.74 million acres from de-gazetted forest reserves and PPF just for agricultural production,⁴¹ although the actual figure is expected to be significantly higher. In addition, some forest reserves and PPFs 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.

As agribusiness concessions are regularly allocated within forest reserves, the particular allocation and degazetting process demands significant attention. The minister of MOECAF, with approval from the central government, can legally alter the category of the whole or a portion of the Forest Reserve, and de-gazette it into, for example, an agricultural holding, or convert it into a PPF (*Article 7*). However, there is no clear procedure or mechanism regulating how this would be accomplished or what standards are to be applied (as is absent from *Article 8*). According to interviews in 2013 and 2014 with active and retired forestry officials in Yangon, the permission to change a PFE into a non-forestland use (e.g., turning a forest reserve into an agribusiness concession) must come from the country's top decision-makers — formerly military officials but now relevant ministers and/or the President's Office. However, while several informants believe there is a legal procedure to follow to de-gazette a PFE, no known legal document outlines this process, and no one claimed to know the actual legal procedures. Forest Trends also did not obtain any relevant documents.

⁴⁰ Data collected from MOECAF, Naypyitaw.

⁴¹ MSU and MDFI/CESD 2013.

In many cases, land classified as forest reserve on existing maps does not match current actual land use (often agricultural use), which has become a significant problem with government land use mapping and planning during the reform period.⁴² Rural populations that have long used areas now demarcated as forest reserves or PPFs have been technically in violation of the *Forest Law*; though local authorities have often granted informal permission for these villages to maintain access use rights, this status is always at risk when new authorities are posted.⁴³

For several decades the MOECAF has pushed for establishing state — and now private — managed tree plantations. The Director General (DG) of the MOECAF's Forest Department may, with the approval of the minister, establish tree plantations on designated forestlands, which include commercial tree plantations (e.g., teak), village firewood and local wood supply plantations, tree plantations for the purposes of environmental conservation, and industrial plantations (mostly teak, rosewood, and other valuable hardwoods, but also can include rubber and oil palm if it is managed by the FD) (*Article 13*). However, this program has been largely unsuccessful due to unclear laws and tenure security, which have deterred private investors who increasingly view tenure insecurity as an investment and public relations risk.

Conversion Timber from "Other" Forestlands

Unclassified forests, which in general have less substantial tree cover, is also a targeted forestland category for agribusiness concessions, owing to its more ambiguous state, ecological function, and jurisdictional control. It is assumed that most of this forestland where valuable trees remained was logged and the timber sold on the international market, although no such data is available. For an agribusiness concession to be located in an "unclassified" or "other" forest (collectively so-called "non-PFE"), the *Central Committee for the Management of Vacant, Fallow, and Virgin Lands* (under the *VFV Law*, see next section), headed by the Minister of MOAI, may make a request to the Minister of MOECAF to change the land use designation to allow for an agribusiness concession. In this situation, a state agency or company must first apply for a permit from the Forest Department, which still has jurisdiction over the standing trees in this non-PFE land — even if the land is under the authority of another agency, such as the MOAI. Therefore, like for PFE lands, any tree that is felled for commercial production, such as conversion timber, must still technically follow silvicultural protocol with proper MOECAF permits. There is no evidence, however, that scientific forest management is being carried out; valuable trees are removed and the remaining forest is burned.

The most common land use in non-PFE lands is actually swidden cultivation (*taungya*) by small-holder farmers in the uplands. They possess no legal land use rights or tenure security under the new land laws (see next section) or existing forest laws and policies. Both "public forest" and "wasteland" fall under provisions found within both the *Forest Law* (1992) and the *VFV Law* (2012). These lands are at the disposal of any government department, although permission for any land use change must be given by the township land management body (as per the new land laws, see agriculture analysis for more information), in which both the Forest Department and the State Land and Records Department (SLRD) of the MOAI are participating departments.

⁴² Oberndorf 2012.

⁴³ Smallholder cultivators' tenure security may improve, however, with the implementation of the new policy on granting limited agricultural use rights within PPF, although this would not be the case for rotating upland cultivation (which would still be illegal in these areas).

Land Use Rights in Forest Reserves

Local communities are largely excluded from any access and use rights to land categorized as forest reserves or PPFs, 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 livelihoods concern — since the lack of forest and use rights contributes to poverty and food/resource insecurity — that demands further attention and advocacy.

In June 2013, the 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.⁴⁴ This legislation was considered a key innovative piece of the MOECAF's good governance reform. However, it must be permanent agriculture, and not shifting cultivation (which is mostly practiced by communities), and only holds for communities under fifty households. It is yet unclear, however, how well this will be implemented and honored, and how resource use, access, and security will change for these communities on the ground.

Timber Extraction Regulations

There are also many legal provisions regulating the cutting of wood in forest-designated lands under the control of the MOECAF. The extraction of any forest products needs a permit (*Articles 17, 18,* and *19*). Extraction on a commercial scale requires a competitive bidding system unless it is carried out by a state-owned enterprise (SOE) (e.g., Myanmar Timber Enterprise (MTE), the logging arm of the MOECAF), beneficial to the public, or granted a waiver by the MOECAF minister (*Article 18*). These very significant clauses give the legal right for the MOECAF (especially the MTE) to issue decrees to determine which wood is "officially legal" without interministerial oversight or following "rule by law" practices or holding to the good intentions of the law.



Photo credit: Local researcher, timber yard, Tanintharyi Region

The duration of the commercial extraction permit varies: one year if granted by the state Forest Department, two to four years if from the Director General of the Forest Department at head-quarters in Naypyitaw, or five or more years if from the minister himself (*Article 19*). No officially defined restricted trees (which are different for different areas of the country) or teak (nationally restricted) can be utilized in any way in designated forestlands without permission from the Forest Department (*Article 27*) (see also the *Conversion Timber* section).

If these legal procedures for timber extracted in forestland conversions are followed, then conversion timber, much like timber from managed forests, is determined to be official

(and therefore "legal") according to Myanmar law. However, as a high-level central forest government official himself noted in an interview in Yangon in March 2013, conversion timber may be "legal", but it is definitely not sustainable as it is supposed to be for managed forests. Nor does "official" mean legal in the sense of international good governance, following the "intent" of the national law, or meeting legality standards for

⁴⁴ Soe Than Lyn 2013

importing countries. The "rule by decree" that is governing forestland conversion and associated production of conversion timber does not conform to any robust "rule of law" and good governance.

The *Protection of Wildlife and Conservation of Natural Areas Law* (1994) is primarily concerned with the conservation of wildlife and their habitats, and compliance with relevant international treaties such as CITES and the Convention on Biological Diversity. It is important in that it provides a rudimentary land classification system for natural areas that are protected (*Article 7*). Natural areas fall under the classification of PPF found in the *Forest Law* (1992), giving greater legal conservation backing to designated forestlands. There is no mention in the *Forest Law* (1992) or *Forest Policy* (1995) of conflict mediation measures, law and policy enforcement, or land tenure security for villagers living within designated forestlands. However, the *Protection of Wildlife and Conservation of Natural Areas Law* does provide a mechanism for compensating individuals or businesses who have existing rights to the land under relevant land acquisition laws (*Article 8*), and 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*). The law also contains penalty provisions for anyone who causes damage to any ecosystems within a natural area (*Article 36*). However, it does not appear that these provisions are enforced for conversion of protected forestlands, nor is there any known case of a party using these laws to contest conversion of protected forests to non-forest uses.



Photo credit: Kevin Woods, log stockpile, Tanintharyi Region

INDUSTRIAL AGRICULTURE AND CONVERSION TIMBER

Background

During the 1990s and 2000s, military-state partnerships with Burmese companies who were selected to carry out national development projects on behalf of the military-state gave rise to what can be called the "Burmese Way to Capitalism." The agricultural sector has been no exception to this model of development. As early as 1991 through that year's *Wastelands Act*, the government has supported, through national decrees, laws, and policies, the reallocation of land from small-holder farmers to select Myanmar businesses to produce (in theory, but often not in practice) industrial agricultural commodities for national self-sufficiency in primary crops, such as for rubber, rice, palm oil, and physic nut (*Jatropha*), as well as foreign export earnings. These elite Myanmar businesses, known as "crony companies" among the Myanmar public, were oftentimes actually coerced into carrying out these military-state agricultural development projects in return for receiving other lucrative economic opportunities from central officials, such as import/export permits or logging concessions, which would then offset their development project costs.

However, the companies appeared reluctant and often did not plant, or only did so along roads for a chance view by visiting high-level officials. Most active and retired government officials and businesses have admitted, off the record, the lackluster results of industrial agricultural production before the current reform period, as well as during the transition period so far — indeed it is inscribed in government figures. The political economy of industrial agricultural development is thus underpinned by these particular military-state development strategies, at least in some cases (e.g., in Tanintharyi Region; see case study in this report). In reality these agribusiness concessions — which often were given to companies heavily involved in the logging industry — acted in effect more as a legal cover for logging in Myanmar's remaining high value forests (e.g., Tanintharyi Region, versus, for example, Kachin State). Logging in the agribusiness concession offered these companies a quick and easy rent-seeking mechanism while appearing to help the military-state become a "modern, developed nation" independent of agricultural imports and resilient to Western sanctions.

Growth of Agribusiness Concessions

Since the reform government took office, the international investment community (predominantly Asia-based financiers but increasingly expanding to include major Western companies) is anxious to tap into Myanmar. Agribusiness has become one of the hottest potential new investment sectors — with Myanmar being advertised as the "final land frontier" of Asia. The first two laws promulgated by the first Union Parliament were land laws that provide the legal grounds for large-scale agricultural concessions to the domestic and foreign private sector (see more in legal analysis below). The first and second Commercial Farm Asia's international agribusiness

forums hosted in Yangon showcased Myanmar's opening of agricultural lands for foreign investment.⁴⁵ Ongoing land conversion for the intended purpose of industrial agricultural production is still largely led by the same military-favored Burmese companies, and is now backed by foreign (predominately Asian) investors as well. Now these investors are also venturing to lease large-scale agricultural estates. The demand for LSLAs for agribusiness estates follows the global trend of land acquisitions for industrial agricultural expansion that began to surge in 2008 after the global market crash and food/oil price spike.⁴⁶ The coincidence of these two drivers has further elevated interest in, and exacerbated the extent of, establishing agribusiness estates in Myanmar.

With land having become Myanmar's most valuable commodity asset, international financial institutions (IFIs), development aid institutions, and global finance corporations are pushing for full liberalization and modernization of the agricultural sector in Myanmar, hoping for a quick and relatively easy boost to the country's gross domestic product (GDP) earnings. Regional and global institutions are eager for Myanmar to provide a new source of reliable primary agricultural commodities, while the Myanmar government views its agricultural sector as a prominent potential source of foreign-earned income with a hopeful surge of agricultural exports. Small-holder farmers, however, which are the bedrock of the country's functioning economy and three-fourths of the population, are seen as an obstacle rather than an asset in such an agricultural development model.

To date, however, much of this Foreign Direct Investment (FDI) has not yet materialized, with the vast majority of all agribusiness concessions allocated to domestic Burmese companies, whether or not they are informally financed by foreign companies (and therefore outside the purview of FDI). In fiscal year 2010-2011, official figures on approved FDI in the agriculture sector amounted to only US\$ 139 million,⁴⁷ which was due to the first three foreign companies being allowed to lease land for commercial farming of oil palm in Tanintharyi region.⁴⁸ By January 2013, FDI in the agricultural sector reached just US\$ 183 million. By March 2014, 13 foreign companies totaling US\$ 203 million have been approved for FDI in the agriculture sector, representing just 0.44 percent of the total FDI.⁴⁹ In contrast, 10 foreign companies totaling US\$ 174 million have actually invested in the agricultural sector as FDI in Myanmar by 2014 (versus only signing a Memorandum of Understanding with the intention to actually invest, as the figures above capture).⁵⁰

As these figures demonstrate, FDI in the agricultural sector and formal foreign-operated agricultural estates is so far quite insignificant, especially compared to other sectors. While the vast majority of agricultural concessions in the country to date are *formally* run by Myanmar companies, informal foreign investment is considered significant. FDI figures that only record official, government-approved foreign investment distort the extent of actual foreign investment in the sector because of the reliance on informal investment. In a significant number of cases Burmese companies are informally financially backed by foreign investors and therefore this type of informal FDI escapes government regulation and statistics.⁵¹ For example, informal Chinese agroinvestment in northern Burma driven by China's opium substitution program is significant, with serious and wide-ranging socio-economic, political, and environmental impacts, but is not recorded in official FDI figures.⁵²

⁴⁶ Borras and Franco 2012.

- ⁴⁸ MOAI 2011; DICA 2011.
- ⁴⁹ DICA 2014.
- ⁵⁰ DICA 2014.
- ⁵¹ Woods 2013a.
- ⁵² Kramer and Woods 2012.

⁴⁵ <u>http://www.cmtevents.com/eventschedule.aspx?ev=121040</u>, last accessed January 2014; and <u>http://www.myanmaragribusiness.com/index/php</u>. Last accessed January 2014.

⁴⁷ CSO 2012.

The MOAI's 30-year Master Plan for the Agriculture Sector (2000-2001 to 2030-2031) aims to convert 10 million acres of "wasteland" for private industrial agricultural production.⁵³ Examples of government-promoted agricultural development schemes include ongoing oil palm promotion in Tanintharyi Region (one of the case studies for this report); a previous nationwide Jatropha (physic nut) campaign (which targeted 0.5 million acres per state and region, for a national total of 8 million acres); rubber, especially in the north for the Chinese export market; and biofuels, (e.g., cassava and sugarcane) (the latter two being the second case study in Kachin State for this report). The government first planned to achieve these goals by relying upon the Myanmar "crony companies" since the initial agribusiness boom in Myanmar began during sanctions, in addition to the concessions providing a type of rent-seeking opportunity to "cronies" in return for helping the military-state actualize national development goals.

