Status and Trend in Land Access of Smallholder Rubber Farmers in Mon State



Enlightened Myanmar Research | Ardeth Thawnghmung

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Acronyms

AMRDP	All Mon Region Democracy Party
FAB	Farmland Administration Body
CBOs	Community Based Organizations
DKBA	Democratic Karen Buddhist Army
HURFOM	Human Rights From Mon Land
INGOs	International Non-Government Organizations
MAS	Myanmar Agriculture Service
MOECF	Ministry of Environmental Conservation and Forestry
MOAI	Ministry of Agriculture and Irrigation
MRPPA	Myanmar Rubber Planters and Producers Association
KNU	Karen National Unity
NMSP	New Mon State Party
SPDC	State Peace and Development Council
USDP	Union of Solidarity and Development Party
SLRD	Settlement and Land Records Department
SLORC	The State Law and Order Restoration Council
UMFCCI	Union of Myanmar Federation of Chambers of Commerce and Industry
VFV Law	Vacant, Fallow, Virgin Lands Management Law

Executive Summary

Status and Trend in Land Access of Smallholder Rubber Farmers in Mon State

This report attempts to identify trend and land holding status of rubber farmers in Mon state and analyzes challenges and issues that are confronting small-scale rubber growers in Mon state/Myanmar. Particular emphasis is given on small holders' land tenure security, which has conventionally been regarded as crucial in promoting equity, sustainable growth and development in developing countries.

It begins with a brief background of current political and economic situations in Mon state, and analysis of past and present laws that deal with agricultural planning, production, distribution, and land governance. The second part of the paper covers location, people, and methods of data collection and highlights the study's limitations. The third part of the report presents the study's findings, which include data on the growing significance of rubber in Mon economy, impetus behind rubber expansion, estimated income and socio-economic condition of rubber planters and their current land holding status. The fourth part of the report identifies a number of conditions that undermine land tenure security among the small-holders in Mon state. The next section analyzes the nature and characteristics of institutions that govern rural sector and identifies interests and positions of various actors who will play a major role in influencing the course of political and economic outcome in Mon state. The last section of the report provides recommendations and concluding remarks.

Official data as well as observation, interviews and conversation that took place during the field work indicate the growth of rubber plantation in Mon state over the past 10 years. Acreage for rubber more than doubled from 2004 to 2009 in Myanmar, with Mon state accounting for the largest cultivated areas. The expansion of rubber has been carried out through the clearing of new lands (including prohibited areas such as reserved and protected forests), introduction of high-yielding varieties, and conversion of land previously designated for other crops.

The growth of rubber plantation in Mon state can be attributed to (1) changes in government policies in the 1990s which remove restriction on freedom of movement and market activities and offer incentives to develop agriculture (2) capital made available by remittance from Mon migrant laborers in Thailand, Malaysia, and Singapore (3) improved infrastructure and political environment following ceasefire agreements between the Burmese government and the New Mon State party (NMSP) in 1995, and (4) market response to higher profit margins generated by rubber compared to failing or pittance amount of cash earned by other traditional crops in the region.

The majority of rubber farmers (64% of rubber farmers) in Mon state have small and mediumsize farms. Estimated over half (53%) of the rubber cultivators are medium farmers who holds between 5 to 19.99 acres of land. Small farmers or those who own 4.99 acres or less constitute about 11% of the rubber owners. Upper medium farmer (20-39.99 acres) account for 16% of the land holding while large scale holders (40 and above) constitute 20% of the holdings.

Income derived from rubber varies depending on the location, cost of land, prices of rubber in any given year, or whether one grows high-yielding or traditional varieties. Rubber generally generate an estimated profit which ranges between 200,000 to 1,000,000 kyats per acre per year, and is significantly higher than that of paddy, a staple crop which has traditionally

accounted for the largest cultivated acres in the region. Local farmers reported that paddy farming has repeatedly failed over the past 4 or 5 years due to low productivity, high input cost, and extreme weather. Consequently, rice fields have been abandoned, or replaced by rubber.

Key recommendations

Promote awareness and offer assistance toward land title registration, and provide legal aids to land dispute settlements

The majority respondents interviewed by the research team did not hold land use titles, but were in the process of applying for land holding certificates during the time of the study. A few who have not done so attributed their lack of awareness about the new land laws and/or the cost involved in applying for the land titles or/and lack of documents to prove their claim over the land they cultivate. Assistance can be provided to those who lack the means, the proper papers or the awareness to establish legal claim over the lands they work.

Offer support to political parties, land management committees, land and human rights groups, land investigation commissions and civil societal organizations, and activists who are working on land issues. Publish a paper on different scenarios of land disputes, highlight laws and regulations governing these cases, and offer general guidelines and appropriate procedures to settle disputes. Circulate the paper among the general public and multiple entities (courts, regional parliament, farmland management committees, land investigation commissions) working on land disputes. Help empower the farmland management committees, which has been legally authorized to arbitrate land claims.

State capacity will have to be strengthened by offering skill and capacity -building training to civil servants who are responsible for implementing and enforcing laws and rulings, and provide them with incentives to safeguard laws, policies, and carry out policies to serve public interests, while simultaneously subject them under public scrutiny for their potential abuses against the populations.

Offer assistance to undertake land survey

Offer support to ongoing initiatives to collect accurate information about cultivated crops and ownership, which will definitely require considerable human and financial resources and collaboration among government agencies.

Address loopholes in current land laws

Organize support and continue to push for the implementation of most of the recommendations that have been suggested in previous analysis and review of land related laws, and persuade the Forestry department to extend the deadline to apply for the use of reserve forests. Coordinate effort toward dialogue among the government, NMPS and KNU to create agreement to improve land security of communities through one type of legal system i.e. the Government of Myanmar system, while allowing the MNSP or KNU to retain some rights to revenues and taxes and subject them to international best practices. Donors can also work with armed groups to collect data on the number and profile of displaced populations and refugees

who plan to return to their villages and develop creative and mutually beneficial solutions toward the resettlement of displaced populations in post-ceasefire situations. While a nation-wide comprehensive law should be created as guiding principles, state and regional governments should be given greater autonomy to formulate and implement land laws that reflect their specific region's economy and political situations.

Offer infrastructure and technical input support toward small/medium holders

Implement broad-based infrastructural support to enhance land security of small and medium holders. Those include diversification of market and creation of value-added industries to create price stability, establishing and ensuring quality control over seeds and fertilizer, and offering low interest loans and technical support, and exploring additional and alternative or extra livelihood opportunities to vulnerable population in Mon state. Encourage the formation of small holding rubber producers group under umbrella of the Myanmar Rubber Planters and Producers Association (MRPPA).

Conduct further study on mono-cropping

Conduct research on the potential economic and environmental consequences of monocropping in the region. Although global demand for rubber is expected to exceed global supply by 2020, the Mon state's economy remains vulnerable due to its overreliance on Chinese market and the growing role of rubber in Mon economy. In addition, there are potential environment costs associated with rubber expansion in the region.

Background

Study rationale

This report attempts to identify the trend, past and present status and prospect of rubber economy in Mon state and analyzes challenges and issues that are confronting small-scale rubber growers in Mon state/Myanmar. Particular emphasis is given on small holders' land tenure security, which has conventionally been regarded as crucial in promoting equity, sustainable growth and development in developing countries.

The objectives of the study are (1) provide overview of status and trends in access to land and land rights of smallholder rubber farmers in Mon State, (2) offer comparative analysis over the trends of access to land and livelihood opportunities between rubber farmers and farmers who depends on paddy and other traditional crops in Mon State, (3) provide a root cause analysis of status and trends, i.e. assess the drivers behind change. (4) To make recommendations on actions that could be taken to address these root cause and to ensure secure land tenure for smallholder rubber farmers.

The study is based on conversation, interviews, analysis of small, medium, and large holding rubber and paddy farmers, village administrators, experts, rubber trader/exporter and processors, and township and state level authorities in Mon state.

The study can be seen as a multifaceted analysis composed of following components:

- Status of land tenure in rubber sector in Mon State; current trends and drivers of change.
- Institutional analysis of roles and power dynamics of different stakeholders (government agencies and authorities, private sector, civil society, smallholder rubber farmers, etc.) affecting the land tenure security of smallholder rubber farmers.
- Impacts of previous and current policies and laws on land tenure security or insecurity of smallholder rubber farmers
- Other political economic factors contributing to land tenure security or insecurity of smallholder rubber farmers.
- Analysis of threats to and opportunities for land tenure security from perspective of smallholder rubber farmers.

The study is sponsored by Swiss Agency for Development and Cooperation (SDC) of the Embassy of Switzerland and CARE International in Myanmar which also simultaneous carry out value chain assessment to contribute to a program design in support of smallholder farmer rubber productivity in Mon State.

Myanmar Development Research (MDR) is selected as a partner for implementing the study, given its sound experiences in doing socio-economic researches in different state and regions of Myanmar in collaborating with various stakeholders mainly include government community and community-based organizations, CSOs, service provider and executive offices, international and local NGOs.

Mon State: Historical Context of the Current Political and Economic Situations

Mon state is located in Southeastern Burma sharing border with Kayin (Karen) state on the east, the Andaman Sea on the west, Bago division on the north and Thaninthayi division on the south. It also shares a short border with Kanchanaburi province in Thailand on its south-eastern tip. Mon people are one of the seven largest minority nationalities in Burma who constitute a majority population in the states named after their respective nationalities. Mon people, estimated to be between 2-3 million populations in the country, are the majority populations in Mon state. The remaining groups which reside in Mon state are Bamar, Kayin (Karen), Shan, Pao, and others. The Mon people take pride in their ancient civilization and independent kingdoms that existed between the 9th and the 11th and the 13th and the 16th century and for a brief period in the mid-18th century until it was subjugated yet again by the Burmese king. After the Burma gained independence from the British, a number of Mon armed organizations went underground to fight for greater autonomy or independence. In 1995, the Burmese government reached a ceasefire agreement with the strongest Mon ethnic armed organization, the New Mon

State Party (NMSP), which was allowed to carry arms, conduct businesses, and exercise control over a given territory. Several Mon and Karen ceased-fire and non-ceasefire armed groups are also currently operating in Mon state.