By 2001, more than one million acres of large-scale agricultural concessions had been allocated to nearly 100 Myanmar private companies. By 2011, both the number of companies and allocated acres covered had doubled. Over half were awarded in Tanintharyi Region (exclusively oil palm) and Kachin State (rubber, sugarcane, and cassava). Kachin State officially had 15 Myanmar companies with grants totaling nearly 600,000 acres. Tanintharyi Region had 36 companies with over 670,000 acres.⁵⁴ By March 2012, after the government's first year in power, during the period of grassroots resistance against mainly agricultural "land grabs,"⁵⁵ there was a 76 percent increase in agricultural concessions awards, up to 3.4 million acres.⁵⁶ By mid-2013, over 5.2 million acres of industrial agricultural concessions had been awarded across Myanmar — more than a 50 percent increase over the previous year and 170 percent since 2010. Over 60 percent of the total area of agricultural concessions (mainly biofuel and rubber) are currently located in just two regions: Tanintharyi Region (with nearly 1.9 million acres, or 36 percent of the country's total concession area) and Kachin State (with nearly 1.4 million acres, or 27 percent of country's total). These two regions, perhaps not incidentally, also contain the largest extent of remaining HCVFs in the country. Just over 60 percent of Tanintharyi Region is covered in forest habitat (roughly 6 million acres),⁵⁷ with about one-third of Tanintharyi's total land area under an officially delineated forest category. Kachin State, on the other hand, has nearly 9.2 million acres of protected forest under PFE, which is 42 percent of the total land area of Kachin State.⁵⁸

Table 1 (see *Executive Summary*) lists the government's agribusiness data for the country since the new administration has taken office. These data only include officially allocated private agribusiness concessions, and do not include agricultural production schemes implemented by smallholders or other modes of production, or agricultural estates that have not been recorded by the central government. This means concessions allocated by local elites out of government oversight or by non-state entities, or in areas outside the administration of the central government (considerable in ethnic areas) are not included in those national agribusiness figures. A very rough estimate of actual agribusiness concessions may therefore be an *additional* 500,000 acres — or more due to expansive rubber concessions in Wa Semi-Autonomous Area. In addition, agricultural plots that were not allocated as agribusiness concessions, such as by smallholder farmers or individuals, are also not included in the agribusiness figures. Nonetheless, the agribusiness data certainly gives an indication of scale and extent by state/region, and are therefore very helpful in understanding trends in LSLAs for private agricultural estates.

⁵³ MOAI 2002.

⁵⁴ According to central, not regional, government statistics, which vary considerably.

⁵⁵ In the context of Myanmar, the phrase "land grab" here refers to an "illegal" land acquisition, as determined by Myanmar government laws and regulations, whereas LSLA is meant to infer a "legal" large-scale land acquisition. These are of course politicized terms not without debates on how they are politically deployed.

⁵⁶ DAP 2012.

⁵⁷ It is not known how "forest" is defined here, however.

⁵⁸ Forest Department, Naypyitaw.

Only 23 percent of total acres of agribusiness concessions awarded have been planted with any agricultural crops as of mid-2013. This number falls to 19 percent for oil palm concessions in Tanintharyi, and just 13 percent for concessions in Kachin State.⁵⁹

Other government data sources reveal that the central government has earmarked by 2010-2011 nearly 11 million acres of demarcated forestlands (of different categories) in the country suitable for perennial agribusiness crop production. Over 1 million acres of this category are marked for Tanintharyi, which is a sixth of the total forestland area in the region, and half of what has been designated as a protected forest. Over 6 million acres of designated "virgin" and "vacant" land throughout the country have also been assigned as available for agribusiness concessions, with the highest number of acres available in Shan State at 3.6 million acres, whereas Kayin State possesses nearly 1 million acres, and Kachin State under 500,000 acres. Forestlands and "vacant" lands earmarked as available for agribusiness ventures thus total 17 million acres in the country (Table 3).⁶⁰

With little results on the ground in terms of agricultural planting, let alone production, the government-allocated concessions are not yet achieving national objectives of increased agricultural production for export or for self-sufficiency. Myanmar's land laws require that these concessions need to be fully planted within a few years of receiving the concession or else the land will be taken back (see below for details of land laws). This has also given further evidence to those who claim that agribusiness concessions are in part a cover for logging and land speculation. Farmers, activists, and civil society organizations have been forming cohesive social movements, and are urging the government to follow the law and return the land back to its original land users — although according to law the land would return back to the state.⁶¹ The few cases of land reverting back to the state, or in rare cases back to the original users, have been perceived as a political stunt by well-known companies and politicians.⁶²



Photo credit: Local researcher, military check point around agribusiness concession, Kachin State

⁶¹ UCA News 2014.

⁵⁹ O'Toole 2013b.

⁶⁰ MOAI, Naypyitaw.

⁶² May Sitt Paing 2013.

TABLE 3

Land Marked Available for Perennial Crop Cultivation (2010–2011, in acres)

State/Region	"Vacant"/ "Virgin" Land	Reserve/ Unclassified Forest	"Other" Forest	Total Land Available for Cultivation
Naypyitaw	—	—	—	—
Kachin	428,000	—	_	428,000
Kayin	945,790	_	_	945,790
Kayah	_	—	_	
Chin	_	_	_	
Sagaing	_	49,000	_	49,000
Tanintharyi	68,000	871,500	278,200	1,217,700
Bago	57,509	_	_	57,509
Magwe	148,545	2,597,701	_	2,746,246
Mandalay	714,594	1,341,558	_	2,056,152
Mon	_	206,010	_	206,010
Yangon	7,657	3,240	266,811	277,708
Rakhine	162,254	1,123,823	_	1,268,077
Shan	3,646,004	2,439,326	1,309,108	7,394,438
Ayeayarwady	_	333,386	_	333,386
TOTAL	6,178,353	8,965,544	1,854,119	16,998,016

Source: Central MoAI office, Naypyitaw

In contrast to the dismal rate of planting by the large-scale commercial concessions, crops traditionally managed by smallholders have shown better success. Table 4 lists government 2012-2013 data for acres of *planted* industrial agricultural crops but which are not allocated agribusiness concessions. This includes rubber (1.44 million acres), sugarcane (380,000 acres), cotton (689,000 acres), and oil palm (354,000 acres), totaling 2.86 million acres. This planted acreage is nearly 140 percent more than what is recorded as planted for agribusiness concessions. Cotton is normally grown by smallholders (not by concessions), rubber is mainly cultivated by smallholders (but not in the north which, is the new hotspot for rubber concessions informally owned by Chinese investors, and which is often not recorded in national agribusiness concessions even if grown on estates. However, it is quite possible that these agricultural crop production schemes are also leading to forest conversion and the production of associated conversion timber.

TABLE 4

Main *Planted* Industrial Crops Growing by State/Region, 2012–2013

State/Region	Planted Crops (acres)				
	Rubber	Sugarcane	Cotton	0il Palm	
Naypyitaw	-	13,421	8,894	_	
Kachin	63,503	5,242	_	55	
Kayin	213,027	7,955	_		
Kayah	36	_	_		
Chin	9	672	573	_	
Sagaing	9,764	162,582	87,320	_	
Tanintharyi*	298,356	_	_	359,455	
Bago	107,703	48,200	17,830	_	
Magwe	-	15,241	348,844	_	
Mandalay	381	31,620	224,332	_	
Mon	470,066	442	-	_	
Yangon	40,293	5,640	_	_	
Rakhine	35,398	1,987	_		
Shan	172,287	87,229	786	_	
Ayeayarwady	24,997	230	11		
TOTAL	1,435,820	38,0461	688,590	359,455	
GRAND TOTAL					

Source: Central DAP, MOAI, Naypyitaw, 2013, except Taninthari which was taken from Regional MOAI office

* = Figure taken from Tanintharyi Regional MOAI office

Government-Promoted Agricultural Commodities



Photo credit: Kevin Woods, newly planted rubber concession along the road in Kachin State.

Rubber

For the case of rubber, the central government has a 30year plan (2000-2030) to promote 1.5 million acres of planted rubber. Within just five years (starting in 2005-2006), planted rubber increased by over 120 percent (nearly twice the rate of increase compared to the decade before), from just nearly 560,000 acres planted in 2005-2006 to 1.23 million acres in 2010-2011, and up to 1.44 million acres planted by 2012-2013. The bulk of rubber plantations are still in traditional growing areas in southeastern Myanmar (Tanintharyi Division, Mon State, and Kayin State), with all three states/divisions each having approximately a 40,000 acre increase in rubber from 2009-2010 to 2011-2012. All of these regions are ethnic areas that have high remaining forest cover, and which are susceptible to illegal cross-border timber trade, especially since the official log export ban. The rubber spike in northern Myanmar (northern Shan State and Kachin State) is driven by China's opium substitution program, which does not appear to be generating much conversion timber as it is mostly being planted in upland swidden fields.⁶³

Oil Palm

Another major industrial agricultural crop promoted by the previous military regime since the late 1990s and now under the reform government is oil palm development — exclusively in Tanintharyi Region, southeastern Myanmar. The intended goal was to plant 500,000 acres of oil palm: half for domestic demand, the other half for export.⁶⁴ In just one decade, Tanintharyi Region has experienced nearly a 900 percent increase in oil palm planted since 2000-2001,⁶⁵ although annual increases are stagnating. According to regional government data, by the end of 2012-2013 (after a seven-year oil palm development program), a total of nearly 1.90 million acres had been 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), but only 360,000 acres have actually been planted. Oil palm concessions now cover 18 percent of the land area of Tanintharyi Region,



Photo credit: Local researcher, timber barge, oil palm concession area, Tanintharyi Region

predominately in the more extensively forested southern and eastern parts. Over 60 percent of Tanintharyi Region is under forest cover, where nearly twothirds of the total area of the region falls under a designated forest category. The fact that the majority of concessions are located in forested areas, which will require clear-cutting for the agricultural development project to progress, leads to widespread speculation that the logging revenue is the primary motivation for these projects. Refer to the case study presented at the end of this report for more detailed information.

⁶³ Kramer and Woods 2012.

⁶⁴ New Light of Myanmar 2002.

⁶⁵ DAP 2010b.

LEGAL ANALYSIS OF AGRICULTURE SECTOR RELEVANT FOR CONVERSION TIMBER

The new laws and policies since the new government has taken office have fostered a more liberal legal environment for large-scale foreign investments, including for the agribusiness sector. However, many of these new land-related laws have yet to prove they can offer the proper safeguards for the statutory land use rights to widespread marginalized populations when in conflict with "investor rights". In response to these criticisms from civil society and the donor community, a draft *National Land Use Policy (NLUP)* has been produced, which underwent a national consultation process at the end of 2014. The draft *NLUP*, while still prioritizing foreign investors and large-scale industrial agriculture, at least offers several provisions to confer rights to those previously denied, specifically for upland cultivators relying upon customary rules and practices. The analysis provided here draws from the current enacted land-related laws and policies (2012), although this could significantly change after the 2015 elections when new legal instruments are expected to be passed and enforced, such as the *NLUP*.

Provisions for Customary Law

No laws in Myanmar since the colonial period officially recognize customary laws or practices for land use, despite ethnic communities often relying upon them to govern their communities. In addition, upland swidden cultivation (non-permanent upland agro-forestry cultivation practices, or taungya) is not an officially recognized land use category or practice, thereby not offering any statutory legal protection to an estimated 30-40 percent of the country's population who are considered taungya cultivators. These vulnerable communities and households have no legal protection for their agriculture-based livelihood strategies under statutory law. It is not clear the degree to which this land practice will be given statutory use rights in the *NLUP* as inconsistencies exist in the different articles and among different government stakeholders.

Contested "Wastelands"

The *Vacant, Fallow, and Virgin Land Law (VFV Law)* (2012) follows the 1991 *Wastelands Law* by providing the legal precedent to reallocate so-called "vacant, fallow, and virgin land" to the private sector.

"Virgin land" is defined in the VFV Law (2012) as "new land or other woodland, in which cultivation has never been done before" (*Article 2*), which may or may not contain forest cover and is typically a designated forestland category. If a designated forested land, then it must be de-gazetted to qualify for reallocation to the private sector as an agribusiness concession under the VFV Law. "Fallow" land, much like "vacant" land, is land that was at one time cultivated but is no longer actively (and officially) used.

This presents a problem with how "active cultivation" or "officially" used or accessed land is defined, which can lead to swidden fields (that often resemble agro-forests) to be categorized as "vacant" or "fallow" land,

especially since plots are sometimes left fallow for several years before returning to cultivate in order to allow for soil and plant regeneration (especially for *taungya* fields). Moreover, customary land practices and shifting cultivation are not recognized as official land use practices and confer no official land use status — and therefore these lands are being designated as "vacant" according to the VFV Law.

Discrepancies in Mapping and Land Categorizations

The Forestry Department and the MOAI have overlapping power and authority over forestlands that are used or targeted for agriculture, such as "vacant, virgin, and fallow" lands. Oftentimes discrepancies exist among how government maps categorize the land, how different township offices administer the land, and actual on-the-ground use of the land by local communities. For example, a land area may be marked as "virgin" land on a government map, but the township Forest Department manages the land as a watershed or conservation forest, and a nearby village has been doing swidden cultivation in the hilly area for generations but without any official recognition.⁶⁶ These overlapping land uses, categories, and administration are beleaguered by ineffective land use management and inaccurate mapping. Agribusiness concessions are oftentimes strategically targeting these ambiguously categorized and locally used lands — which are often forested to varying degrees — precisely because of the lack of clarity and enforcement in any specific land management use regime. For this reason, the granting of agribusiness concessions in forestlands highlights these institutional, categorical, and land use conflicts.

Resource Rights in an Agribusiness Concession

The land-related laws and policies have created an enabling environment to facilitate the legal transfer of land use rights to private investors to facilitate large-scale agribusiness ventures. Private investors, both domestic and foreign, are granted land and resource use rights over that of local communities and households. Without associated safeguard policies, the legal framework is effectively reallocating these rights from current local users who have no formal land use title, or Land Use Certificate (LUC), to investors (see more information on LUCs below). Some households have no LUC yet due to administrative delays, the inability to afford the transaction costs (often bribes) to obtain an LUC, or the inability to meet state agricultural standards which do not favor traditional practices of shifting cultivation, grazing land, agro-forestry, etc.

The land-related laws regulate use rights of companies which are allocated "wastelands." According to the VFV Law, land that is reallocated to the private sector must be used for the purpose granted and in relation to the economic enterprise, whereby exploring or extracting any other natural resources above and below the ground is prohibited (*Article 16*). However, a specific allowance for land use rights to the private company is given for mining under the Ministry of Mines.

For agribusiness, however, the VFV Law and bylaws are vague on whether it is legal for a company to log the concession as their main economic activity under an agribusiness concession. The relevant ministries must give permission to the company for the related economic activities in the land concession (*Bylaws, Article 16*), but logging is never specifically mentioned as one such permitted activity. However, in order to "avoid unnecessary destruction of forests and the natural environment," MOECAF and other relevant ministries need to be "consulted" on the land concession development (*Bylaws, Article 16*). The company must return the granted land back to the Union government if natural resources and artifacts related to "cultural heritage" are discovered in the land area (*Bylaws, Article 47*), although it is not stated what qualifies as "cultural heritage." If

⁶⁶ Oberndorf 2012.

the company did not plant the agricultural crop according to a strict regiment, then they would have to return the land (to the state, not the previous land users).

Size Regulations of Agricultural Concessions

According to the *VFV Law*, no more than 5,000 acres at a time can be allocated for industrial agricultural estates. After 75 percent of the permitted acres are cultivated, an additional maximum 5,000 acres at a time up to a total of 50,000 acres shall be permitted with a 30-year lease. However, more than 5,000 acres at a time shall be permitted if in the "best interest of the state" with the permission of the Union Government Cabinet (*Article 3*). Moreover, 15 percent of the concession must be cultivated within the first year, 30 percent in the second year, another 30 percent in the third year, and 25 percent in the fourth year, completing 100 percent of the project within four years (*Bylaws, Article 45*).

There are many examples of agribusiness concessions that are initially beyond the maximum permitted size, some of which are showcased in this report's case studies. Very few of the concessions have planted as stipulated in the bylaws, and only a few cases exist whereby the land has been returned either to the state or the original land claimants for failing to meet these stipulated regulations.

Land Use Certificates (LUCs)

The Farmland Law, passed at the same time as the VFV Law in March 2012, states that land use rights can be legally bought, sold, and transferred on a land market with a LUC. The State still always owns the land (and everything above and below), so only the land use rights are bestowed. While farmers have long traded land plots informally, the legalization of a legal land use market introduces significant new potential socio-economic differential impacts as land use rights are now a tradable commodity - the first time such a form of property rights has been legally prescribed in Myanmar. Very significantly, in practice this translates as anyone without an official LUC no longer possesses statutory land use rights, so that the bestowing of LUCs actually negates all other land use rights regimes. LUCs are gradually being issued by the MOAI's Settlement and Land Records Department (SLRD), but it will



Photo credit: local researcher, farmer harvesting field

take decades to title all the permanent agriculture land in the country (despite the government's declaration to do so in just a few years period). Major problems with corruption are being reported, with only wealthier households able to afford the bribe to obtain the title, and currently the program predominately covers lowland paddy villages in the Central Dry Zone and Delta region.

Currently, it is technically not possible to issue an LUC for a shifting agricultural practice. Therefore ethnic upland areas, which amount to as much as 30 to 40 percent of the country's total land area, are under the greatest land tenure security threat under these laws due to their lack of recognized statutory use rights. The

law also gives unconstitutional power to the *Central Farmland Management Body* (under the *Farmland Law*), chaired by the Minister of MOAI, on decisions over farmland use, management, and allocation (*Articles 35-38, 40*) — the same as for the *VFV Management Body* (under the *VFV Law*). If the cultivator does not start to cultivate the farmland within six months, then the *Central Farmland Management Body* shall confiscate the farmland (*Articles 30 and 31*). Again, as for the case of the *VFV Law*, governing bodies are not so far rescinding unplanted allocated land as required in the law.



Photo credit: Local researcher, mechanized agribusiness concession, Hukawng Valley, Kachin State

Foreign Investment in Land and Agriculture

The new **Foreign Investment Law (FIL)** pertains indirectly to agribusiness and therefore forest conversion and associated conversion timber. Some sectors, including the agricultural sector, have been deemed "restricted" sectors for investment, and carry certain extra, although ambiguous, precautions. The Myanmar Investment Commission (MIC), the highest governing body over large-scale foreign investments, can make exemptions for foreign investments in these restricted sectors, however, if it considers it is in the "national interest" (especially if it is to "benefit" ethnic minorities). Relevant prohibited activities in designated areas include the following: prejudicial to the cultures and customs of the ethnic nationalities; prejudicial to public health; prejudicial to natural resources, the environment, and biodiversity; agriculture that could be carried out by national citizens; and within ten miles of an international boundary except for special economic zones (*Article 4*). However, if the projects are deemed "beneficial" to Myanmar citizens, especially to ethnic minorities, then it may gain approval from the Union Government, and therefore override these restrictions (*Article 5*). These articles are not yet known to be enforced, however.

For the specific case of foreign investment in land, the *FIL* allows for land use rights to be bestowed for a total of 70 years (*Articles 31-32*), which if for agricultural purposes contravenes the *VFV Law*. If the investors want a lease longer than 70 years under the *FIL*, they may get permission from the Union Government if their land concession is located in "less developed and poor communication areas" of the country as then it will be especially "suitable for the economic development of the whole country" (*Article 36*). Interestingly, these areas are also the location of Myanmar's remaining valuable timber. Provincial governments (state and region-levels) are not required to give consent to investments within their jurisdiction, although they need to be "informed" by the implementing Union Government. On the other hand, the Union Government does not need to give approval to large-sized investments implemented under provincial authorities, although they have to be notified.

A new investment law has been drafted under the World Bank Group's International Financial Corporation (IFC) program with the Myanmar government. The initial draft submitted to the government focuses on the facilitation of foreign investment but without related social or environmental safeguards. According to IFC's submitted draft, any national government regulations, although sparse, that protect communities and their land use and livelihood rights, as mentioned in the above laws and the future NLUP, can be challenged in international arbitration courts by investors (foreign or domestic) if they hamper their profits. This has further serious implications for the legal environment in Myanmar.⁶⁷

The new laws since President Thein Sein's government took office have put land and resources on the market, but without the necessary good governance and institutions needed to ensure proper implementation. The historical legacy of governing by decree or "loopholes" has been written into the new laws, such that an effective rule of law in practice is greatly inhibited, noted by numerous clauses stating the legal authority for a senior official to overrule the other articles. Even still, the articles that are included to govern the use and management of resources with regards to social, cultural, and environmental factors are not being properly followed, and civil society is not systematically using these articles to legally contest the land allocation process or agribusiness and logging practices.



Photo credi: Local researcher, cassava concession, Hukawng Valley, Kachin State.

⁶⁷ Woods and Aguirre 2014.

PRODUCING CONVERSION TIMBER

Some ad hoc, limited data may be collected by government agencies on conversion timber, but it is neither made public nor considered highly accurate, and independent data on conversion timber do not exist either. Neither do independent data on conversion timber exist. To date there are also no publicly available maps for land concessions, either for agribusiness or other sectors. Making digital data transparent to improve land use and management decision making is just beginning to gain momentum in Myanmar, although still very much hampered. Agribusiness concessions, and perhaps also logging data related to these concessions, are recorded and mapped at the region and state government level, although the degree and accuracy of the centralized data (which to a limited extent is reported in this section) is uncertain.



Photo credi: Local researcher, MTE log yard, Tanintharyi Region

Research for this report uncovered government-collected and reported data for conversion timber for development projects in general, as well as specifically for large-scale hydropower and perennial crops under MOECAF jurisdiction. Just in 2004 and 2005, 1.77 million acres of forest reserves and PFEs were de-gazetted to make way for resource extraction, energy infrastructure development, agricultural expansion, and military compounds.68 In addition, over 800 domestic companies had been allocated a total of nearly 750,000 acres of de-gazetted forestland for industrial agricultural production by 2013.69

For 2011-2012 alone, according to Forest Department internal data, the total number of hardwood trees harvested from converting protected forestlands into hydropower sites was 11,326 teak trees (estimated roughly as nearly 17,000 m³) and 62,525 non-teak hardwood trees (roughly estimated as nearly

⁶⁸ Data collected from the MOECAF, Naypyitaw.

⁶⁹ MSU and MDRI/CESD 2013.

94,000 m³).⁷⁰ It is unknown from which dam sites these trees were cut, and any other information is also unavailable. It is also not known if the government has data for other years or for other sectors.

Land clearance for rubber and oil palm *only* under MOECAF jurisdiction (not the MOAI, which is the usual case) over the 2011-2012 period resulted in the harvest of 1,228 teak trees (estimated roughly as 1,800 m³) and 7,714 non-teak trees (estimated roughly as 11,500 m³). Data on agricultural crops under the MOAI jurisdiction (versus the MOECAF depicted here) were not available.⁷¹ The MOAI has no known data for acres of forestland conversions or volumes of conversion timber coming off agribusiness concessions under their authority. Total conversion timber volumes for the 2011-2012 period revealed by this Forest Department data was therefore nearly 19,000 m³ for teak and more than 105,000 m³ for non-teak trees, for a total of almost 125,000 m³, as depicted in Table 5.

TABLE 5

Conversion Timber from Hydropower, Rubber, and Oil Palm under the MOECAF Authority, 2011–2012

Sector	Teak Trees	Est. Cubic Meters	Non-Teak Trees	Est. Cubic Meters	Total Trees	Total Cubic Meters
Hydropower	11,326	16,989	62,525	93,788	73,851	110,777
Rubber/Oil Palm	1,228	1,842	7,714	11,571	8,942	13,413
TOTAL	12,554	18,831	70,239	105,359	82,793	124,190

Source: Central Forestry Department, MOECAF, Naypyitaw.

In an interview in 2013, an active central government official in the Forest Department in Naypyitaw claimed that the central government does not have any collected data on forestland conversion or associated conversion timber because the purposes for different land uses continually change based on the dynamic socio-economic situation of the country. New donor organizations and international non-government organizations (NGOs) setting up land-based programs in Myanmar are keen to work with government agencies to make land concession data available to the public to help inform multi-stakeholder land use planning and management

As this data clearly demonstrates, it is important that the forestry sector in general, and in particular forestland conversion and associated conversion timber, are taken into account.

⁷⁰ The calculation for wood volume based on number of trees uses the conversion rate used by the MOECAF, although more information on each tree would be needed in order to more accurately estimate volumes.

⁷¹ Forestry Department, MOECAF, Naypyitaw. These agricultural concessions are under the jurisdiction of the Forest Department, not the MOAI as is more often the case. The central Forest Department has recorded 845,779 acres of rubber and oil palm plantations by 2012 under their jurisdiction.

CASE STUDIES

The Context for Agro-Conversion Timber in Myanmar

Overview

Two prominent case studies were selected that best demonstrate the complex issues at play with the production of agro-conversion timber in Myanmar. The two state/regions selected as case studies represent over 60 percent of the agricultural concessions allocated in the country, and are also the two areas of the country with the most HCVFs remaining.

- 1. Oil palm development in Tanintharyi Region in the far southeastern part of Myanmar showcases the intersection of agribusiness and conversion timber in the country. Tanintharyi Region, especially in the southern half where oil palm concessions are mostly located, has some of the most extensive lowland HCVFs in the country, largely under forest reserve protection, with unparalleled ecological diversity and value. These protected forest areas also provide the central government with its annual log quotas, with Tanintharyi Region's annual official quota marked at 30,000 cubic tons. Oil palm development in the country is exclusively centered in Tanintharyi Region, which has reached nearly 1.9 million acres, or 36 percent of the country's total concession area (the highest concentration of agribusiness concessions of any state/region in the country), which covers 18 percent of the total land area of Tanintharyi region. Only 19 percent of that acreage has actually been planted in oil palm, fueling claims that logging is the prime incentive for profit. The overlap of agribusiness concessions and HCVFs in Tanintharyi Region make it an obvious choice to better understand how these two sectors intersect to produce conversion timber. Moreover, the oil palm industry is one of the global agricultural commodities that significantly drive deforestation and production of conversion timber in the world.⁷²
- 2. Kachin State, located in northern Myanmar bordering Yunnan, China and geographically opposite in the country from Tanintharyi Region, boasts some of the highest forest cover and HCVFs in the country as well as the second highest concentration of agribusiness concessions in the country (after Tanintharyi Region) at 27 percent. Nearly 1.4 million acres have so far been allocated in Kachin State, mostly for rubber and biofuel crops, such as sugarcane and cassava, although only 12 percent of that has actually been planted. In Kachin State, the particular political economy and ecology are starkly different than in Tanintharyi Region, and thus the case study provides comparative insight as to how local political, economic, environmental, and social contexts impact the production or not of conversion timber.