The current Mon state government is formed according to the 2008 constitution, and is dominated by the pro-government party, Union Solitary Development Party (USPD), which controls state's cabinet, and holds a majority of the seats in the region's unicameral legislature. Twenty five percent for the state's seats are reserved for the Myanmar military, which also has its South Eastern Command headquarters in Mawlamyine, the capital of Mon state. The All Mon Region Democracy Party (AMRDP), is the second largest political party in Mon state, and holds almost 25% (short of one vote) of the state's legislative seats.1 Kayin (known in English writing as "Karen"), constitutes more than 0.1 percent of the populations in Mon state, and are given their own Karen affairs minister who is endowed with authority to deal with Karen affairs in Mon state.

The ongoing land disputes in Mon state can be traced back to post-ceasefire settlements which enabled the Myanmar army to confiscate large segments of land to build bases and grow crops to support the troops. Some of these disputes have been resolved through a variety of formal and informal channels, but the majority of the disputes remain unresolved. The evolving nature of land governance structure and dispute settlement mechanisms will be very much determined by the evolving power configuration and relationships among the central government, the Mon state government, Myanmar army, political parties, non-armed groups, and civil societal actors.

Mon state's economy has traditionally been based on rice cultivation in lowland areas, timber, fruits and trees, and rubber plantation in lower slopes, coastal fishing and related industries, and more recently, on remittance from migrant laborers working in the neighboring countries. Rice, rubber, sugar cane, betal nut, coconut, fruits (durian, mangosteen, pumalo, rambutan) are major agricultural products.

Due to abundant natural resources and proximity to Thailand, Mon state has relatively better living conditions compared to areas occupied by ethnic minority groups. According to Integrated Housing Living Conditions Survey in Myanmar (2009-2010), for instance, 16.3% of the populations in Mon state are classified as "poor" compared to 46.4% in Eastern Shan state, 43.5% in Rakhine state, 73.3% in Chin state, and 28.6% in Kachin state.2 Many young Mon are currently working in Thailand as migrant laborers, and have kept the Mon state's economy afloat through remittances that have been reinvested in the purchase of rubber land and plantations.

¹ See elections results by Altsean_Burma. Available at

http://www.altsean.org/Research/2010/Key%20Facts/Results/Division%20and%20State%20Parliament%20Winners .php

²Integrated Housing Living Conditions Survey in Myanmar (2009-2010), the UNDP and the Ministry of Naitonal planning and Economic Development, Yangon, 2010.

Land law and Policy Changes

Until recently, the Myanmar farmers were subject to the Land Nationalization Act of 1953, which prohibited farmers from mortgaging, selling or transferring their land use rights.3 The Socialist government (1972-1988) also imposed restrictions on the types of cultivated crops, cultivated lands and prohibited private trading and exporting of agricultural goods. Farmers were required to sell a certain amount of products to government at low fixed prices to subsidize. Consequently, Myanmar rural sector remained underdeveloped and rural residents lived in extreme poverty under the socialist period. The prices of land were low due to the lack of economic opportunities, socialist policies which prohibited private ownership over land and Burma's isolation from foreign countries and global economy.

In 1991, the government created a new policy to promote public and private investment in agricultural crops/livestock breeding or aquaculture enterprise, called the management of Culturable land, Fallow Land and Waste Land, which provided the use of a maximum 5,000 acres for thirty years lease to private investors. 4 Investors were exempted from tax revenues for a period of 2-8 years.

This period witnessed "land grabbing" by army, government ministries, domestic enterprises and individual citizens. Crony companies and powerful families connected to the military government were given land titles for large tracts of waste lands within which scattered pieces of lands are also being cultivated by farming communities. Many of the latter who had settled on these lands for generations and often without registering their land for permanent land use rights and who operate under customary law have lost their lands to agro-business because their lands were categorized as "fallow" or "waste" in the official record. Farmers also lost their lands they cultivated to infrastructural construction, i.e. dams and government factories.5 According to the Department of Agricultural Planning, the land given to private companies increased from 225,242 acres to a total of 1.9 million acres (to 204 companies) to 2011, with half of that in Tanintharyi and Kachin state.6 Mon state did not attract any large-scale investment on the land, since none of these 204 private companies were granted concessions in Mon state.

Land grabbing, however, became a widespread and common phenomenon after ceasefire agreements between the government and MNSP were concluded in 1995. The Burmese army began expanding its bases in previously inaccessible areas made possible by improved roads

⁶Ibid., 5.

³ Land Core group of the Food Security Working Group, "13 Case studies of Land Confiscations in Three Townships of Central Myanmar," Yangon, September 2012

⁴ Leckie, Scott and Ezekiel Simperingham (ed.,). Housing, Land, and Property Right in Burma: The Current Legal Framework, Displacement Solutions & The HLP Institute, 605-607.

⁵ Ibid., 5.

and bridges. Given the close nature of political system and severe political repression, many of these land confiscation did not encounter much resistance or get publicity in local media except for cases that were advocated by exile opposition groups and international human rights. The Human Rights Foundation of Monland (HURFOM) has begun documenting and publishing reports on land confiscation and human rights abuses in Mon state since 1995.

After the new government came to power in 2011, it began implementing a series of political and economic reforms to promote economic development. The 2008 constitution continues to regard the government as the ultimate owner of all lands in the country (article 37), but the land law of August 2012 allows the sale, transfer, lease and mortgaging of agricultural lands, thus making a land market in agriculture and investment. The government also set up Farmland Management Committee at various levels to enable individuals to register for land titles. This Farmland Administrative Body (FAB) is chaired by the minister of the Ministry of Agriculture and Irrigation. The Vacant, Fallow and Virgin Lands Management Law of 2012 (VFV Law) governs the allocation and use of virgin land or land that has never before been cultivated and vacant or fallow land or land "abandoned" by a tenant for any reason. The law establishes the Central Committee for the Management of Vacant, Fallow and Virgin Lands (CCVFV), to grant and rescind use rights for such lands. The Foreign Investment Law of 2012 governs foreign investment in land-related projects, and gives the Myanmar Investment Commission (MIC) to review proposals, issue or suspend permits. The law offers land use rights to foreign investors up to a total of seventy years.7

Activists and experts have expressed concerns that the new land laws were drafted hastily and were implemented to benefit large corporation investors at the expense of small-holders. There was no acknowledgement or procedure regarding customary and communal practices, especially in upland areas dominated by minority ethnic groups who constitute 30-40% of the populations and occupied 57% of the total land area.8 Neither has the land law addressed the issues of resettlement of populations displaced by civil war. In addition, they point out that the law has given too much power over the Ministry of Agriculture and Irrigation, which is endowed with the authority to allocate and manage uncultivated lands. Others shed light on the implementation processes and point out the prevalence of corrupt practices and vested interest among local authorities and powerful businesses to maintain and perpetuate the status quo. They have unanimously called for amendments to existing laws to be more sensitive to the needs of the majority populations.

This report, which is based on the study of rubber planters in Mon state, echoes the prevailing sentiments on the limitations of current land laws and the severity of land grabbing in the region. However, it attempts to offer a more comprehensive understanding of the situation by shedding light on diverse practices and multiple causes of land tenure insecurity in Mon state.

⁷ Obendorf 2012, 17.

⁸⁸⁸ "Access Denied: Land Rights and Ethnic Conflict in Burma," Transnational Institute, Burma Policy Briefing Nr 11, May 2013.

Methodology

The findings of the study are based on visits of sixteen villages from four townships in Southern and Northern Mon state. These townships include Thaton Township (Northern Mon State), Mu Don Township (Northern Mon State), Than Phyu Zayat (Southern part of Mon State), and Ye Township (Southern part of Mon State). Villages from four townships are selected based on their location, varying sizes, varying distance from the main roads and cities, types of governing authorities, ethnicity, and types of crops grown.

The study began with a preliminary field trip between June 21-24, 2013 in four townships; Moulmein, Thaton, Than Pyu Zayat, and Ye, and a small village in Ye township. The team members talked to scores of individuals knowledgeable about the situations from the region. These including Rubber Producer Association members in Mon state (Moulmein and Ye), All Mon Region Democracy Party members (who are also rubber planters), one paddy grower, 2 large-scale rubber plantation owner and operator (1000 acres holding), former and current village heads of Taung Bon village in Ye township, small-scale rubber growers (Moulmein, Ye), knowledgeable individuals, an environmental/political activist, and a rubber collector/ exporter in Than Pyu zayet.

The team also visited a rubber processing factory in Ye town, a large-scale rubber nursery and plantation in Thaton town, and a Rubber roller factory in Moulmein. One team member also interviewed a high ranking forestry official responsible for rubber plantation in Thaninthayi Region. The actual field work took place between July 15 and August 3 and was carried out by a team of eight researchers who were divided into two groups to visit villages in Southern and Northern Mon state.

The project includes survey and interview of 105 rubber and paddy farmers in Southern Mon state and 104 of those in Northern Mon state, village tract administrators, township and state government authorities, members of Rubber Plantation Association in Mon state, two central executive committee members of All Mon Region Development Party, township level land record, agricultural, and forestry officials, members of Rubber Producers Association, knowledgeable individuals, one member of Mon Literature and Culture Committee, member of Karen Literature and Culture Committee, environmental/political activist, rubber processing factory owner, and rubber collector/ exporters. It ended with meeting with Mon state's Minister of Agriculture, Director General of Settlement and Land Record department, and Director General of Perennial Crop Enterprises, and Director General of the Ministry of Forestry and Environmental Conservation.