Both Kachin State and Tanintharyi Region are located in predominately non-Bama ethnic areas within existing conflict zones, and where most of Myanmar's natural forests still remain. The local political, socio-cultural, and economic context of a given area significantly influences landscape production outcomes. For the case

⁷² Hosonuma et al. 2012.

of agribusiness concessions of Kachin State, conversion timber may or may not be produced, depending on the company that receives the concession and the agro-ecological habitat and geographical location of the concession. When the concession is driven by China's opium substitution program to secure agricultural commodities, conversion timber is not normally produced because the concessions mostly target swidden fields, or when located in existing tree cover, the low-value timber is cleared and burned. In other instances, especially in territories controlled by paramilitaries and ethnic armed political opposition groups, forestland conversion is driven by a demand for high-value timber (versus agricultural production) as rent-seeking behavior. Finally, due to their location in ethnic conflict areas, these development projects may have other strategic objectives and/ or implications above and beyond the generation of logging revenues — such as military-state securitization of the area.⁷³



Photo credi: Local researcher, recently logged and burned roadside forest for agribusiness concession

⁷³ Woods 2011a.

CASE STUDY 1 Oil Palm Concessions and Conversion Timber in Tanintharyi Region, Southeastern Myanmar

Background

The previous Myanmar military government initiated a military-sponsored industrial oil palm development program beginning in 1999 as part of its national self-sufficiency plan. Tanintharyi Region in southeastern Myanmar, particularly the southern portion, is the only place in the country that has a climate potentially suitable for oil palm cultivation, although there is a lack of studies that support those claims. Large areas of this region at the time the "palm oil bowl" plan was conceived, however, were controlled — and still are to a lesser extent today - by one of the country's best known and oldest non-state ethnic armed political opposition groups, the Karen National Union (KNU). After several years of targeted offensives against KNU posts and Karen civilian populations in the mid- to late-1990s in Tanintharyi Region, the Myanmar military-government soon thereafter launched its first seven-year phase oil palm development program in 1999, announcing Tanintharyi Region as the "edible oil palm big pot of the nation." First, the only road running from the north to the south of the region was upgraded and renamed the "Union Road," and potentially KNU-sympathetic Karen villages were resettled along the militarycontrolled road and in valleys along branch roads as part of a counterinsurgency strategy.⁷⁴ Other Karen villagers fled and are now categorized as internally-displaced peoples (IDPs) in the region or refugees on the Thailand border to this day. The sites of the original cleared villages have now mostly been allocated to private Myanmar businesses as oil palm concessions or are being considered by international conservation organizations as prime sites for nature conservation parks. 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 legality and ethics of oil palm production, rezoning for conservation, and resettlement of IDPs and refugees.

Forest Area and Conservation Value

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), as defined by international conservation teams, 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.⁷⁵ The world's largest international conservation organizations — with offices in both Yangon and now Tanintharyi — have focused new conservation efforts in Tanintharyi Region due to its endangered ecological forest and marine habitat. In order to be successful in land-based conservation efforts, however, expanding industrial oil palm (and rubber) concessions and land speculation must be directly addressed as the main threat to the region's biodiversity value, forest habitat, and local livelihoods.

⁷⁴ Interviews, Dawei, Tanintharyi Region, 2013 and Yangon, Myanmar and Chiang Mai, Thailand, 2010 and 2013.

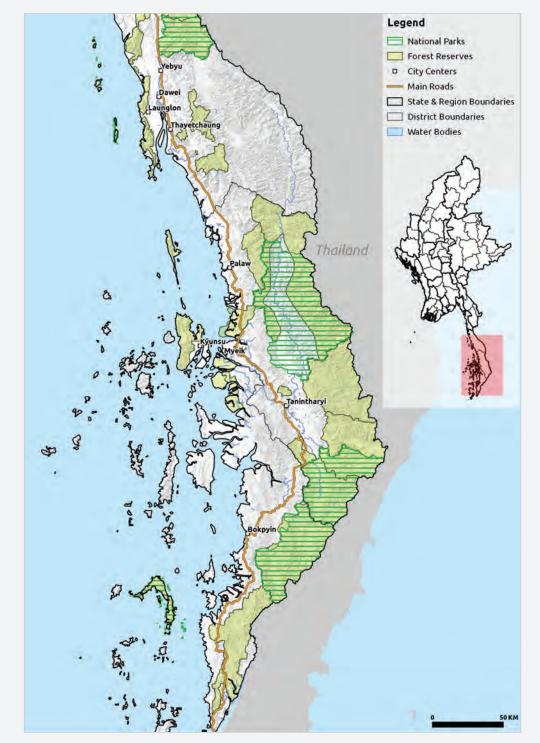
⁷⁵ WCS 2012.

According to 2013 Tanintharyi Regional government data, 62 percent of Tanintharyi is covered in forest habitat (approximately 6 million acres).⁷⁶ Of the total land territory in Tanintharyi Region, 31 percent is officially delineated under a forest category 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 protected forest habitats in Tanintharyi of varying sizes — some only a few acres, and others hundreds of thousands of acres in size - total 3.32 million acres. Dawei District has the lowest area of protected forest (due to the lowest forest cover) at 116,000 acres, and also has the least acreage of oil palm concessions awarded. Myeik District, on the other hand, has over 1.45 million acres of protected forest habitat, thanks in part to Tanintharyi Nature Reserve (420,000 acres alone). The southernmost district, Kaw-thaung, has nearly 437,000 acres of protected forest reserves owing largely to Lay Nya National Forest and Ba Kyan Forest Reserve. Only one protected area has been formally approved so far — the Tanintharyi Nature Reserve in the northern part of Tanintharyi — in 2005. 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. The location and size of the protected forest habitats, although not labeled by name, are illustrated in Figures 3 and 4. As this case study reveals, forest reserves and "unclassified forests" have been targeted for oil palm concessions, putting further pressure on the expansive lowland forests and rare wildlife in the region.

⁷⁶ It is not known how "forest" is defined here, however.

FIGURE 3

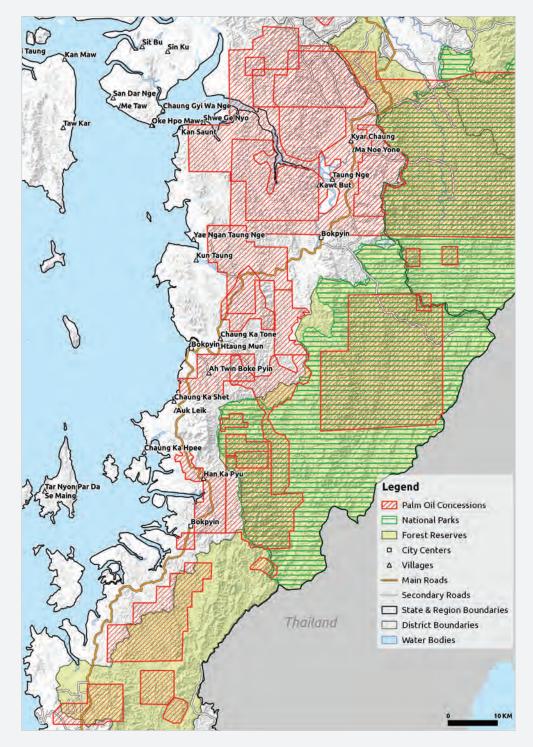
Tanintharyi Region in Southern Myanmar



Note: Data was compiled based on regional-level government mapping data available to researchers, and is not meant to be definitive nor geographically exact. Compilation of maps done by Mathieu Pellerin.

FIGURE 4

Southern Tanintharyi Region in Southern Myanmar



Note: Data was compiled based on regional-level government mapping data available to researchers, and is not meant to be definitive nor geographically exact. Compilation of maps done by Mathieu Pellerin.

Forest Use Rights

On land that falls under the different forest categories, local communities are prohibited from any land or resource use, including rights to hunt, fish in streams, or cut branches for firewood (refer to "protected forest regimes" section). Some exceptions exist, such as in village firewood plots, or if a special permit is applied for village use, such as for house building. The forest reserves have been demarcated for multiple uses in theory, but in reality have been little more than seen as sources of commercial timber exploitation — demonstrated by being de-gazetted for logging and agribusiness concessions.

Developing the Nation's Oil Palm Bowl

The central military-government intended to plant 500,000 acres of oil palm in Tanintharyi Region starting in 1999, to be managed by "crony companies" hand-selected by the military regime leaders at that time. Half of the expected yield was meant to meet domestic demand, with the other half earmarked for export.⁷⁷

Entities Involved

Nearly 50 companies, almost all from Myanmar (except for one or two formally foreign-leased concessions), have been granted oil palm concessions of various sizes, some upwards of hundreds of thousands of acres, over the past one to two decades. Despite legal requirements on annual planting quotas as a percentage of the concession size, most have only planted a small fraction of their entire concession — and in fact have little incentive not to do so as the government is not enforcing the stated penalty of land use rights reverting to the state.⁷⁸

The government's Ministry of Industry administers only about 20,000 acres of oil palm concessions. Myanmar's military conglomerate Union of Myanmar Economic Holdings Limited (UMEHL) initially received most of the oil palm concessions, but now only holds 3,000 acres since most concessions have been transferred to the domestic private sector. But oil palm development and the companies who hold concessions are still closely tied to military-led development due to personal and business connections. The previous Coastal Military Commander (the regional military commander for Tanintharyi Region), Khin Zaw Oo, for example, was transferred to be the chairman of UMEHL after he, family members, and business partners received oil palm concessions.⁷⁹

An insignificant area of smallholder oil palm plantations exist (11,000 acres as of 2013), as few households have the political connections or funding to obtain a permit and initiate such a development.

Extent of Actual Planting

According to government data, by the end of the first seven-year development period (2005-2006), only about 166,000 acres of oil palm had been planted, far below the 500,000 acre planted target. By 2009-2010, around 250,000 acres of oil palm had been planted out of a total of over 1 million acres allocated to Myanmar private companies.⁸⁰ According to township level data, by the end of 2012-2013 (and the end of another seven-year oil palm development program), nearly 360,000 acres have been planted by Myanmar companies out of almost 1.9 million acres now allocated.

⁷⁷ New Light of Myanmar 2002.

⁷⁸ Companies must plant a certain percentage of their agribusiness concession every year with completion within four years, according to the VFV Law (2012).

⁷⁹ He has recently reportedly been transferred from chairman of UMEHL to overseeing military operations in southeast Myanmar (including Tanintharyi Region).

⁸⁰ Myanmar Perennial Crops Enterprise (MPCE), MOAI, Naypyitaw.

As of 2013, 18 percent of the total land area of Tanintharyi Region has been demarcated into oil palm concessions, but less than 20 percent of this acreage has actually been planted with oil palm — and in some cases planting is only along visible horizons for government visits, which do not leave the roads. See Table 6 for a list of acres of oil palm concessions allocated and planted by township.⁸¹

	District	No. of	Allocated	Planted	% Planted
		Companies			
Companies	Dawei	6	32,854	19,790	60
	Myeik	23	408,221	38,410	ç
	Kaw Thaung	23	1,455,895	269,200	18
Type of Holder	Private Company		1,896,970	327,400	17
	State-Owned Enterprise		_	18,390	_
	Military Battalion/Unit		_	2,739	
	Smallholder		_	10,926	_
TANINTHAR	YI REGION TOTAL	52	1,896,970	359,455	19

Rubber is not included in agribusiness data provided by the MOAI as land planted in rubber has not been formerly allocated to the private sector (as the case with oil palm), despite the need for both oil palm and rubber to be taken into consideration when analyzing deforestation trends. In 2008-2009 just over 250,000 acres of oil palm and 200,000 acres of rubber had been planted, for a total of 454,000 acres. By 2012-2013, nearly 360,000 acres of oil palm and almost 300,000 acres of rubber had been planted, for a total of almost 660,000 acres, as shown in Table 7. While the majority of oil palm is centered in southern Tanintharyi Region, rubber is mostly being planted in the northern half of the region, which is currently less forested and subsequently has fewer forest reserves and protected forests.

⁸¹ MPCE, MOAI, Naypyitaw; except 2013 data is from the Tanintharyi Regional government because central government data significantly underestimates figures.

TABLE 7

Oil Palm and Rubber Planted in Tanintharyi Region, 2008-2013

Year	Oil Palm	Rubber	Total
2008/09	251,380	202,743	454,123
2009/10	276,940	219,295	496,235
2010/11	306,135	238,357	544,492
2011/12	296,780	264,146	560,926
2012/13	359,455	298,356	657,811

Source: MOAI, Tanintharyi Region for oil palm; MOAI, Naypyitaw for rubber

Overlap of Oil Palm Concessions and Protected Forests

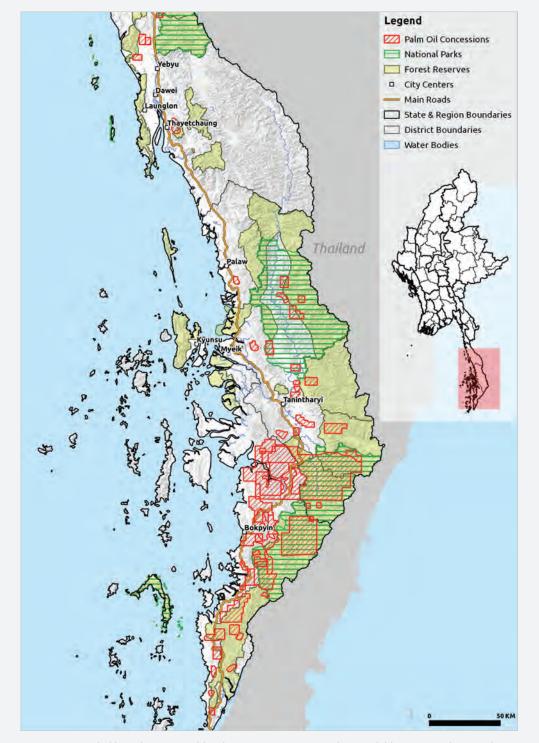
Figures 5 and 6 map two government data sets for Tanintharyi Region: land categorized as protected forests (31 percent of total land area, or 3.32 million acres) and oil palm concessions (18 percent of total land area, or 1.9 million acres). As illustrated, there is considerable spatial overlap between protected forest zones and demarcated oil palm concessions, particularly in the southern part of Tanintharyi Region. Forest quality in each protected forest zone is currently difficult to ascertain; analysis from satellite imaging and ground-truthing is needed to more accurately decipher the extent of deforestation and planting in oil palm concessions.

Poor and Inconsistent Data

The figures on amount of oil palm concessions awarded as recorded by the central MOAI office in Naypyitaw were significantly lower than those compiled by the Tanintharyi Regional government office. However, both central and regional datasets show similar statistics for acres planted. The regional data for concessions awarded are assumed to be more accurate as the regional office has concession mapping and company data to back up their figures. For this reason, for 2012-2013 (the only regional data available) the regional data provided are used in this report rather than central data. Data for these maps are based on spatial data retrieved from regional government, and are not meant to be authoritative of the actual situation at this time.

FIGURE 5

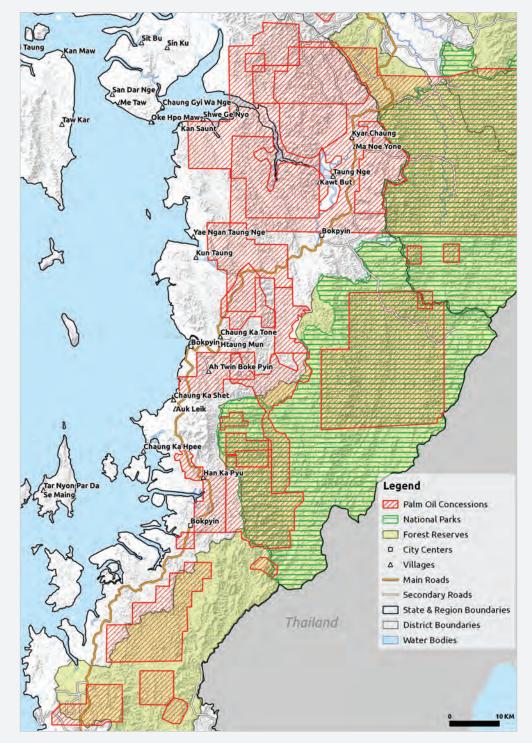
Tanintharyi Region in Southern Myanmar



Note: Data was compiled based on regional-level government mapping data available to researchers, and is not meant to be definitive nor geographically exact. Compilation of maps done by Mathieu Pellerin.

FIGURE 6

Southern Tanintharyi Region in Southern Myanmar



Note: Data was compiled based on regional-level government mapping data available to researchers, and is not meant to be definitive nor geographically exact. Compilation of maps done by Mathieu Pellerin.

Domestic Private Sector Involvement in Oil Palm Development

Oil palm development must be placed within the particular political economy context of Myanmar in order to better understand its failure, how Tanintharyi Region became parceled out into oil palm concessions (particularly within forest reserves), and why the region became the hotbed of conversion timber.

After the former military leaders pushed oil palm development in Tanintharyi Region as a national development program, Ministry of Industry and UMEHL began to receive oil palm concessions in Tanintharyi Region. As the military-government undertook privatization measures, most of these were then transferred to domestic companies with good connections to the established military elite. For some of these "crony companies," the large land concessions were perceived as a token for their role as the private arm of military-led development by potentially allowing them to profit from the burgeoning domestic oil palm market, and as this case will argue, the timber trade, and most recently since reforms, land speculation. Many of the oil palm concessions, especially in the southern part, are carved out of forest reserves, as Figures 5 and 6 illustrate. The companies then qualify for obtaining logging permits from the Myanmar Timber Enterprise (MTE) for a fee. Companies oftentimes realized the timber profit potential and therefore focused instead on only logging their concession, especially those companies who already had an active timber subsidiary company (see below). In fact, those Myanmar companies most active in the logging sector received the largest oil palm concessions in the highest quality forests of the region. These companies — with an optimistic view towards the region's future economic prospects — saw their estates as potentially valuable assets to be sold (to domestic or foreign investors), as a kind of land speculation with a zero buy-in price.

Almost all the companies that have received oil palm concessions are national Myanmar companies, mostly based in Yangon. A few well-established Tanintharyi-based companies owned by local political and economic strongmen with good business connections to top-level officials have received oil palm and logging concessions in Tanintharyi Region. The latter include local elite businessman Khin Sein, representing his birthplace in Tanintharyi Region as an MP in the new parliament, who received oil palm concessions for his company Annawa Soe Moe along the Dawei-Myeik roadway. Other political-economic elite from Tanintharyi Region with very large and extensive land concessions include the "godfather" of Tanintharyi Hla Than, whose Pyi Phyo Tun International Company holds oil palm plantations and operates wood factories, and Htay Myint's *Yuzana Company* (based in Yangon and one of the country's most prominent companies)

Htay Myint, from Myeik district in Tanintharyi Region, is one of the country's most well-known "cronies" with a near monopoly in the oil palm sector, and is also active in other lucrative industries. His subsidiary Yuzana Oil Palm Cultivation Company was the first to be awarded massive oil palm concessions, which were transferred to him from UMEHL holdings. He soon became the nation's largest private oil palm concessionaire, which then led to his company building the country's only high-capacity modern palm oil processing mill (leading to a virtual monopoly on crude oil palm, or CPO, processing). He was made head of the state-backed trade business association for oil palm, the Myanmar Oil Palm Producers Association, members of which are companies that have received oil palm concessions and been given permits to import/export oil palm. He owns the second largest area of oil palm concession in the country, totaling 283,000 acres in Kawthaung district, of which 190,000 acres have been reportedly planted according to regional government statistics. Given the acres actually planted by Yuzana Oil Palm Cultivation Company, import/export permits for edible oils, and large-scale investment in oil mills, Htay Myint has positioned himself to continue to be the "king of palm" in the country. In the 2010 elections Htay Myint won the MP seat for Myeik in his hometown, and now represents Myeik's political and economic interests in Parliament. Yuzana Company is also involved in the logging business (among many other sectors), which includes conversion timber from his large-scale agribusiness concessions, including from his 200,000 acre biofuel concessions in and along the Hukaung Valley Tiger Reserve in Kachin State (see the other case study for Kachin State in this report).⁸²

⁸² KDNG 2010.

Other nationally recognized companies, all of whom hold close relations with former military leaders and now some active high-ranking government officials, include the Kanbawza Group (55,000 acres allocated, with 7,750 planted); SI Company (47,000 acres allocated, almost none planted); Eden Company, owned by the country's top paddy trader Chit Khine (10,000 acres allocated, none planted); and South Dagon (13,000 acres allocated, of which 70 percent is apparently planted), among many other Yangon-based Myanmar "crony companies."

While up until two years ago only Myanmar companies could officially receive agribusiness concessions, it is suspected that some of the domestic companies are informally backed by foreign investors, especially those who have smaller capital portfolios but are confronted with substantial start-up costs for logging and oil palm development.⁸³ Since the new land laws and *Foreign Investment Law* took effect, however, foreign investors are legally able to secure large-scale land concessions on their own, including for agribusiness, with various legal regulations specific to foreign investors.⁸⁴ Currently, several Asian investors have received large oil palm concessions. For example, Resources and Resources (R&R) in Singapore, a subsidiary of Korean-owned Auto Industry Group (AIG, also written sometimes as Myanmar Auto Corporation or Myanmar Industry Corporation), received a 133,000 acre oil palm concession in southern Tanintharyi Region in a forested landscape, with no recorded planted area so far. The China Construction International Corporation has received a very large-scale oil palm concession in Kawthaung district in the far south, also a forested region, totaling an unknown number of acres. According to personal communication with a retired industrial crops official in Yangon in 2014, this concession may no longer be beholden to this company. The concern is that more oil palm concessions will continue to be granted to foreign investors, especially from Malaysia but also including Thailand and Indonesia, who already dominate the oil palm industry in Southeast Asia. For example, 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.⁸⁵ It is therefore expected that deforestation associated with land acquisitions will gain momentum in the Tanintharyi Region in the coming years unless significant technical and political interventions are made.



Photo credi: Local researcher, logged agribusiness concession, Tanintharyi Region

Logging for Oil Palm Development

Htay Za, tycoon owner of the conglomerate Htoo Group of Companies, has benefited from very close connections to the two top former military rulers. He owns a variety of subsidiary companies in several sectors across Myanmar, and is another highly significant player in the oil palm sector, but not for actually cultivating oil palm. He has received the largest land concession ever awarded in the country, totaling 668,000 acres in Pyigyimandaing and Karathuri sub-townships in Kawthaung Township in the southern part of Tanintharyi Region. Htay Za's

⁸³ Many Burmese informants independently claimed this, in particular a retired industrial crops official in Yangon in October 2010.

⁸⁴ The draft investment law, which has not yet been passed at time of writing, would grant additional "rights" to corporations investing in Myanmar (whether domestic or foreign), which would enable investors to potentially by-pass any domestic regulations or restrictions on business practices.

⁸⁵ Burnama 2012.

oil palm concession is located in an area demarcated as the La Nya National Forest with extensive lowland HCVF. It is presumed that the delay in upgrading La Nya Forest Reserve into a fully protected area, as has been proposed and reportedly accepted by the MOECAF, is due to the fact that a large part of the reserve is within Htoo Trading Company concession. An additional 42,000 acres of oil palm concessions have been awarded to him in other areas of Tanintharyi Region as well. Another subsidiary company, Aye Shwe Wah Company, has also received substantial oil palm concessions. According to regional government data, Htoo Group of Companies has not yet planted any oil palm in any of its concessions, raising further suspicion conversion timber is the motive for profit.

Htoo Group of Companies is also one of the largest and most significant logging companies operating in Myanmar under Htay Za's subsidiary Htoo Wood Products Company. The company has received logging concessions in natural forests throughout the country, especially in ethnic conflict areas, including in Tanintharyi Region and Kachin State. His timber subsidiary company also operates a log yard in Yangon for direct wood exports.

Other well-known companies heavily involved in logging, large-scale hydropower, road building, and the illicit economy include Asia World Group, which has received over 15,000 acres of oil palm concessions in the northern Tanintharyi Region, and Win Aung's Dagon Timber Company, a long-time player in the timber business, which has also received oil palm concessions totaling nearly 19,000 acres (75 percent of which has reportedly been planted).

Central government data reveals that nearly 70,000 acres of lowland forest had been cleared and burned for oil palm development in Tanintharyi Region by companies only for 2010-2011, as illustrated in Table 8. About 1.15 million acres of categorized forestlands in Tanintharyi have been specifically earmarked as suitable for agribusiness concessions, according to government data (Table 1). The company recorded as clearing the most forest for oil palm concessions by far is Htay Myint's Yuzana Company, totaling nearly 25,000 acres during 2010-2011 alone, according to central government data. It is expected that these figures do not accurately depict actual acres logged and timber produced.

TABLE 8

Forest Clearance for Oil Palm Concessions, Tanintharyi Region, 2010–2011 (acres)

Year	District	Planned Forest Clearance	Actual Forest Cleared
2010	Dawei	300	105
2010	Myeik	2,420	2,420
2010	Kaw Thaung	24,280	34,410
2010 TANINTHARYI TOTAL		27,000	36,935
2011	Dawei	_	_
2011	Myeik	3,620	3,070
2011	Kaw Thaung	21,980	29,262
	2011 TANINTHARYI TOTAL		32,332
2010+2	2010+2011 TANINTHARYI TOTAL		69,267

Source: Central MOAI, Naypyitaw, 2013.

Myanmar companies are sourcing logs not only from the conversion of forestlands to oil palm; about 30 Myanmar companies are also operating logging concessions in Tanintharyi Region. Some are the same companies receiving oil palm concessions, such as the subsidiary of Htoo Group of Companies (Htoo Wood Products Company), which has received logging concessions in government reserve forests in Tanintharyi Region every year as well, according to central government data.

Hla Than, chairman of Myeik Public Corporation and the Myeik District of Commerce, and owner of Pyi Phyo Tun International Company, is colloquially regarded as the "godfather of logging" in Tanintharyi Region. He used to be very close with the former Coastal military command, and is now close with the current Chief Minister of Tanintharyi. His Pyi Phyo Tun International Company has been awarded nearly 32,000 acres of oil palm concessions (5,000 acres reported as planted). Both Pyi Phyo Tun International Company and the Myeik District of Commerce have constructed roads in forested areas, connecting Myeik town to the Thai border, with both sides of the road open for oil palm and rubber development. Allegedly conversion timber from roadside concessions is destined largely for Thailand across the nearby border.

According to regional government data, the official annual log volume quota for Tanintharyi Region is 30,000 cubic tons from reserved forests to be implemented by select Myanmar private companies, many of which are linked to HIa Than and others mentioned above. Sources claim (backed by other evidence) that the actual log volumes cut each year are in fact much higher.

Rubber



Photo credi: Local researcher, rubber concession, Tanintharyi Region

Rubber cultivation has also become a significant land use in Tanintharyi Region as well. However, most rubber is established in the region on smallholder plots, and not by large-scale concessions allocated from the Myanmar government, as is the case for oil palm. Therefore rubber is not covered within agribusiness concession data; instead it is only recorded as planted agricultural crops (Tables 7 and 9). Establishing smallholder rubber plots in Tanintharyi Region at this time has less to do with rubber as a valuable commodity (especially as the global and regional rubber price has hit rock bottom), and more to do with land claiming strategies. As Tanintharyi Region has become the center of the country's oil palm industry, and most recently

and importantly the location of the country's and region's largest potential new deep sea port at Dawei with overland infrastructure and renewed economic connectivity to bordering Thailand, land speculation, especially around towns and new roads, has intensified.⁸⁶ The result has been the clearing of hill forests and planting of rubber seedlings by both local elite villagers and outside businessmen as a method to claim land use rights, in the hopes that the new claimant will be able to not only sell rubber once harvested, but more profitably sell the land for a high price after little to no investment. Establishing rubber plantations as a speculative land claim is a new phenomenon that is causing social and environmental impacts that demand further research and policy advocacy.