Initial contacts with the villages were made through village tract administrators who then introduced the research team to household members. Surveys and interviews were conducted among those who were willing and able to converse in Burmese. Researchers began by explaining the purposes of the research, and proceeded with survey questions. The results in this report are based on 4 types of interviews/surveys; 1. A general socio-economic status of village profile provided by the village tract administrator, (2) a Focus Group Discussion (FGD) among participants composed of community leaders and village administrators, (3) informal

conversation with knowledgeable key informants (including government officials), and (4) household surveys.

A state level meeting was conducted with the Minister of Agriculture, and high ranking officials from Settlement and Land Record, and Forestry and Environmental Conservation. The research ended with a meeting with a lawyer who offers necessary information on rules, laws, and regulations regarding land issues.

The team efforts to obtain data are limited by the short duration within which the team members spent in each village, lack of trust toward outsides by local residents who also expressed discomfort by some of the sensitive questions (such as land holding, rubber acreage), inability to cross check authenticity of some of the claims made, and lack of updated and reliable official data at the village, township, as well as state levels. In Ye township, two villages that were characterized officially as "government-controlled" areas were in fact under the control of one and a number of armed groups, and frequented by the local Special Branch staff and Myanmar Military Intelligence.

Results

The Growth of Rubber Plantations in Mon State: Trends and Drivers

Rubber is one of the major revenue-generating crops in Myanmar's national economy. Rubber plantations have been expanded in last two decades, with the Myanmar Agricultural Service (MAS) reporting in 2010 that over 1.1 million acres of rubber had been planted. The 2010 Myanmar Census of Agriculture indicates that 38% of the area under compact plantations nation-wide is in rubber, and the largest area of rubber is in Mon State. According to Minister of Agriculture and Irrigation in Mon state, one third of rubber plants have currently been harvested (100,202 tons) in 2012 (interview, August, 2013).

The research finds that some rubber farmers have continued to harvest and plant traditional "wild" rubbers on their existing farms, while financially capable individuals have introduced high - yielding rubber plants. Some started cultivating rubber in the nearby fallow, vacant, waste lands, pasture, reserved or protected forest, or/and converted lands designated for paddy or other crops (garden or orchard) into rubber. There are a number of reasons why rubbers have been planted in the areas previously designated for paddy and other fruits trees. High production costs for paddy have mainly been attributed to the decline of paddy production. A large-scale rubber owner in Ye mentioned that betel nuts trees in the western and southern part of Ye township have began experiencing disease (e.g. pre-matured falling) over the past 10 years, leaving farmers with no choice but to replace some of the acres with rubber. It is not clear whether this is a widespread phenomenon, but he estimated that approximately 10% of the current rubber acreage in Ye township may have previously been planted to betel or durian.9 A

⁹ It is estimated that about 10,000 acres of betel nuts have been affected by such disease by falling prematurely. IN Ye township, there are about 100,000 acres planted to betal nuts.

resident from Thaung Bon village in Ye township however said that between 50 and 70% of the existing rubber acreage in his village may been converted from other fruit trees. One key informant knowledgeable about the local situations pointed out the destruction of coconut trees caused by Nargis in 2008 as the culprit. A small scale rubber planter (retired government official) in Ye said that he cut downh is betel nuts trees to plant rubber.

This volunteer adoption of rubber as a primary cash crop has began in Southern Mon state over the past 10 years, gradually spread to Northern Mon, overtaking forest, reserved/protected forests, steep hills and lands designated for other crops. Villagers from Wei Thun Chaung, Than Pyu Zayat township, for instance, noted "the only vacant fields we have left are "soccer field and paved roads." Other respondents in our survey remarked "only schools and monastery compounds in the hills are left untouched by rubber trees." Residents from Taung Hpa Lu, Than Pyu Zayat, said they began planting rubber within their house compounds, and there was no such thing as "pasture or grazing lands" in their areas. When asked if any of the farmers were encroaching on forest areas, one rubber farmers from Ye township said "there was no 'forest' in our areas. There were no hard wood trees by the time we cleared the land. There were only bamboos." Similar comments were made by township and state level authorities. In some cases, these vacant and forest lands have been acquired with tacit approval of local authorities and remain unreported, but in other cases, people seemed to encroach on the land without the knowledge of concerned authorities. The local residents saw rubber plantations positively as a "white gold," and a "forest" that refurbish the environment.

Local residents in both South and Northern Mon state remarked that increasing scarcity and rising prices of land in Mon state have been a motivating factor for farmers to sell off their land in Mon state, and/or expand rubber cultivation to neighboring Karen state that still has large tracts of uncultivated (including forest) lands. The majority of rubber plantations are owned and operated by small- and Medium holders, most of whom are Mon national, but there has been increasing numbers of large-scale holders. Another noticeable trend in Northern Mon state is the presence of absentee landownership in remote areas by residents based in Yangon or major towns in Mon state. This may be a growing phenomenon, although it is difficult to obtain the actual acreage and percentage of rubber land owned absentee landords.

The expansion of rubber plantation over the past twenty years has been fueled by the favorable government policies, remittance of migrant working in Thailand and other Southeast Asian countries, rubber price hike in 2000, and ceasefire agreements between the government and ethnicity based armed groups in Mon state.

Government Policies

Rubber was introduced in Myanmar in 1876 and planted commercially in 1905. Very few people planted rubber in 1962-1988 partly because the government procured all rubber outputs at low fixed prices. The SPDC reduced the procurement quota to 55% of the total output, and abolished the procurement practice in 2004. Rubber producers have since been required to pay 8% of the total income, and additional 10% of the total revenues for export (export tax was later reduced to 2% in 2011). The growth of rubber economy is most noticeable in Mon state, which

has been a traditional home for rubber and has had favorable weather and soil for rubber plantation. In 1991, the military government attempted to promote the agricultural sector by offering a variety of incentives to potential investors to develop "culturable, fallow, and waste" lands. This policy has also facilitated massive acquisition of lands including those that were worked by farmers.

Larger acres of rubber plantations have increasingly been acquired by non-traditional farmers, including large-scale private enterprises as well as public, and non-government officials in Mon state. Not surprisingly, rubber has become a high priority cash earner for the Mon state government officials and residents, overtaking other traditional major crops such as paddy.

Remittance from Mon migrant labors in Thailand and Asian countries

Since 1988, increasing numbers of residents from Burma have left their country to flee from political repression and to search for better economic opportunities. It is currently estimated that there are about 2 million legal and illegal migrant workers and 150,000 refugees are currently living and working in Thailand. Residents from Mon state (along with those from Karen, Thaninthayi, and Shan states) constitute a large proportion of these workers due to geographical proximity and a long history of conflicts, civil war, and political repression in these ethnic areas.10 Mon migrant workers are also found in Malaysia, which hosts an estimated 50,000 people from Burma, and in Singapore, which has approximately 100,000 Burmese.11 It is estimated that about 3 million Burmese are currently living in Asia.

The Mon economy has relied heavily on remittance, and there is no doubt that remittance has played a major role in fueling the rubber expansion among small holding families. A study done by economists from Macquarie University among 1,000 migrant workers in Thailand estimated that half of the respondents said they sent home on average of 575 dollars annually.12 While an overwhelming majority of the respondents (96 per cent of respondents) ranked "assisting families in basic survival" as their first order of priority, those who use remittance for other purposes identified "purchase or develop farm land" "establish a business," "hire workers in Burma" (along with repaying debt or education expenses, or purchase consumer goods) as a motivation for sending remittance home.

¹⁰ Supang Chantavanich, "Myanmar Migrants to Thailand and Implications to Myanmar Development," Policy Review Series on Myanmar Economy, Bangkok Research Center, Number 7, October 2012.

¹¹ Renaud Egreteau, "Burmese Diaspora: A Preliminary Research Note on the Politics of Burmese Diasporic Communities in Asia," *Journal of Current Southeast Asian Affairs*, 02/2012, 115-147.

¹² Sean Turnell, Alison Vicary and Wylie Bradford. BURMA ECONOMIC WATCH Macquarie University, Sydney, Australia

The team's survey of selected villages in four townships also shows a large percentage of residents working in Thailand (see appendix). Respondents also remarked that they used remittance money to invest or reinvest in rubber land (buying lands, introducing high-yielding variety crops or hiring workers).

	Wei Nut, Ye	Hnin Hsoke, Ye	Wei Paung, Ye	Han Gan, Ye	Taung Hpa Lu, Than Pyu Zayat	Set Se, Than Pyu Zayat	Wea Kha Mi, Than Pyu Zayat	Than Pyu Zayat
Estimated #s of migrant workers	200	62	30	NA	300	30	1,000	100
#s of households	200	140	200	1,600	360	738	319	NA

Table 1 Estimated Number	of Mon Migrant Workers i	n Thailand and Asia
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	Inn Waing Gyi, Thaton	Inn Shay, Thaton	Naung Bo, Thaton	Da Nu, Thaton	Be Yan, Mudon	Kawt Kha Pon, Mudon	Naing Hlon, Mudon	Te Kaung Taung, Mudon
Estimated #s of migrant workers	150	70	1000	20	850	700	150	400
#s of households	1,821	185	1,477	85	696	858	1,174	983

Eighty two out all the 209 households surveyed in both Southern and Norther Mon mentioned that at least one member of their household members are working abroad (14 out of 47 households in Ye, 17 out of 58 households in Than Pyu Zayat, 15 out of 42 households in Thaton township, 36 out of 62 households in Mudon, 17 out of 58 households interviewed said they had at least one member working outside the country). One key informant from Ye township said that respondents may have been underreporting because "almost every household has at least one member working abroad to the best of my knowledge." Respondents were either unwilling or unable to divulge information about the amount of income sent home during the interviews because they said were "irregular and hard to predict." A few key informants and comments from the FGD indicate that remittances vary from 200,000 to 300,000 kyats per month to an annual lump sum of 2,000,000 to 6,000, 000 kyats depending on the types of jobs, the host country where they were working, and the numbers of households who

are working abroad. In Ta Kon Daing village, participants in the FGD commented that remittance has been their villagers' main income.

One key informant from Southern Mon mentioned that workers who work in Singapore Malaysia, Japan, or South Korea, or who have years of working experiences and are fluent in Thai (and therefore can be employed as personal assistant, supervisor of workers, sale person and secretaries in service sector), or who work in illegal fishing industries in Thailand earn higher income than recent migrants who do not have language or working experiences. A small percentage of the better off families were able to send their children to Singapore or Malaysia for higher education, while the "medium" and poor income families send their family members for additional income. It takes about 2-3 years before they are able to pay off their debts to the brokers.

Three key informants mentioned that money earned from abroad were reinvested into buying new land partly because of the high potential return from rubber or from the land, and partly because ownership of rubber land brings along higher social prestige. They said in three separate occasions, "where else would Mon people put their money in into other than rubber?"

Ceasefire agreements between armed Groups and Government

Ceasefire agreements between the government and various ethnic armed groups that have fought the government for the past 40 years have affected the growth of rubber plantation in two ways. First, greater political stability and improved infrastructure have created more favorable environment for new business opportunities and economic transaction. As part of the ceasefire agreements, the SLORC implemented the Development of Border Areas and National Races Law in 1993 to develop the border regions of the country and "advance" the ethnic minority groups that have lagged behind in communication, education, health, and economic and social affairs. Consequently, infrastructure building has become major facet of Burmese development in the border regions and nationally. The regime claimed it spent 61 per cent of total expenditures for border areas development on the construction and maintenance of roads and bridges. Official publications provide a long list of hospitals, schools and roads that the government has constructed. One notable example in Mon state has been the completion of Thanwlin Bridge in 2005 which connects the city of Mawlamyaing and Mottama. While the Border areas and National Races initiatives have been condemned as an extension of "statebuilding exercise" to establish the regime's control over the populace and extract natural resources, and have been criticized for their poor quality delivery, the improved infrastructure (especially roads) following increased number of military battalions and construction of pipelines have created opportunities for individuals to travel and trade more speedily than they would have been under the pre-ceasefire periods.¹³

Second, ceasefire agreements between the government and armed groups also offered armed groups opportunity to carry arms, conduct businesses, extract resources, and exercise control over populations in specified territories. This created a more politically secure and stable

¹³Curtis Lambrecht, "Destruction and violation: Burma's Border Development Policies," Watershed Vol.5 No. 2, November 1999-February 2000.

environment and encouraged Mon residents from ceasefire areas and private investors to officially acquire and cultivate rubber in previously inaccessible lands.

High prices and greater demand for rubber and declining profit in paddy and other crops

High prices and rising demand for rubber, declining profit or greater financial loss incurred from paddy and other cash crops, and lack of other better alternative income-generating opportunities also facilitated a volunteer adoption of rubber. The chart below shows a ten-fold increase in natural rubber price between 2001 and 2011 due to surging demand and tight supply. Natural (as opposed to synthetic rubber which is derived from petrochemical) rubber is expected to continue to generate demand.14 Rubber prices in 2012 which averaged US\$3,600 per tonne are set to remain unchanged due to rising oil prices, which increase the prices of synthetic rubber, and thereby increasing the demand for the more resilient and durable natural rubber. Rubber is used to produce tyres and tyre products, which account for over 50% of consumption, and clothing and footwear, contraceptives and surgical gloves. Global natural rubber production which is forecasted to reach nine million tonnes by 2020 fall short of demand which is estimated at around 11.5 million tones. One of this increases in demand will come from China.¹⁵

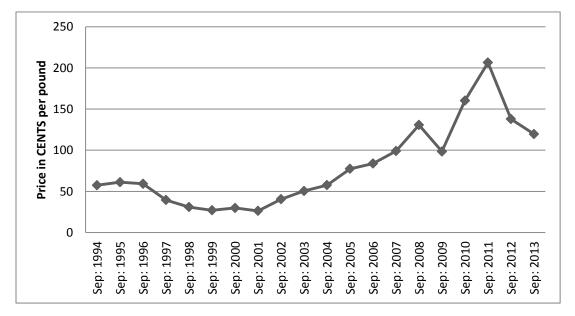


Figure 1 World Rubber Price (1995-2013)

Source: SICOM, the Singapore Commodity Exchange.

¹⁴Global Witness, "Rubber Barons: How Vietnamese companies and international financiers are driving a land grabbing crisis in Cambodia and Laos." May 2013.

¹⁵ Global Witness, Rubber Barons: How Vietnamese companies and international financiers are driving a land grabbing crisis in Cambodia and Laos." May 2013.4-5.

Natural rubber (hevea brasiliensis) is native to the Amazon rainforest but today most rubber is produced in South and Southeast Asia. Six of Burma's neighboring countries-- Thailand, Indonesia, Malaysia, India, Vietnam and China – account for approximately 90% of global production. Between 1961 and 2005, global natural rubber production grew on average 3.4% a year.16

In Mon state, ownership of rubber plantation is seen as an easy venue for economic improvement as well as higher social status, and a 'retirement plan' for the old age. For instance, there are hundred years old rubber trees in Than Pyu Zayat and residents are still harvesting rubber grown during the British colonial period. The loss of interest in other crops such as paddy or fruits is not confined to farmers alone.

Mon state authorities have commented that none of the potential foreign investors that have visited them shown interest in investing in annual crops, and that five companies have shown some serious interest in agricultural sector were mainly interested in acquiring massive plots of land to produce and process rubber. Recently, Japanese government and private investors have visited Myanmar to explore the possibility of buying and processing Myanmar rubber.

Socioeconomic status of small-holder rubber farmers

This section defines the sizes and status of land holding and estimated income of small holding rubber farmers who constitute a majority population in Mon state.

Definitions of "small," "medium," and "large" -scale land ownership *Small Holders (4.99 acres and under)*

A small holding rubber farmer is defined as a family or a person who owns the rubber plantation under 4.99 acres (approximately 1,100 rubber plants). They utilize family members' labor to tap and collect the latex, and grind and store the rubber sheets. According to our finding, an individual can tap 500 rubber trees per day. Thus a family with at least 4 members can manage all the works in plantation of approximately 1,100 plants (5 acres) without using any extra workers. About 11 % of rubber planters in Mon state are small-holders.

Medium Holders (5-19.99 acres)

Individuals who own rubber lands between five acres and 19.99 acres (about 1,300 plants to 4,400 plants) are defined as medium holders. They need to hire one worker for every 500 plants. They usually have a pair of grinding mills to process rubber sheets. Most of the rubber plantation owners (53%) in the region are medium holders.

Upper Medium Holders (20-39.99 acres)

A family who owns rubber land between twenty one acres to forty acres (about 4,620 plants to 8,800 plants) is characterized as an upper medium holder. The upper medium owners need

¹⁶ Global Witness, 2013, 5.

large investments to pay for inputs and labor during the initial seven years of rubber plantation. From the seventh year onward, the owners need to maintain a sufficient capital to pay for the maintenance. The upper medium holders were the hardest hit during the price collapse in 2008. They either offer wage (based on the number of plants) or rely on share-cropping practice (50:50, 60:40, or 70:30) for additional laborers. About 12% of rubber farmers in Mon state can be considered as upper medium holders.

50%-50%

The owners and the workers share the profits of the rubber products equally.

60%-40%

In 60%-40% contract, the owners obtain 60% of the total production or income. The workers have to buy all the necessary equipment for tapping rubber. This 60:40 ratio is widely used among the Mon rubber Plantations.

70%-30%

70 -30 sharing is more common among the older plantations. Workers obtain 70% and the owners retain 30% of the total production or income.

Wage

Under this practice, owners hire the workers or pay their workers based on the numbers of plants they can tap. The salary system is rarely practiced by the Upper Medium holders but it is used in some plantations.

FGD and our conversation with key informants indicate that share -cropping system is most predominant among upper medium holders. While small holders can manage the farm with their family land, large scale holders tend to hire wage labor. There are some exceptional situations, however. Small who cannot personally manage their plantations because they do not have helping hands, or because of low productivity generated by rubber and difficult terrain (deep slope, etc) may also practice share cropping.

Large scale Holders (40 and above)

Large holders usually require a manager or foreman to manage the farms. A manager can manage 10,000 rubber trees. A manager supervises workers and overseas the production, harvest, and processing of rubber latex. Smoking house is a sign of large scale ownership since it is difficult to dry a large volume of sheets manually. Most of the Large scale holders sell their products directly to Chinese company at Mudon or Than Pyu Zayat or export their products to China through Muse. These bigger plantations reportedly consume a higher dosage of fertilizers and pesticide and weed killing spray. The acid (dilute Surlphuric acid, Loung Mee in Myanmar) that has been used to melt the rubber latex into rubber blocks is reported to flow into natural creeks and destroy inhabitants in the stream.

Approximately 20% of rubber farmers in Mon state are large scale holders. There are a few individuals (Mon national) who own more than 100,000 rubber trees in Mon State.