⁸⁶ Khin Myo Thwe 2013; TNI 2012.

Today, Thai and Malaysian companies are beginning to invest in rubber estates in Tanintharyi Region. Some of Thailand's top rubber companies, such as Thai Hua Rubber Plc. and Sri Trang Company, have signed MoUs for possible future rubber estates along the Thai–Myanmar border. Felda Global Ventures Holdings Bhd (FGV), Malaysia's largest agrocompany, has partnered with a local unknown Burmese partner, Pho La Min Trading Ltd (PLM). Several other Malaysian companies have signed MoUs with the MOAI for rubber and oil palm development in southeastern Myanmar.⁸⁷

The area of rubber planted in Tanintharyi Region has increased 50 percent between 2008-2009 (200,000 acres) and 2012-2013 (300,000 acres), according to regional government data. Most rubber was planted in the northern half of the region (rather than in the south like for oil palm): nearly 120,000 acres in Dawei District, almost 130,000 acres in Myeik District, and just about 50,000 acres in Kawthaung (Table 9). While no data exist on deforestation caused by rubber planting, field observations and interviews indicate that most of the rubber established is in cleared hill forest areas that previously had no formal land claimant (under either the MOAI and/or the MOECAF), although with potential informal customary land claimants.

TABLE 9

Rubber Planted in Tanintharyi Region up to July 2013

Year	Region/ District	Total Planted
2008/09	Region	202,743
2009/10	Region	219,295
2010/11	Region	238,357
2011/12	Region	264,146
2012/13	Region	298,356
	Dawei	119,248
	Myeik	129,565
	Kaw Thaung	49,543
TOTAL AV/ Rubbei	223,000	

Source: MOAI regional office, Tanintharyi Region

More research is needed to ground truth both oil palm and rubber concessions and actual planting as recorded in government data to better verify the figures cited here, and better ascertain the degree to which these commodities are driving deforestation and associated conversion timber production and international trade. Follow-up research would help to determine the extent and legality of the conversion timber sourced from these lands, and the social and economic impacts on rural populations in those areas. Forced evictions, forced resettlement of Karen communities during the counter-insurgency period in the late 1990s, and future returning IDPs and refugees need to be carefully documented and considered in terms of zoning and rightsbased implications for both agricultural concessions as well as international forest conservation schemes.

⁸⁷ The New Light of Myanmar 2012; Myat May Zin 2012; Malaysian investment in the rubber sector has been confirmed by Myanmar rubber traders, Yangon, November, 2012.

CASE STUDY 2

Agribusiness Concessions in Forested Areas of Kachin State, Northern Myanmar

Background

The rich forested areas of Kachin State in the far north of Myanmar next to Yunnan, China are home to 27 percent of the country's total agribusiness concessions by area (second only to Tanintharyi Region). The Burmese military and the Kachin Independence Organization/Army (KIO/A), one of the most prominent ethnic armed political opposition groups in the country, have been embroiled in an ethnic political armed conflict for decades in this area. 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.⁸⁸ Soon after President U Thein Sein took office, the Burmese military annulled the ceasefire agreement, resulting in renewed armed conflict that continues today.⁸⁹

The political context, ecological landscape, and agribusiness development strategy in Kachin State differs in some significant ways from Tanintharyi Region, and has affected the degree to which agribusiness has driven deforestation and the production of conversion timber. Oil palm development in Tanintharyi Region was a national development goal instigated by the then military ruler, using the military's private business associates to reach palm oil production goals; many were coerced into accepting the concessions in the first place, but soon accepted them as the price to pay to access the timber and engage in land speculation.

In contrast, agribusiness development in Kachin State evolved in a more localized manner particular to resource relations with neighboring Yunnan, China and with the Myanmar military-state less able to exercise political authority and control in many areas of Kachin State. In Kachin State, 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, further contributing to the armed conflict. Agricultural development fueling forest conversion and leading to the production of conversion timber has been predominately driven by 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 Kachin State since the late 1990s,⁹⁰ agribusiness concessions have not been needed (as much) as a mechanism to access timber. Agricultural projects are also potentially more profitable as an enterprise in itself due to financial support from Chinese government programs, such as the opium substitution program, with short-distance access to regional and global agricultural commodity markets across the China border.

⁸⁸ Woods 2011a.

⁸⁹ TNI 2013; Human Rights Watch 2013.

⁹⁰ Global Witness 2006; Woods 2011b.

Agribusiness Development

Kachin State has been, and is still, promoted as the next frontier of agribusiness development by the former military-government. This is not perhaps just about developing an agricultural frontier, but (some argue) also is part of a military-state strategy of territorial expansion into areas contested by the KIO.⁹¹ By 2012-2013, the national agriculture ministry in Naypyitaw recorded nearly 1.4 million acres of agricultural concessions awarded in Kachin State alone (27 percent of the national total), but less than 175,000 acres have actually been planted, or just 12 percent of total concession area (Table 10). 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 (Table 1). Much of these "wastelands" cover forested areas as well as areas actively used by local communities for swidden agriculture and for other livelihood uses. Kachin State's heavily forested and swidden landscape has been demarcated into nearly 9.2 million acres of protected forest under PFE, which is 42 percent of the total land area of the state.⁹²

For example, in Mansi Township in Bhamo District in southeastern Kachin State on the Yunnan, China border, 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.⁹³ Conflicting government maps and land use zoning and management regimes are contributing to making farmers who are already cultivating that land invisible in the eyes of the state and investors. This is a common problem in the country, especially in ethnic upland areas with agro-forested landscapes.⁹⁴

TABLE 10

Agribusiness Concessions in Kachin State, 2010-2013

Year	Allocated	Planted	% Planted
2010/11	596,180	_	_
2011/12	1,396,575	—	—
2012/13	1,381,165	172,348	12

Source: Central MOAI, Naypyitaw.

Rubber, paddy, corn, bananas, watermelon, and biofuel crops such as cassava and sugarcane, among others, are now being cultivated by private companies in Kachin State. The Kachin State provincial agricultural ministry pushed a target of 100,000 acres of rubber planted by 2010, which has been reportedly reached in concession areas granted but not yet in actual planted acres (Table 11).

⁹¹ Woods 2012.

⁹² Forest Department, Naypyitaw

⁹³ Mansi township wastelands and forest reserve maps on file with author.

⁹⁴ Oberndorf 2012.

TABLE 11

Rubber Planted in Kachin State, 2008-2013

Year	Allocated	Planted
2006/07	19,145	_
2007/08	37,732	_
2008/09	60,967	38,386
2009/10	100,000	43,377
2010/11	_	50,047
2011/12	_	54,072
2012/13	_	63,503
TOTAL AVA Rubbe	184,000	

Source: For allocated data, see MAS, Myitkyina Office, MOAI, 2010. For planted data, see Central MOAI, Naypyitaw.

China's Opium Substitution Program

Since the mid-2000s during a ceasefire period, Kachin State has become the site of Chinese agribusiness concessions (predominately rubber, but also rice, corn, watermelon, and banana), typically supported by subsidies and tax-free import quotas under China's national opium substitution program.⁹⁵ Today, agricultural concessions are granted to local elites (including armed actors, some of whom are allegedly involved in the drugs economy) who themselves are backed by China-based (predominately Yunnan) companies receiving these subsidies and tax breaks from the Beijing government (and administered by the Kunming provincial government). As of 2010, a total of over 90,000 acres of agricultural estates have been established by Yunnan-based companies under the Chinese opium substitution program in northern Myanmar (Shan and Kachin States) (Table 12).⁹⁶ Local populations who have been forcibly displaced from their upland swidden agro-forestry lands for the Chinese agricultural estates are further contributing to poverty, drugs production and trade, and social and political conflict.⁹⁷

⁹⁵ Kramer and Woods 2012.

⁹⁶ Woods 2013a.

⁹⁷ Kramer and Woods 2012.

TABLE 12

Yunnan Companies' Opium Crop Substitution Plantations, Northern Myanmar, up to 2010

Agric. Crop	Acres
Rubber	47,916
Corn	5,913
Castor-Oil	5,270
Rice	4,032
All other	28,597
TOTAL	91,732

Source: Chinese government websites, 2010.

Conversion Timber

Conversion timber issues in Kachin State are more opaque and less straightforward than in Tanintharyi Region where oil palm concessions have been predominately located in expansive, high-quality forest reserves. In Kachin State, agribusiness concessions have been located in a variety of land categories and agro-ecological habitats — from forest and wildlife reserves to active upland swidden agro-forests and community forests relied upon by local communities for food security and non-timber forest products (NTFPs). Deforestation driven by agribusiness is therefore much less clear, as are the volumes of conversion timber produced.

The fact remains, however, that the local and national companies (often associated with Chinese investors), as well as Chinese companies more directly, involved in Kachin agricultural concessions are also involved in logging and mining operations. And many of these land-based deals revolve around personal relations to armed actors (Myanmar military, "paramilitaries," and/or the non-state armed groups, including but not limited to the KIO). The mining and logging companies appear to be diversifying their portfolio by expanding into the agribusiness sector, with political and financial encouragement from China's opium substitution program. This situation has tended to keep agribusiness investments separate from logging operations — even though the same companies are involved in both.

Only in a few cases are agribusiness concessions used as a means to access timber without intentions to actually develop an agricultural project. In these cases, concessions are usually given to companies with logging operations in high-quality forest reserves typically in the only Border Guard Force (BGF) area of Kachin State in Special Region 1 (under the former armed militia group the New Democratic Army-Kachin (NDA-K), now a BGF under the nominal control of the Myanmar military).⁹⁸ The industrial agricultural concessions act as a legal cover for logging, much like in Tanintharyi Region.

The allocation of teak, rosewood, and other valuable hardwood plantations in Kachin forest reserves with existing high-quality forests often use reforestation as a cover for logging, increasingly prevalent in Special Region 1 under the BGF (formerly NDA-K). Valuable hardwoods are being cut in these reserves, with little

⁹⁸ Border Guard Forces (BGFs) were created as the new government took office, when ethnic armed ceasefire groups were pushed to become quasi-paramilitaries on behalf of the Myanmar Army (but still with considerable agency).



Photo credi: Kevin Woods, log yard, Kachin State-China border

to no planting of plantation trees, according to information from local researchers provided in 2013. The allocation of timber plantations in existing forests is providing another legal loophole, in addition to agribusiness estates, to access timber outside of logging concessions.

Logging for infrastructure development, such as roads, bridges, and mega-dams, has also been identified as a strong driver of deforestation along the Yunnan border. Over the past five years, many Chinese and local companies backed by Chinese businessmen have received permits to develop infrastructure in forested areas, especially in Special Region 1. Many of the

development benefits never materialize, leading to the assumption that the main objective of these projects was to access the highly-prized hardwoods rather than to provide services for local communities who remain without electricity, roads, or any government social services.

Hkaya Agribusiness Concession, Southeastern Kachin State"



Photo credi: Kevin Woods, Hkaya banana concession, Kachin State

The Hkaya area lies off the main paved road 60 miles east of Kachin State's provincial capital, and pushed up against Laiza, the Kachin Independence Organization/Army (KIO/A) headquarters on the Yunnan border. A 30,000 acre banana and rubber concession in and along two Myanmar government forest reserves was awarded to Kachin and Chinese business people in the late 2000s during the ceasefire period. This concession typifies the politics of agribusiness and logging in ethnic conflict areas where many of the countries' LSLAs for agricultural production are now taking place.

A well-known and politically connected Sino-Myanmar businesswoman from the Kachin-Yunnan border has been heavily involved in logging in Kachin State since the early 2000s due to her solid relationships with former northern military

commanders, KIO officers, and Chinese businessmen. In the late 2000s, with political connections and growing financial capital, her companies diversified into the agricultural sector and expanded relations with new Kachin businesses, including a Chinese businessman supported by China's opium substitution program. She became business partners with a Kachin colleague with close connections with a former employee at the most well-known Kachin company, Jadeland Company. These two then partnered with a Chinese businessman heavily invested in various resource extraction sectors in Kachin, including in agribusiness, who also had not only good political connections on both sides of the Yunnan-Kachin border, but also promised access to mainland China state subsidies through China's opium substitution program which were available to him if he partnered with local elites on the Myanmar side to secure the land concessions. These three investors started the Northern Royal Jade Company (NRJ), and soon thereafter obtained a 30,000 acre agribusiness concession near Hkaya village in Daw Hpon Yan sub-township, right next to KIO/A's headquarters at Laiza. The concession is also located along the Dapyin (Taping) River which has already been dammed by Chinese investors for hydropower energy

⁹⁹ Information for this case study is from Kachin community development workers, Myitkyina, 2010 and 2013.

exported to Yunnan, and was also the site of the first outbreak of war against the KIO and the Myanmar Army when their ceasefire broke a few years after the Hkaya concession was awarded. By 2010, NRJ had planted 11,550 acres of banana, rubber, and some hardwood trees in their Hkaya concession, according to township authorities.

In addition to being located next to a dam site and the KIO/A's headquarters, the concession is located in the high-value forest areas of both Bun Sun and Thein Daw forest reserves under the administration of the Myanmar government's Forest Department. The forest has been crucial in providing protection to the KIO/A against attacks by the Myanmar Army as well as logging revenue for both parties. The Kachin businessman Yup Zau Kawng's Jadeland Company won the contract from the Myanmar's military-government to build a road inside the forest reserves, which not only provided access to the new agricultural concession, but in effect also connected two other government-controlled towns that the Myanmar military sees as strategically important control points. Jadeland Company received permission to log the forests on both sides of the road and subsequently the forest reserve was then administratively changed to permanent agricultural land.

Local and regional Forest Department officials in Kachin State were allegedly bribed to allow this expansion of agricultural cultivation into the forest reserves. A provincial forestry official in Kachin State complained to the national Myanmar government about the clear-cutting of the forest reserves and the lack of planting the entire concession of agricultural crops or tree seedlings, but no action was reportedly taken.¹⁰⁰

Within the Hkaya concession, Ma Maw villagers in Daw Pon Yang Township had already informally demarcated one of their hill forests as a community forest and were currently waiting for official paperwork which they hoped to use to fend off agribusiness ventures on their community land. However, after the concession was granted to NRJ, they lost the right to obtain a community forest title. The hill forest was clear cut and is now part of the NRJ banana plantation.

After the road was cut through the forest, the Myanmar military increased its presence in the area close to the KIO/A's headquarters. Less than two years after NRJ Company received the concession, cut the timber, and planted some crops, war broke out between the Myanmar Army and the KIO/A. The Hkaya agricultural concession area twice was the location for a defining battle against opposing forces — which represents a prolonged armed struggle for ethnic sovereignty largely defined over resource rights and equitable sharing of resource rents in "Kachin territory."

Yuzana's Biofuel Concession in Hukaung Valley, Kachin State

The country's most well-known and largest agribusiness concession is located in and along the world's largest tiger reserve in western Kachin State. Yuzana Company, owned by Htay Myint (the same company prevalent in the oil palm sector in Tanintharyi Region), was granted a 200,000 acre agricultural concession in Hukaung Valley (Hukawng or Hugawng, in Kachin) from the then northern military commander, with whom he fostered close relations when that commander was posted in Tanintharyi before his post to Kachin State. Today, Yuzana is cultivating mostly cassava, and to a lesser degree sugarcane, for China's domestic biofuel market.¹⁰¹

Yuzana Company's agribusiness operation required some forest clearance. Valuable hardwoods within their concession area were harvested and sold on local and regional markets, although their remote location and the local ecology (mixed habitat of wetlands, grazing land, agriculture, and lowland forests) were not well suited for a major logging operation. Instead, the potential profits from cassava cultivation and processing for

¹⁰⁰ This information is based on local researchers who conducted research with the lead author in 2011, 2012, and 2013.

¹⁰¹ KDNG 2010.

biofuel production were high enough to warrant the importing of heavy machinery from Thailand and workers from central Myanmar and the delta region at considerable cost. While Yuzana Company may be serious about developing their concession, only approximately 20,000 acres of the concession have been planted so far according to township authorities, which is in contravention of national land laws (as is the size of the concession).

Yuzana Company contracted a China-based Mein Guan Company to build infrastructure (e.g., a bridge) in the Yuzana Company concession. Mein Guan Company was also granted a land concession by Yuzana Company within its concession area as payment for its services to Yuzana Company. Mein Guan Company then cleared selected forested parts of the land, subsequently producing conversion timber, and then planted paddy for the China market. Part of Mein Guan Company's concession area included a 2,500 acre official community forest. This caused conflict with villagers as their community forest was supposed to be legally protected against confiscation. After dialogue and negotiation 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 Company's agricultural concession.

At the same time that the then Myanmar military commander in Kachin State granted Yuzana Company the concession in and along the world's largest tiger reserve in Hukaung Valley, Jadeland Company (the same as in the Hkaya case study above) also received a 200,000 acre concession in the same valley bordering Yuzana Company's concession. Some of its concession had high-quality forests containing valuable hardwoods, which were allegedly targeted for clear-cutting by companies contracted out by Jadeland Company.¹⁰² Jadeland Company sold part of the concession to a mainland Chinese company with the intention of planting corn and rubber, but this appears to have resulted only in the harvesting of conversion timber. The Hukaung Valley Tiger Reserve Police prematurely stopped the operation, but the company allegedly got away with harvesting 160 tons of timber.¹⁰³ The company did not adequately pursue agricultural development, perhaps because the company 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 the concession with agricultural crops. However, the concession area did not possess much high-quality forest habitat and only insignificant volumes of high quality conversion timber were produced. Local villager resistance to the land clearance limited the extent to which National Progressive Company was able to continue to clear-cut forests and plant industrial agricultural crops.



Photo credi: Local researcher, Special Region 1 mountain forests

Agribusiness, Timber Plantations and Conversion Timber in Special Region 1, Kachin State

While the Hukaung Valley agribusiness concessions are predominately not directly driven by the revenues from conversion timber, there are some cases of awarded agricultural concessions which clearly incentivize or act as a cover for logging operations. Conversion timber can be sanctioned by the local Myanmar Forest Department offices

¹⁰² Kachin researcher, 2013

¹⁰³ Interview with Kachin researcher, 2013

and exported across the border to Yunnan, China, which may (or may not, pending interpretations) breach national regulations on cross-border timber trade for both Myanmar and China (according to the 2006 bilateral China-Myanmar agreement).¹⁰⁴ In addition to Chinese nationals backed by China's opium substitution program playing a key role in agribusiness in northern Myanmar, armed actors aligned with the Myanmar national military (BGFs and so-called "paramilitaries") also play a pivotal role in facilitating resource deals, many of which are converting forests to degraded sites and selling off the conversion timber.

Zahkung Ting Ying of the formerly-named New Democratic Army Kachin (NDA-K) in Special Region 1 (SR 1) in northeastern Kachin State broke off from the KIO/A during ceasefire negotiations in the early 1990s. He has since increasingly become a major recipient of agribusiness and logging concessions in territory under his influence (mainly SR 1 but outside as well), especially since becoming a Border Guard Force (BGF) operating under the Myanmar national army since 2010 (to help fight against the KIO). SR 1 is located directly along the Kachin State-Yunnan border, a geographical location that easily facilitates cross-border timber transport (as well as other illicit goods) to China. Zakung Ting Ying and his associates in the former NDA-K, all of whom have close business relations with Chinese nationals, have implemented logging, agribusiness, and infrastructure development projects in their BGF's territory of influence along the border as well as further southwest nearer to Myitkyina, the provincial capital.

Companies such as Golden Myanmar, Well-Being Myanmar, and Chan Yin Ku all have direct links to the former NDA-K leaders and their relatives, and have all received agribusiness concessions in forested habitats throughout Kachin State. These concessions appear to be financially backed by Chinese businessmen, some of whom may be supported by China's opium substitution program. Since the BGF is under the official control of the Myanmar Army (although in reality the BGF maintains significant autonomy), BGF officials have cultivated closer political and business relations with high-level Myanmar military officials.

In SR 1 under the BGF, agribusiness concessions are minimal, unlike in areas near and in KIO/A's territories of influence. Instead, Zahkung Ting Ying is granting permission to selected companies, many of them who are relatives or high-level leaders in his BGF, to implement reforestation and infrastructure development projects in and along their territory of influence. However, these are largely a cover for logging with no intention to develop the area for the intended purpose. For example, a colonel in the BGF who oversees extensive resource extraction and agribusiness projects in Kachin State received a road building contract in Saw Law area in SR 1 from Zahkung Ting Ying, with permission directly from the northern military commander at that time. A seasonal road with little utility to anyone, the road is widely suspected to have been a cover to log wide swaths of the high-quality forest on either side of the road, with permission given eventually from the local Forest Department (apparently under duress).¹⁰⁵

Another company whose owner is an official in the BGF received a 25,000 acre concession for reforestation in a heavily forested border area in SR 1. Permission was given directly from the local government's Forest Department, which apparently received a nod from Naypyitaw. The conversion timber from this area was sent to China via Panghwa (administrative headquarters for the BGF on the Kachin State-Yunnan border), after which Yew (the Taxus genus) and Chinese coffin tree species (*Tawiania cryptomerioides*) were placed on China's domestic market.¹⁰⁶

¹⁰⁴ Woods 2013.

¹⁰⁵ Contract on file with author.

¹⁰⁶ Information from local researcher, 2013.



Forestland conversion, especially for agribusiness, is an overlooked driver of deforestation and producer of conversion timber. As political and economic reforms proceed in Myanmar, large-scale investments in land, prominent among them agribusiness, will put greater pressures on forested landscapes in the country. Meanwhile, the ending of sanctions, including for timber, has triggered much interest among Myanmar timber traders to legally export Myanmar-sourced timber to the EU and North America. But the MOECAF and Myanmar timber traders are left facing many hurdles: a national log export ban, lack of any national certification schemes, no differentiation of timber sources, and various international legal timber trade regulations with which Myanmar's timber sector is struggling to comply.

Initiatives to date for both producer and consumer sides are found in some cases to be having an impact and reducing the incidences of illegal trade in timber at the global scale.¹⁰⁷ Donors and other stakeholders concerned with reducing illegal logging and preventing further forest cover loss are increasingly recognizing the role that conversion of forests to non-forest uses — primarily large-scale industrial agriculture — plays in minimizing deforestation. However, attention on illegal logging has generally followed the supply chain from allocation of timber rights to entry into trade, overlooking the risk of illegal forest conversion in the first place and the production of conversion timber.

A number of voluntary certification standards and roundtables, as well as those engaged in the development of the FLEGT VPA, are increasingly aware of issues with land conversion. In addition, some major producers, traders, and retailers of major commodities, such as oil palm, are starting to declare purchasing policies for agricultural commodities which include "zero conversion" as a target for imports, although this is still very limited.¹⁰⁸

Demand-side initiatives like the EUTR and the EU's FLEGT Action Plan with its associated VPA processes have helped raise global attention on illegal logging, but are only now beginning to focus on the legality of timber produced from land converted for other uses. Certification standards have likewise tended to be hesitant about certifying legal timber products produced on legally converted land, and typically only follow the supply chain after the allocation of timber rights in conventional forest concessions. Bilateral dialogues have primarily been with government agencies responsible for forest management, and have largely not been able to initiate dialogues with the more powerful government agencies responsible for land allocation and/or agricultural development. There is therefore a risk that illegal practices in conversion of forestland to non-forest use may have been overlooked, particularly where these occur in the allocation process itself. Even when national legal procedures are followed, important gaps in environmental and social safeguards are not codified in the national

¹⁰⁷ Lawson and MacFaul 2010.

¹⁰⁸ Proforest 2011.

legal framework — Myanmar being a case in point. What is clear from the legal analysis and case studies presented here is relying upon national laws to dictate the legality of conversion timber, or timber in general, is woefully inadequate. The relevant laws in Myanmar, much like for other regional countries such as Laos and Cambodia, still follow a "rule by decree" system whereby timber becomes "legal" if and when a high-level official declares it as such. The situation is even worse for the case of forest conversion and associated conversion timber because it is barely even mentioned in the laws with regards to what is considered legal, resulting in much legal ambiguity. More national attention on the issue of forest conversion and conversion timber is therefore needed. The Myanmar government should engage with a broad spectrum of civil society to gain consensus on how to define the legality of timber, including for forest conversion, production of conversion timber, and associated trade.



Photo credi: Local researcher, hill forest, Tanintharyi Region



- Borras, Saturnino M., Jr., and Jennifer C. Franco. 2012. "Global Land Grabbing and Trajectories of Agrarian Change: A Preliminary Analysis." Journal of Agrarian Change 12(1): 34-59. doi: 10.1111/j.1471-0366.2011.00339.x.
- Burnama. 2012. "Felda to Build Myanmar Supply Chain." October 2.
- Department of Agricultural Planning (DAP). 2010. Myanmar Agriculture in Brief. MOAI, Government of the Union of Myanmar.
- DAP. 2010b. Perennial Plantation Development in Myanmar, 2010-2011. Government of the Union of Myanmar. (In Burmese)
- DAP. 2012. Myanmar Agriculture in Brief. MOAI, Government of the Union of Myanmar.
- Eleven News. 2012. "Myanmar to Ban Timber Exports in 2014." October 29.
- EIA. 2014. "Data Corruption: Exposing the True Scale of Logging in Myanmar." Environmental Investigation Agency, London. <u>http://www.illegal-logging.info/sites/default/files/EIA-Data-Corruption-FINAL.pdf</u>
- FAO. 2009. Myanmar Forestry Outlook Study. Asia-Pacific Forestry Sector Outlook Study II, Working Paper No. APFSOS II/WP/2009/07, Food and Agriculture Organization of the United Nations, Bangkok, Thailand. <u>http://www.fao.org/3/a-am252e.pdf</u>
- FAO. 2010. Global Forest Resource Assessment 2010: Country Report Myanmar. Food and Agriculture Organization of the United Nations, Rome. <u>http://www.fao.org/docrep/013/i1757e/i1757e.pdf</u> (Main Report); <u>http://www.fao.org/docrep/013/al576E/al576E.pdf</u> (Country Report)
- Ferrie, Jared. 2014. "Myanmar's Log Export Ban to Hurt Businessmen but Help Forests." Reuters, March 20. http://uk.reuters.com/article/2014/03/20/us-myanmar-forests-idUKBREA2J27K20140320
- Forest Certification Committee of Myanmar. 2013. Timber Harvesting and Traceability Verification in Myanmar. Government of the Union of Myanmar.
- Forest Trends, Forthcoming."Review of Log Export Ban Experiences and Policy Implications for Myanmar." Forest Trends, Washington, D.C.
- Forest Trends. 2013. "Potential Legality Issues from Forest Conversion Timber." Forest Trends, Washington, D.C., and the IDL Group, Bristol, United Kingdom. <u>http://forest-trends.org/publication_details.</u> <u>php?publicationID=4137</u>