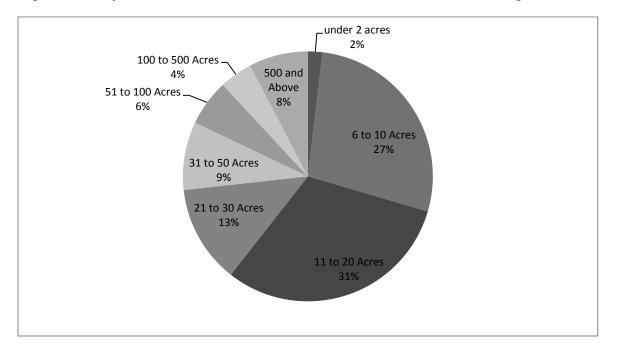
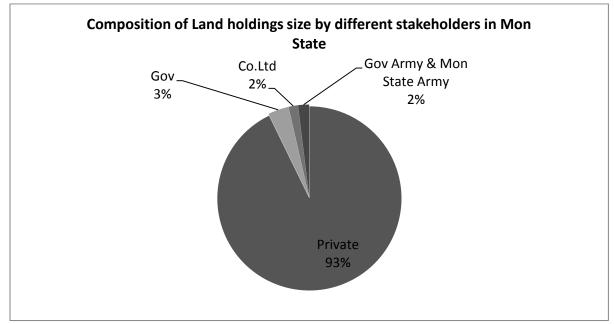


Figure 2 Composition of cultivated rubber acres and size of land holdings in Mon State

Figure 3 Composition of land holding by different stakeholders in Mon State



Sources: Department of Industrial Crop Development, Mon State

Estimated incomes of Smallholding Rubber Farmers

It is difficult to estimate and generalize the socioeconomic status of small holding rubber farmers, since some of them rely on other sources of income (such as remittance) as their primary or secondary income. There are retired government officials and traders who own a small plot of rubber plantations for additional income. In fact, there seems to be a growing presence of absentee landownership, as more residents from Yangon and urban areas in Mon state are increasingly buying rubber plantations for investment and retirement. Thus the conventional definition of "small-holders" or "agriculturalists" who earn their living from farm land does not apply under some circumstances in Mon state.

The incomes of small-holding rubber farmers also vary depending on whether one grows the traditional or high-yielding rubber plants, as well as the prices of rubber in any given year. It is therefore important to categorize farmers not just in terms of their land holding, but also in terms of the types of rubber they grow, and on the extent to which they rely on rubber as primary, secondary, or extra income generating source.

Again, individuals who participated in household surveys were unwilling to divulge information about their total household incomes, and therefore we can only use a number of "indirect" measures to assess the socio-economic status of the villages and individual households. We present estimated costs and income of wild and high-yielding rubber to estimate the income of rubber farmers. We also let the village heads ranked socio-economic status of different households within their individual villages.

Rubber is a perennial crop which takes approximately six or seven years before it can be harvested. The start-up cost for rubber is relatively high especially if one includes in the cost of land, and if it is a high-yielding species. At the initial six years, farmers hire labor to clean, graft and nurture the nurseries. A majority of costs are spent on hiring labor, and on seeds, fertilizers, and weed killing spray. The total investment cost of high yielding varieties is estimated to be between 1,000 to 2,000 dollars (excluding the cost of land) per acre. It is far cheaper to plant wild or natural rubber which does not require much care or fertilizer. These initial six years are the most challenging times as farmers have rely on other incomes for survival as well as for investment in rubber. Small and medium farmers who rely on rubber as their main source of income have struggled due to high start-up cost, and lack of institutional and technical support. The majority of rubber cultivators identified "quality control" as a major challenge to their livelihood. The seeds and fertilizer they bought were not certified by the government, nor insured by companies, and the quality and purity of seeds are not known until 6-7 years after the seeds have been planted.

Once rubber matures and is harvested, it not only brings a steady stream of income, which can last for two or three generations, but also significantly reduces expenses. Initial investment cost can be recouped within a couple of years. It is estimated that rubber generates a maximum of 1-2 laks per acre per month, or about 7-14 lakhs for 7 months. Rubber harvesting is halted during the rainy season which is between May and October

Table 2 Comparison of estimated cost and revenues of traditional and high-yielding crops (in Kyat per acre)

Cost Items	Traditional	High- Yielding	High -yielding
	Hnin Soke, Ye	Wei Paung, Ye	Thaton
Cost of land	-	3,000,000	3,000,000
Total cost for clearing land			373,720
Total maintenance costs for the initial six years	500,000	1,078,000	900,000
Other costs (for harvesting)		298,000 (labor) 353,000 (materials)	582,000 637,030
Total costs for the initial six years (excluding the cost of land)	500,000	1,729,000	2,492,750
Production	6 lbs per day, 25 days, x 6 months	20 lb per day, 25 days x 6 months	12 lb per day, 30 days x 6 months
Price	600 kyats	600 kyats/lb	800 kyats/lb
Expected gross income for the first harvesting year	250,000	1,800,000	1,728,000

Table 3 Estimated income for the eighth and ninth year (Thaton Township)/ Per acre for high yielding

Harvesting	Total income	Net income
528,000 (labor)	1,728,000	1,200,000 (maximum)
		(

Thus it can be concluded that the income of a rubber farmer who own one acre of rubberproducing land earns between 1,000,000 and 1200,000 kyats per year. In Mon state, the self-ranked categories that describe what constitute poor, middle, and rich families vary from village to village (See Annex 6 for Self-ranked socio-economic status in Northern and Southern Mon State). They range from the amount of lands possessed by households, to the ability to donate to social and religious occasions, to the types of housing and possessions.

Generally speaking, landless and daily wage laborers are considered the poorest members of the village. According to our survey of households which hired labor, daily wagers are paid between 3500-5000 kyats per day. Included in this category of "poor" households are also those with a small acres of rubber land (mostly wild rubber and between 1-5 acres), those who use family labor, or have many dependent members (FGD and informal conversation with key informants). Researchers also observed that all four villages they visited in Mudon township and 2 villages in Thadon township (2 villages) seem to have majority households with "decent" or "comfortable" life style by the local standard. Only Inn shay and Inn Wine seem to have a large proportion of poor (landless people) residents. The "medium" households are those who own between 6-10 acres of rubber-producing land. Those who own over 20 acres are considered rich or wealthy families by the local standard.

Relationship between Rubber and Paddy

Although further research is needed to assess the relationship between rubber and paddy cultivations, the expansion of rubber acres seems to be directly correlated with the decline in paddy cultivated acres, which has traditionally constituted the largest cultivated acres in Mon state. The official Statistical Yearbook indicates that paddy cultivated acres has declined gradually since 2007. There is no reliable and accurate data on paddy and rubber cultivated areas, but the Minister of Agriculture and Irrigation in Mon state casually remarked that paddy planted acres was 10,000,000 before 2010, and declined to 880,000 in 2011, and 750,000 in 2012.

Table 4 Sown acreage of major crops in Mon State

	Paddy	Rubber	Beatle nut	Fruits	Coconut	
2000-2001	774,635	194,268	22,736	88,529	9820	
2006-2007	1,105,730	311,251	54,386	100,440	10,625	

Source: Statistical Yearbook 2007

Table 5 Paddy and Rubber cultivated land in Mon State (2004-2011)

	Paddy Cultivated Land in Mon State							
2004-	2005-	2006-	2007-	2008-	2009-	2010-		
2005	2006	2007	2008	2009	2010	2011		
761750	932509	1105730	1047355	1017082	1016750	1007164		
Rubber	Rubber Cultivated Land in Mon State							
2004-	2005-	2006-	2007-	2008-	2009-	2010-		
2005	2006	2007	2008	2009	2010	2011		
245805	268243	311251	379765	407879	423692	451725		

Source: Statistical Yearbook 2007

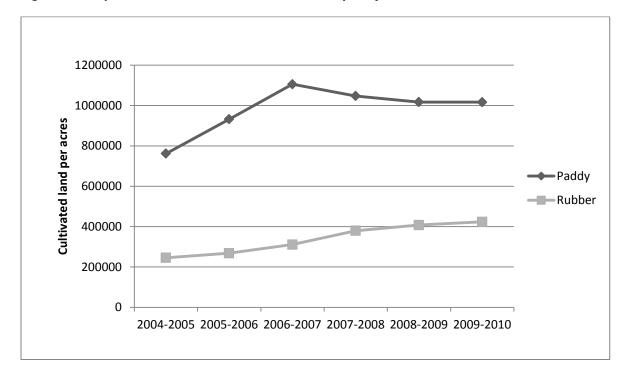


Figure 4 Comparison of rubber cultivated land and paddy¹⁷

Paddy farming has increasingly become a failing business in the region over the past few years due to low productivity and quality, increased costs, weak institutional and official support, and most recently, extreme weather. The team has come across many farmers who have either abandoned paddy lands or switched to other crops, including rubber. Three farmers from Wei Nut, Ye township, who lost thirty acres of their paddy field to Myanmar army (Ta Ma 33) in the 2000s expressed that they have lost their will and desire to go through excessive bureaucratic process to regain their now "worthless" paddy lands, which are now abandoned by the army after the land has been flooded for the past 10 years. The chart below shows a sheer loss experienced by farmers who were hard hit by extreme (drought) last year.

	Expenses	Income
Field preparation	20,000	-

¹⁷ Sources: Statistical Yearbook 2012: The Government of the Union of Myanmar: Ministry of National Planning and Economic Development, Central Statistical Organization, NayPyitaw, Myanmar.

Seeds (one basket)	5,000	-
Tillage	24,000	-
Transplantation (excluding food)	72,000	-
Fertilizer (one bag)	17,000	-
Pesticide	2,500	-
Harvesting (excluding food)	32,000	-
Total expenses	172,000	-
Total income		100,000
20 Baskets x 5000 kyats per basket		
Total loss per acre	72,500 ¹⁸	-

While climate changes is a global phenomenon caused by a multitude of reasons, a few forestry officials in Mon state and Yangon have attributed this vagarious and extreme weather to excessive use of weed spray in rubber plantation, which uprooted bushes and other trees, and thereby eroding soil, shallowing streams and inundating rice fields. They argue that rubber by nature has a high rate of water consumption but a high rate of evaporation. In addition, a higher profit margin from rubber investment increases the cost of labor (about 6,500 kyats per day in the South), which also increase input cost for paddy. Despite repeated loss, there are a few areas that still preserve paddy farming (especially in the North) either because residents believe paddy will turn profitable in the future or as a strategy to diversify income. Some in fact allow tenant to farm their lands free of charge in order to preserve the soil.

A comparison of the input costs and income generated by rubber and paddy in above table reveal that households that rely on small-scale rubber production are generally economically better-off compared to their counterparts who grow rice. In addition, the study finds discernible differences in income and socioeconomic status between Mon villages and Karen villages, between farmers who grow high-yielding or "budding/grafting" plants and those who grow wild rubber, and between villages in Mudon township and Thaton township.

¹⁸ The loss vary from 65,800 kyats in Taung Pa Lu (based on 15 baskets per acre), to 8000 kyats in Lamaine (based on 30 baskets per acre)

It is observed that most of the Karen villages in Southern and Northern Mon state tend to rely

Daw Tin Lay Yi: A Paddy Farmer from Wei Kamei

Daw Tin Lay Yi and her husband used to own eight acres of "natural" rubber farm and 9 acres of rice field to support their family of eight. The rubber plants were only five years old when they had to sell them off in 2006 to pay for the debts incurred by their son's drug addiction and for the medical bills accumulated by the husband's illness. Since then, paddy production and productivity began to decline due to water shortage in the higher elevated areas and flooding in the low-lying fields. Paddy productivity has reduced from 40-45 baskets to 30 baskets per acre. They started planting sugar cane in place of paddy over the past 4-5 years. Three years ago, they abandoned 3 acres of their rice field because of increased input cost, decline in paddy price, and flood in the lower areas. Currently they are working on 6 acre rice field and produce a total of 180 paddy baskets and have lost interest in planting paddy. Daw Tin lay Yi is suffering from eye cataract and her husband's health has declined. She cannot sell produce as she used to. One of her sons is working as a wage laborer by harvesting rubber latex to help out with their financial difficulties.

mainly on paddy rather than rubber, plant natural rather than highyielding plants, rely on organic rather than chemical fertilizer, and depend on a wide variety of crops for income. They seemed to lag behind Mon villages in terms of adoption of new technology as well as in socioeconomic status. Mon villages' relatively better economic status is observed through their daily or weekly donation and contribution to the monks and monasteries, building of new pagodas (7,000 lakhs or 700,000 USD), and celebration of costly cremation ceremonies for monks (estimated cost about 200,000 USD per ceremony). The majority of Mon residents in Mon villages or in mixed ethnic villages seem to have decent housing (often Thai style architecture) by local standard and possess motor cycles and televisions. The existing socioeconomic and cultural practices of Karen residents are under threat as Karen villagers sold off their lands to Mon rubber planters and retreated to the hills.

Inn Waing Gyi, a small Karen village with a total 170 households and 1,821 populations in Thaton township, offers an example of a Karen village in Mon state which may no longer survive on traditional livelihood and ways of live. It has a predominantly Sgaw Karen Buddhist who rely on paddy as their main source of income. It is one of the poorest villages visited by the research team. Houses are built with basic and simple materials such as thatch and bamboo that are available within the environment. Most of the residents cannot speak Burmese. The majority of the households own an average of 5 acres of rice field located near the village, and some of them plant paddy in other villages. They grow only one crop per year. Bad weather last year destroyed their crops, cutting the productivity from 70 to 30 baskets per acre. Paddy is no longer making profit for these villagers who have traditionally relied on this crop for their survival.

Some of the landless villagers are also employed at a nearby largescale rubber plantation owned by a wealthy rubber land owner in the town. Approximately 20 households started growing rubber in 2003. Each of them holds between 5 to 15 acres of rubber plantation. Yet they can only grow wild rubber plants using nonsystematic ways (planting too many rubber trees per plot, sapping the juice before the trees are ready). Out of desperation, some of the villagers plant rubber by the paddy fields.

Land Tenure Insecurity: Status, Trends and Drivers

Land Use Title

Until recently, many farmers in areas occupied by Burma's minority groups do not have land use titles because of lack of awareness and knowledge about the need and procedures to obtain land titles, or because they "illegally" obtained these lands by clearing the lands designated as reserved or protected forest, or because they were cultivating outside the control of the government and/or practiced traditional practices (such as rotational agriculture) that were not recognized by the government. One study estimated in June 2013 that 85% of farmers in the country lacked valid paperwork for their land.19 The situation in Mon state reflects this general trend.

The government has launched an initiative to facilitate the process for registering land titles as part of its effort to implement the new land laws, and to promote the role of private sector in agriculture sector. Land use rights are to be managed by Farmland Management Body (FMB) at Village/Ward, Township, State and Central levels, and registered by the Settlement and Land Records Department (SLRD). The Minister of MoAI is the chairperson; Deputy Minister of MoAI is deputy chairperson; the Director General of SLRD is the secretary and the structure is replicated at the State/Region levels and below. Individuals with claims to land must submit to their Township's SLRD for a Land Use Certificate (LUC) and pay a fee to register their land should the SLRD decide in their favour.20

A Farmland Management Committee at the village level is made up of village tract administrator (chairman), community leader chosen by the villagers, agriculture and Irrigation official, settlement and land record official (secretary), and village tract clerk. Individuals are required to submit their application along with proofs (such as land tax receipts) that they have worked on the lands. A land record official then comes to survey the land, puts up a notice board for 30 days for potential competing claimants, and submits his/her recommendations to the next township level. The process could take a minimum of 3 months and up to one year before the land title is issued. If the ownership to land is contested or objected by others, village leaders must form committee to evaluate competing claims and attempt to settle dispute.

The Central Committee for the Management of Vacant, Fallow, and Virgin lands (CCVFV 2012) is also formed at Village Ward, township, state and Central levels to grant and monitor the use of Vacant, Fallow, and Virgin lands. Here the Minister of MoAI is appointed as a Chairperson with the Director General of the SLRD serving as the Secretary. The CCVFC allow farmers to apply for legal recognition of their existing use of VFC land. The VFC law allows leases of State

¹⁹ HURFOM, 36-37. Disputed Territory: *Mon farmers' fight against unjust land acquisition and barriers to their progress*, 2013.

²⁰ Robert Obendorf, Legal Review of Recetly Enacted Farmland Law and Vacant, Fallow and Virgin Lands Management Law, Food Seucirty working Group's Land Core core, November 2012.

land, up to 5,000 acres at any one time and a cumulative maximum of 50,000 acres, for a period of 30 years (Obendorf 2012, 22).

Those who encroach on "reserved forest land" fall under the jurisdiction of the Forestry department (Forest Law 1992). The Community Forestry Instructions grant a nonrenewable thirty-year tenure guarantee for Forest User.21 The process involves hearing of two witnesses by village leaders. Applicants are fined 5,000 kyats per acre (plus tea money) for violation and required to pay an annual land tax of 500 kyats per acre once the title is granted. The application however should be submitted before September 2011 to be eligible for the use of forests. Other categories of forest land include "protected public forest land," or areas of forestland intended primarily for conservation purposes (Forest Law 1992 and the Protection of Wildlife and Conservation of Natural Areas law 1994), and "public forest land," which also falls within the definition of "virgin land" under the VFV law. The Central Committee for the Management of Vacant, Fallow and Virgin lands may make a request from the Ministry of Environmental Conservation and forestry (MoECaF) that these lands be used for state economic development under the VFC law (Obendorf 2012, 8).

The Union Government set up a deadline to complete the registration of land titles by March 2014, but is unlikely to do so because of lack of human and financial capacities is a major concern. State level authorities remarked that only 11.7% (or a total of 27,000 acres) of the needed registration is completed at the time of the research due to lack of human resources. Only one land record official is reportedly available to take care of 4 villages. Officials were trying to hire additional staff to speed up the registration process. Registration is supposed to be free of charge, but in reality government officials charge small fees for their time and labor. The fees may range from 6,000 to 30,000 kyats per acre or per application, creating further hurdles for financially struggling farmers.

The land registration process, which began in lands located by the main roads and gradually moved to the remote areas, has been carried out in most of the villages where the study was conducted. Almost all the villages in we visited in four townships seemed to have formed the Farmland Management Body and have been visited by the SLRD to measure the land. Some residents were in the process of applying for the land use rights. Informal conversation with key informants and household respondents indicated that most residents do not know about the Farmland law in 2012. Respondents however said that they were told that they can now "own" the land, unlike the practices under the previous regime where they could only "lease" the land (Kaw Ka bon, Mudon), or that they had to fill out "form 7." A few individuals in Thaton Township seemed to fully understand the new law or mentioned that they could now sell and buy their land. Some were under the impression that they would get back their land that have been taken. About one third of the residents in Than Pyu Zayat seemed to know about the law. In Wei Paung, residents were either uninterested or remained skeptical about the government's intent

²¹ Under the Forest Law of 1992, "reserved forest land" is considered a protected class of forestland that is intended primarily for the production of forest products. It may be used for various types of local village production or Community Forestry. Obendorf, 7.

and the new law. In most villages, there seemed to be a gap of knowledge between the betteroff and more progressive households and the rest of the villagers.

Respondents who agreed to be interviewed are grouped into one (or more) of following categories (A) those with land titles, (B) those with land tax receipts and have applied for land title registration (C) those with land tax receipts and have not applied for land title registration (D) those encroached on "unauthorized" (e.g. reserved forest land) lands but were in the process of applying for land holding titles (E) those encroached on authorized but unregistered lands (farmland, virgin, vacant, and fallow land) (F) those holding land use titles in areas controlled by non-government armed groups, and (G) those who hold paper agreements on informal land transaction. It should be noted, however, that these simplified categories are used as a way to shed light on the general status and situations of farmers rather than as an exhaustive and complete list.

Land tax receipts

Farmers who live under government-controlled areas plant paddy and other crops (including rubber) on officially designated lands pay annual land tax and have land tax receipts. They pay between 200-500 kyats per acre per year depending on the types of soil which are categorized as R1, R2, etc (the best soil is R1). Official rate for R1 grade soil is 3.75 kyats per month (only 50 kyats per year). In practice, however, most people pay between 500-700 kyats per acre per year for the land tax. They money is collected by a village tract leader who gives to SLRD official. A few of them have land use titles, but most of them do not. Those who have tax receipts can use them as a prove to apply for the land use titles. Some of them have applied for land use rights during the time of the research. They can out form 7, have their lands measured and assessed by the township SLRD and worked the Farmland Management Body. However, the SLRD lacked human and financial resource and have not been able to carry out their tasks as efficiently and quickly. They were also unable and unwilling to enter insecured areas.