- Forest Trends. 2014. "Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality and Forest Conversion for Agriculture and Timber Plantations." Forest Trends, Washington, D.C. <u>http://forest-trends.org/publication_details.php?publicationID=4718</u>
- Gibbs, H.K., A.S. Ruesch, F. Archard, M.K. Clayton, P. Holmgren, N. Ramankutty, and J.A. Foley. 2010. "Tropical Forests Were the Primary Sources of New Agricultural Land in the 1980s and 1990s." PNAS 107 (38): 16732-16737. doi: 10.1073/pnas.0910275107.
- Global Witness. 2005. "A Choice for China: Ending the Destruction of Burma's Northern Frontier Forests." Global Witness Publishing Inc., Washington, DC. <u>http://www.globalwitness.org/sites/default/files/library/a_choice for china low res.pdf</u>
- Grieg-Gran, Maryanne. 2008. The Costs of Avoiding Deforestation: Update of the Report Prepared for the Stern Review of the Economics of Climate Change. International Institute for Environment and Development (IIED), London. <u>http://pubs.iied.org/pdfs/G02489.pdf</u>
- Hosonuma, Noriko, Martin Herold, Veronique De Sy, Ruth S. De Fries, Maria Brockhaus, Lous Verchot, Arild Angelsen, and Erika Romijn. 2012. "An Assessment of Deforestation and Forest Degradation Drivers in Developing Countries." Environmental Research Letters 7(4). doi: 10.1088/1748-9326/7/4/044009.
- Human Rights Watch. 2013. "Untold Miseries: Wartime Abuses and Forced Displacement in Burma's Kachin State." Human Rights Watch, New York. <u>http://www.hrw.org/sites/default/files/reports/burma0312ForUpload_1.pdf</u>
- ITTO. 2006. "Status of Tropical Forest Management 2005." Technical Series No. 24, International Tropical Timber Organization, Yokohama, Japan.
- Kachin Development Networking Group (KDNG). 2010. "Tyrants, Tycoons, and Tigers: Yuzana Company Ravages Burma's Hugawng Valley." Kachin Development Networking Group, Chiang Mai, Thailand. <u>http://www.burma-center.org/en/publications/reports/item/289-tyrants-tycoons-and-tigers-yuzanacompany-ravages-burmas-hugawng-valley/</u>
- Kachin News Group (KNG). 2013. "Chinese Timber Resumes in Kachin State." March 27.
- Kachinland News. 2013. "Land Rights Activist Bawk Ja Goes on Trial in Hpakant." October 20. http://kachinlandnews.com/?p=23865_
- Khin Hnin Htet. 2011. "Court 'Cheats' Yuzana Land Grab Victims." Democratic Voice of Myanmar, January 11. https://www.dvb.no/news/court-%E2%80%98cheats%E2%80%99-yuzana-land-grab-victims/13662
- Khin Myo Thwe. 2012. "Forestry Plantations Not Running at Full Capacity, says Ministry." Mizzima News, December 11.
- Khin Myo Thwe. 2013. "Land Business Becomes Brisk around Dawei SEZ." Mizzim News, February 20.
- Kissinger, Gabrielle, Martin Herold, and Veronique De Sy. 2012. "Drivers of Deforestation and Forest Degradation: A Synthesis Report for REDD+ Policymakers." Lexeme Consulting, Vancouver, Canada.
- Ko Htwe. 2011. "Kachin Farmers Fight On." The Irrawaddy. January 10. <u>http://www2.irrawaddy.org/article.</u> <u>php?art_id=20498</u>

- Kramer, Tom, and Kevin Woods. 2012. "Financing Dispossession: China's Opium Substitution Programme in Northern Burma." Transnational Institute (TNI), Amsterdam. <u>http://www.burmalibrary.org/docs13/tni-financing_dispossesion.pdf</u>
- Lawson, Sam, and Larry MacFaul, 2010. "Illegal Logging and Related Trade." Chatham House, London. http://www.illegal-logging.info/sites/default/files/uploads/CHillegalloggingpaperwebready1.pdf
- May Sitt Paing. 2013. "Burmese Tycoon Gives Back after Land Grabs." The Irrawaddy. June 7. http://www.irrawaddy.org/burma/burmese-tycoon-gives-back-after-land-grabs.html
- Michigan State University (MSU) and the Myanmar Development Resource Institute's Center for Economic and Social Development (MDRI/CESD). 2013. "A Strategic Agricultural Sector and Food Security Diagnostic for Myanmar." Working Paper. Draft prepared for USAID/Burma. <u>http://fsg.afre.msu.edu/Myanmar/myanmar_agricultural_sector_and_food_security_diagnostic_report.pdf</u>
- Ministry of Agriculture and Irrigation (MOAI). 2002. "Master Plan for Agriculture Development." Government of the Union of Myanmar.
- MOAI. 2009. Myanmar Long Term Plantation of Project Office of the State Manager, Kachin State, Myitkyina. First Quarterly Report on Task Implementation of 2009. Union of Government of Myanmar. 3 December.
- Mizzima News. 2010. "Kachin Teacher, Land Activist to Stand in Phakant for NDF." September 24. <u>http://archive-2.</u> <u>mizzima.com/edop/interview/4398-kachin-teacher-land-activist-to-stand-in-phakant-for-ndf.html</u>
- Mizzima News. 2013 "Myanmar Could Lose a Third of Forestry." May 13. <u>http://archive-1.mizzima.com/</u> <u>business/natural-resources/9427-myanmar-could-lose-a-third-of-forestry</u>
- MOF. 2001. National Forest Master Plan (2001/02 to 2030/31), Vol. 1 & 2. The Government of the Union of Myanmar.
- Mongabay. 2012. "Burma Warns of Deforestation Crisis." August 23. <u>http://news.mongabay.com/2012/0822-</u> <u>myanmar-deforestation-crisis.html</u>
- Myat May Zin. 2012. "Malaysia Eyes Rubber, Oil plantations in Myanmar." Myanmar Times, November 5. <u>http://www.mmtimes.com/index.php/business/2879-malaysia-eyes-rubber-oil-plantations-in-myanmar.html</u>
- NEPCon. 2013. "Myanmar Forest Sector Legality Analysis." NEPCon, Aarhus, Denmark. <u>http://www.nepcon.</u> <u>net/sites/default/files/library/NEPCon-ETTF-Myanmar-forest-legality-study-09-2013.pdf</u>
- New Light of Myanmar. 2002. "Tanintharyi Division Geared Towards New Oil Bowl of Myanmar." January 5.
- New Light of Myanmar. 2012. "President U Sein Thein Receives Malaysian Guest." October 31.
- Noam, Zao. 2010. "White Gold Rush." The Irrawaddy, June 10. <u>http://www2.irrawaddy.org/article.php?art</u> id=18673
- O'Toole, Bill. 2013a. "Conflict Spurs Timber Trade in Shan and Kachin." Myanmar Times, April 30. <u>http://www.</u> mmtimes.com/index.php/national-news/6600-conflict-spurs-timber-trade-in-shan-and-kachin.html
- O'Toole, Bill. 2013b. "Three Quarters of New Land Concessions Unused: Ministry." Myanmar Times, December 15. http://www.mmtimes.com/index.php/national-news/9053-three-quarters-of-new-land-concessionsunused-ministry.html

- Oberndorf, Robert B. 2012. "Legal Review of Recently Enacted Farmland Law and Vacant, Fallow and Virgin Lands Management Law: Improving the Legal & Policy Frameworks Relating to Land Management in Myanmar." Food Security Working Group's (FSWG) Land Core Group (LCG), Myanmar. <u>http://www.forest-trends.org/</u> <u>documents/files/doc 3274.pdf</u>
- OECD. 2014. OECD Investment Policy Reviews: Myanmar. OECD Publishing. doi: 10.1787/9789264206441-en.
- Proforest. 2011. "Review of Policy Options Relating to Sustainable Oil Palm Procurement." Department for Environment, Food and Rural Affairs, London. <u>http://www.proforest.net/publication/bibliog.2011-08-23.3453825412</u>
- Soe Than Lyn. 2013. "Legal Living Permission in Forest Reserves." Myanmar Times, June 17. <u>http://www.mmtimes.com/index.php/national-news/7152-legal-living-permission-in-forest-reserves.html</u>
- Taylor, Michael. 2012. "Monitoring Large Scale Land Acquisitions." Presentation at the GIGA International Workshop on Large-Scale Land Acquisitions, Hamburg, Germany, May 10. <u>http://www.landcoalition.org/</u> <u>sites/default/files/publication/1269/12_05_GIGA_ILC.pdf</u>
- Tint, Kyaw, Oliver Springate-Baginski, and Mehm Ko Ko Gyi. 2011. "Community Forestry in Myanmar: Progress and Potential." Ecosystem Conservation and Community Development Initiative, Yangon, Myanmar. <u>http://www.burmalibrary.org/docs13/Community+Forestry+in+Myanmar-op75-red.pdf</u>
- Transnational Institute (TNI). 2012. "Land Grabbing in Dawei." Transnational Institute, Amsterdam.
- TNI and Burma Centrum Netherlands (BCN). 2013. "The Kachin Crisis: Peace Must Prevail." Burma Policy Briefing No. 10, Transnational Institute, Amsterdam. <u>http://www.tni.org/briefing/kachin-crisis-peace-must-prevail</u>
- TNI and BCN. 2013. "Access Denied: Land Rights and Ethnic Conflict in Burma." Burma Policy Briefing No. 11, Transnational Institute, Amsterdam. <u>http://www.tni.org/briefing/access-denied</u>
- United Nations Office on Drugs and Crime (UNODC). 2012. "The Trafficking of Wildlife and Timber." United Nations Office on Drugs and Crime, Vienna, Austria.
- UPI. 2012. "Myanmar in Deforestation Crisis." August 22. <u>http://www.upi.com/Science_News/2012/08/22/</u> Myanmar-in-deforestation-crisis/UPI-50031345670650/
- Wade, Francis. 2013. "Ceasefire Capitalism: Why Burma's Rebels Have Every Reason to be Suspicious of Gov-ernment Emissaries Talking Peace." Foreign Policy, November 29. <u>http://www.einnews.com/yicha/article/178679595/mbQ8no0oAlVs32NZ</u>
- Wildlife Conservation Society (WCS). 2012. "Myanmar Biodiversity Conservation Investment Vision." Yangon, Myanmar. <u>http://www.harrison-insti-tute.org/Myanmar%20Biodiversity%20Investment%20</u> <u>Conservation%20Vision%202013%20English.pdf</u>
- WWF. 2013. "Ecosystems in the Greater Mekong: Past Trends, Current Status, Possible Futures." <u>http://wwf.</u> panda.org/?208456/Ecosystems-in-the-Greater-Mekong-past-trends-cud rrent-status-possible-futures
- Woods, Kevin. 2011a. "Ceasefire Capitalism: Military-private Partnerships, Resource Concessions and Military-state Building in the Burma-China Borderlands." Journal of Peasant Studies, 38(4): 747-770. doi: 10.1080/03066150.2011.607699.

- Woods, Kevin. 2011b. "Conflict Timber Along the China-Burma Border: Connecting the Global Timber Consumer with Violent Extraction Sites." *In Chinese Circulations: Capital, Commodities and Networks in Southeast Asia*, edited by Wen-Chin Chang and Eric Tagliacozzo, 480-506. Durham: Duke University Press.
- Woods, Kevin. 2013a. "Emerging Agribusiness Trends in Myanmar: Opportunities and Challenges for Poverty Reduction." Yunnan University Press, Kunming, China.
- Woods, Kevin. 2013b. "Timber Trade Flows and Actors in Myanmar: The Political Economy of Myanmar's Timber Trade." Forest Trends, Washington, D.C. <u>http://www.forest-trends.org/publication_details.</u> <u>php?publicationID=4133</u>
- Woods, Kevin. 2013c. "The Politics of the Emerging Agro-Industrial Complex in Asia's 'Final Frontier': The War on Food Sovereignty in Burma." Paper presented at Food Sovereignty: A Critical Dialogue, Interna-tional Conference, Yale University, September 14-15. <u>http://www.yale.edu/agrarianstudies/foodsovereignty/pprs/25_Woods_2013.pdf</u>
- Woods, Kevin, and Kerstin Canby. 2012. "Forest Certification in Myanmar." Information Brief No. 3, Forest Trends, Washington, D.C. <u>http://www.forest-trends.org/publication_details.php?publicationID=3222</u>
- Woods, Kevin, and Kerstin Canby. 2011. "Baseline Study 4, Myanmar: Overview of Forest Law Enforcement, Governance and Trade." Forest Trends, Washington, D.C.
- Woods, Kevin, and Daniel Aguirre. 2014. "Protecting Profits over People." Myanmar Times, November 23-29. http://www.mmtimes.com/index.php/opinion/12356-protecting-profits-over-people.html

Ye Lwin. 2006. "Bid to End Illegal Timber Trade." Myanmar Times, January 25.



The Family of Forest Trends Initiatives

Ecosystem Marketplace

A global platform for transparent information on ecosystem service payments and markets

Water Initiative

Protecting watershed services through markets and incentives that complement conventional management

Forest Trade & Finance

Bringing sustainability to trade and financial investments in the global market for forest products

BBSP

Business and Biodiversity Offsets Program, developing, testing and supporting best practice in biodiversity offsets



Building capacity for local communities and governments to engage in emerging environmental markets

Communities and Markets

Supporting local communities to make informed decisions regarding their participation in environmental markets, strengthening their territorial rights



Using innovative financing to promote the conservation of coastal and marine ecosystem services

Public-Private Co-Finance Initiative

Creating innovative, integrated, and efficient financing to support the transition to low emissions and zero deforestation land use