30 years forest grant

It is issued for the right to cultivate in "reserve forest land", and managed by the Forestry department. Officially farmers pay a tax to the forestry department at a rate of 500 kyats per year (which could amount to 3000 kyats in practice). The contract requires that farmers must replant 40 hard wood trees after their usage. Rubbers are mainly grown in reserve forest land. Those working on forest land are concerned that there is no guarantee that their lease will be extended after their 30 years grant expires. Most people working on reserve forest land do not have the use grant. The deadline for applying for Forest User's Grant however was already passed in September 2011 (interview with Forest Department Thaton township officer).

Informal Agreement

Informal agreement between buyer and seller of the sale of land under which land use title is now transferred to the new owner and kept at the village tract administrator's office. However, the old owner still holds title on the official paper above the village tract level. Researchers also come across share croppers who were selling among each other share-cropping rights, but it is not clear how widespread this practice is. Holders of informal sale agreements are less secured.

Land certificate holders

Those who hold land use certificates or Forest users' Lease and are most secured.

KNU/NMSP grant

Residents who live under the KNU/NMSP controlled areas or under competing authorities fall under this category. They hold land and crop tax receipts issued to them by the KNU or NMSP. In Wea Ka Mei, KNU prohibits residents from selling the land to outsiders. The Mon residents tried to work around this restriction by co-owning the land with natives from whom they bought the land.

Residents living under the MNSP- controlled areas in Wai Paung can obtain land use titles from the MNSP by paying 5,000 kyat. They also pay 30 kyats per plant to MNSP as a form of tax. A land sale worth less than 50 lakhs can be concluded through local community leaders. The MNSP authorities should get involved if the value of the transaction exceeds 50 lakh (see more details in a section under stake holders)

Land use titles granted by the KNU and the NMSP are not recognized by the government. In addition, taxes can be heavy. For instance, the KNU imposed crops tax on rubber planters in Ye Ta Gong at 500,000 per acre. One respondent said he had to pay to KNU a total of 70 lakhs per year for his 13 acres of land.

Most people do not have land use titles issued by the government, but the majority people who live under the government-controlled areas the team met seemed to have land tax receipts and were in the process of applying for official land use titles. For instance, only 8 out of 209 households surveyed had land use titles while 114 households were applying for land use rights as of August 2013. Although our survey on four townships shows no substantial differences between the percentages of paddy or rubber farmers who applied for land use rights, the state-level authorities commented that rubber cultivators, who tend to be more progressive and proactive, have made up a predominant proportion of those who have applied for land use rights. The survey below shows that fewer percentages of people in Northern Mon state are applying for land use titles.

Those who remain under the control of armed groups (MNSP, KNU) have tax receipts and land use titles issued by these armed groups. None of those living under the MNSP- controlled areas were applying for land title at the time of the research. None of the households surveyed in Northern townships have land holding titles during the time of the research. Eight of the 66 households surveyed in Southern townships have land holding titles by the government. Sixty seven respondents said they were not unaware of the new land laws. The research team has also come across a few individuals who refused to register their lands, either because they lack trust in the system or they thought the cost (processing fees, penalty, or taxation) would outweigh the benefits. The research team did not come across any mention of customary

practices or communal holdings by respondents, although such practices may have existed among Karen villagers, who tend to practice shifting/rotational cultivation, which involves the clearing of forests to regenerate for 10 to 12 years before re-cultivation.22 The study team, however, uncovered widespread practices of the informal exchange of unregistered lands among cultivators in the areas. About 14% of the households surveyed (fifty eight out of 209 households) hold unofficial or informal documents on the sale/transfer agreement between two parties, which usually involves the sale by a person who does not have land titles, but holds land tax receipts or inherits the land. These practices occur in government-controlled areas as well as areas under overlapped authorities. For instance, the KNU's policy to prohibit the sale of land to outsiders has resulted in the emergence of "joint-land ownership" between local residents and outsiders. In Wea Kha Mi village, Than Pyu Zayat township, there are reportedly a handful of Mon nationals from Than Pyu Zayat town who own over 40 acres through "co-ownership" with natives to get around the KNU prohibition against the sale of land to outsiders.

	Mudon	Thaton	Than Phyu Zayat	Ye	Total
Total numbers of households	64	39	58	48	209
Land Tax Receipt	50	33	46	27	156
Informal Land Transfer	5	1	23	28	57
Agreement					
30 years Lease from Forest	13	6	1	1	21
Government issued title holders	0	0	4	4	8
land registration still in process	21	5	40	27	114
NMSP issued title	0	0	0	11	11

Table 7 Land holding status in four townships visited by the study team (as of August 2013)

²² USAID, USAID Country Profile: Property Rights and Resource Governance, Burma, 13.

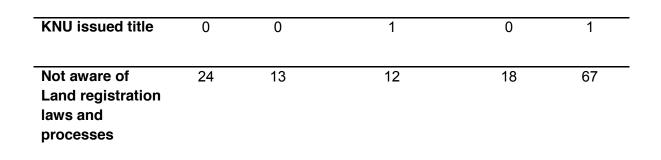
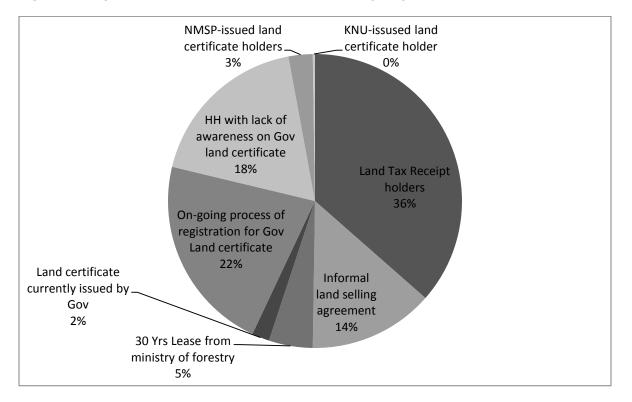


Figure 5 Composition of different land certificate hold by respondent households



Threats to Land Tenure Security

The loss of lands by small-scale holders has predominantly been attributed to land confiscation by the military, the government, large-scale private enterprises, and individual private citizens. Very little attention, however, has been paid to land loss due to failing businesses, lack of loan and infrastructures, market pressure, and indebtedness and poverty. This section briefly sheds light on different types of land acquisition by various actors, a topic which has already been covered extensively and therefore will not be dealt in great length here, and identifies other root causes that pose a threat to land tenure security of small holders in Mon state.

Land grabbing by military, Government Ministries, Private individuals

Rights groups and activists have already documented a massive number of cases of "land grabbing" by military, government ministries, large corporations, and wealthy land owners. Land has typically been acquired to expand urban areas, build industrial zones, expand or establish military sites, carry out state projects, build state-owned factories or provide land to private companies for agriculture or livestock projects (Obendorf 2012). The majority cases of reported land confiscations in Mon state were attributed to the growing deployment of Burmese military battalions after the military signed ceasefire agreements with the major Mon armed resistance group in 1995. The Human Rights Foundation of Mon Land, for instance, reported that during the first five years after the 1995 ceasefire in Mon State, for instance, the Burmese army has reportedly confiscated over 7,780 acres of land from over 370 farmers in Mon State and Southern Burma, with the majority cases reported in Ye township in Southern Mon (The Human Rights Foundation of Mon land "No Land To Farm," 2003; 2013). Until recently, lands in Mon state remained relatively untouched by large- scale agricultural enterprises and continued to be operated by small and medium holders unlike those in Kachin and Tanintharyi which were operated by large holders and accounted for the largest share of lands granted (out of a total of 1.7 million acres given to 216 private businesses) to the large-scale agricultural businesses by 2010.23

We have come across a number of land confiscations especially in the southern part of Mon state. In villages we visited in Mudon, no such cases were reported.

Residents from Thaton township Northern Mon remarked that land grabbing by the army, or the Ministry of Industry, were more common in pre-2010 period, and that new land grabbing cases were almost unheard of in post-2010 periods. InShay, Thaton is a Karen Buddhist village of approximately 185 households. The team members observed that the village has very limited lands, and surrounde by army, Industry II, and Ministry of Agriculture and Irrigation. Respondents from HH survey and FGD seemed to indicate that land grabbings occurred several times in their areas in pre-2010 periods. Participants mentioned that the Ministry of Agriculture took 3000-4000 acres (which may have been a "vacant" land in the official map and worked by local residents) in 1985-86 and planted cashew nuts. The land was reportedly later transferred to Industry 2, which also sold some of them to large private companies. These villagers are now employed as daily laborers for the rubber plantations owned by the Ministry of Industry 2 or private companies. (FGD)

Again in 2000, the Myanmar army confiscated 1,000 acres of land, including those occupied by 10 farmers. These villagers went to see military officials, and half of them got back their lands. Our research team has come across one of these affected individuals through the household survey, who recounted that the army first took one acre of his rubber (2009), and another acre in (2010). He said he has land tax receipts on these confiscated lands.

²³Housing, Land and Property Rights in Burma, 2009, 32, 33.

The Myanmar army (Infantry 1) took over reserved forest land worked by local residents in Danu village, Thaton township in 2010. Some of them reportedly do not have land use titles. The research team has come across one affected individual during the household survey. He mentioned losing 5 out of 15 acres which are under 30 years Forest User's lease. He has been working there for 16 years. He and others approached the forest officials to address their grievances (HOUSEHOLD level survey). Another respondent in the household survey also mentioned that 6 acres of his land (3.5 acres are under Forest User's Grant and 3 acres has land tax receipts). Villagers went to meet township authorities. These cases are still pending. (confirmed by SLRD Thaton township officer)

Another trend that is emerging is the buying and confiscation of lands by individuals or businesses although we do not know how widespread this practice is. A heath care worker who was visiting Hagan village told the researchers that 1,000 acres of land in 9 miles village was taken by three people in Mu Don. It is a reserve forest land worked by local residents who were challenging this acquisition and were trying to get back their land through a village tract leader (who is a school teacher).

In Set Sei, Than Pyu ZaYat township, (household survey) the Ministry of labor took 25.27 acres (beachfront) from 7 owners to build a camp for Model students (Luu Yin Chun) in the 1980s. However, the project was abandoned and the 6/7 of the original occupants went back to resume planting paddy (presumably with no land use rights nor land tax receipts). Among them were reportedly one who got land use right (given by previous village tract owner). In 2013, the Ministry of Labor came back to put territorial demarcation to sell back to companies that wish to build hotels.

Again in Set Sei, Ahnawar Theikpan (Department of the Marine Biology, Ministry of education) took 83.15 acres of land in 1990 and built buildings that remained empty. It also employed a person who originally occupied the land as a lab assistant (who was interviewed during Household survey). The Ministry of Educated was now making a move to take 20 acres more which would include his existing paddy land. Farmers whose lands will be affected argued that the Ministry of Education still has vacant land from its previous acquisition. They approached their village tract leader to complain. Researchers felt that these individuals may not have land use rights

Researchers also had a chance to interview an activist working on land disputes in Ye township, who was helping the following case that took place in Kyun Paw village, Ye township.

In 2000, KA MA YA (568) took over 341.3 acres worth of land (50,000 rubber plants) worked by 39 individuals. Included in these lands were income-generating plants such as lime trees and betal nuts. Occupants were not notified in advance. Army flags were hoisted and occupants were kicked out when they went to work their lands. They were not given any financial compensation. They were summoned at a meeting and was told to sign agreement for share-cropping arrangement. Later their signatures were reportedly put under the statement that said that they agreed to give up their lands.

Among these affected individuals was U Tin Oo who lost 36.63 acres. After 24 acres was taken, he was asked to sign the statement that said that his remaining 12.63 acres were "vacant" lands. He claimed that all these lands were inherited from his parents, who paid regularly land tax under 30 years lease. Since the army took over in 2000, SLRD discontinued collecting taxes from the previous occupants. It appeared that the army worked with SLRD to register these lands as "vacant" to enable the army to confiscate the land and make original occupants share croppers. As a sharecropper, his share of payment has increased to 1500 from 800 kyats per plant, and therefore he ended up paying 6,000,000 kyats to the army for 4300 rubber plants he has tended. In addition, he has to bribe army to enter rubber plantations in "prohibited" or "insecure" areas.

His brother has to go to Thailand to work, and his children have to quit school because these financial stresses. U Lwin, a human rights activist from Ye, appealed to Se General Min Aung haling on behalf of 87 people whose lands have been taken. On july 16, 2013 Du Bo gyoke Way lwin sent a word that the army would return occupied lands back to original owners. They were living with hope as of August 2013.

Lack of Land holding titles and other proofs as occupant of the land

A second category of small holders who are facing imminent threat of losing their lands are those who do not have land holding titles or land tax receipts. While majority who have land tax are in the process of obtaining them, there seems to be a few who continue to till the lands on reserved forest land or protected public forest land, fully aware of the risks involved.

In fact, quite a few people who have lost their lands (see above section under Land grabbing by military, Government Ministries, Private individuals) do not seem to have land use rights or land tax receipts. For instance, six original occupants in Set Sei who lost their land to the Ministry of Labor and went back to harvest rubber in these lands do not have the legal documents nor the land tax receipts.

In addition, researchers were told by key informants that "many" residents in one of the villages in Northern Mon state, were cultivating in forest areas, but they still have not done anything to apply for a forest user certificate. It is unclear whether these areas of forest land fall under "reserved," "protected," or "public forest land." In one village in Northern Mon, some farmers reportedly planted rubbers in forests, while others converted their mangosteen acres into rubber plantations. Some of these farmers had applied for land use titles which were still in process. Most of their rubber plants are only 2-3 years old.

The rubber owners in one particular village in Northern Mon have continued to harvest rubber plantation which are now occupied by the military thinking that it was worth the risk. Others, such as Karen people in Mon state's remote and isolated areas, seemed unaware about the existing laws and regulations. We are unable to conclude whether these populations represent the general populations in Mon state.

The Land Acquisition Act (1894), which was continued to be applied in much of the forced displacement and land confiscation that has taken place since 1962, allows the state to acquire land for any public purpose (See Scott Leckie and Ezekiel Simperingham 2009).

It seems that much of these land confiscations that were carried under the Land Acquisition Act failed to follow the appropriate procedures, including the required notice to be given, procedures for allowing objections to acquisition, the market value analysis of land, the process for taking possession of land, court processes and appeals, procedures for the temporary occupation of land and the acquisition of land for corporations.24 Similar, if not extensive, procedures were attached to Culturable, Fallow Land and Waste Land Law, which was established in 1991 to allow the use of culturable land, fallow land and waste land for agriculture, livestock breeding, aquaculture enterprises or other economic development enterprises.25 Chapter 4 of the Duties and Rights of the Central Committee for the Management of Culturable land, Fallow Land and Waste Land (CFW), for instance, stipulates that the committee is responsible for working with the Settlements and Land Records Department to call for objection, which should be made within 30 days from the date of notification, and to carry out necessary enquiry on various matters including whether the land applied for is actually a culturable land, fallow land or a waste land.26

The research team has found that the military seemed to deploy deceptive strategies to achieve a facade of legitimacy to justify their actions. For instance, Kyun Paw villagers who lost their lands in 2000 to the army said that they were summoned at a meeting and were told to sign agreement for share-cropping arrangement. Later the signatures were put under the title which stated that they agreed to give up their lands.

The nature through which lands were confiscated can therefore be classified into the following categories; (1) land was seized in accordance with the existing laws (procedures and compensation), and confiscated lands were worked by occupants who have land use rights or proof of occupation (e.g. land tax receipts) (2) the confiscation of land was done in accordance with the existing laws, and the lands were worked by occupants who do not have land use titles nor land tax receipts (3) the procedures for the takeover of land was not done in accordance with the existing laws, and the lands were worked by occupants with land use rights or proof of occupation (4) the takeover of land was not done in accordance with the existing laws, and the lands were worked by occupants with the existing laws, and the lands were worked by occupants with land use rights or proof of occupation (4) the takeover of land was not done in accordance with the existing laws, and the lands were worked by occupants with the existing laws, and the lands were worked by occupants with land use rights or proof of occupation (4) the takeover of land was not done in accordance with the existing laws, and the lands were worked by occupants with the existing laws, and the lands were worked by occupants with no land use titles

Analysis of primary data collected during the research trip seems to support the findings of secondary sources about cases at the nation-wide level, combined with the rampant manner in

²⁴Ibid., Housing, land and Property Rights in Burma: The current legal Framework, edited by Scott Leckie and Ezekiel Simperingham, Displacement Solutions, HLP Institute, 2009, 23

²⁵ For perennial crops such as rubber, oil palm and coffee, the Committee could assign blocks of 5,000 acres. For orchard crops, smaller limits of 1,000 to 3,000 acres were established.

²⁶ Housing, Land and Property Rights in Burma, 2009, 610.

which land confiscation took place and the fact that very few people in ethnic areas possess land titles or proofs of occupation, show that scenario 3 and 4 (that is, lands were confiscated improperly from occupants who may or may not have the proofs of claim over the land) are the more common feature of land confiscation in Mon state. For instance, most residents from Da Nu, Thaton township, worked on forest lands with no proper legal documents when the army took over the land in 2010. One occupant in the same village, however, claimed he secured a 30 years lease by the Forestry department for a 15 acre plot of land on which he has been working for 16 years. In the summer of 2013, the army came to survey the land and took 5 acres of his land. Another resident in Ye township (see above case in Ye township) said he was asked by the army to sign his land as a "vacant" land.

Indebtedness due to High cost and Low Productivity (Paddy)

Another root cause of land tenure insecurity which has received less attention among policy and activists has been high input costs and low productivity in paddy, leading to abandonment and sale land in the areas. Almost all of the villages in Northern Mon state have a higher coverage of paddy acreage (except for Da Nu and Inn Shay villages). All of these villages have reported that there had been a decline in paddy productivity, production, and cultivated acres and but we are unable to obtain the accurate data on how much and what are the percentage of paddy acreage that have been abandoned or converted into other crops.

Much of the decline in paddy productivity and production has to do with high cost of input (particularly labor), flood, drought, and pest. Labor shortage is a major crisis in Mon state as many young and able Mon residents have left to work for Thailand, and despite the fact that estimated 25,000 migrant laborers from Irrawaddy and central dry land are currently working in Mon state. The majority of the laborers are from outside the Mon state (central Burma, Pegu Region, delta especially after the Nargis). Some reported deplorable situations among these 25,000 migrant workers (poor and lack of healthcare and education facilities; lack of health and safety standards regarding the handling of insecticide in rubber plantation and chemical and smoke in processing factories; widespread malaria). Others observed a better bargaining position held by migrant laborers in conflict areas and state-employed workers vi-sa-vi their respective employers in some locations. The amount of their earnings, the nature of labor arrangements, and relationships with employers vary across places. Regardless of the situation, daily wages are higher (between 3,000 to 6000 kyats per day) in Mon state, and have contributed to higher cost of paddy farming.

In Naing Hlon, Mudon, paddy farmers repeatedly experienced failure in wet rice paddy farming for the past 4 years. Paddy productivity has reportedly been reduced by half from 50 to 25 baskets per acre. Paddy productivity in Ta Kung Taing, Mudon in 2012 was reportedly 7 baskets per acre due to flood. Paddy farmers from Be Yan, Mudon, started seeing the decline in productivity a couple of years and mentioned that productivity of monsoon paddy has gone down to 25 baskets in 2012 because of pest. Paddy farmers from Inn Shay, Thaton, also reported that paddy productivity has been cut from 50 baskets per acre to 35 baskets in 2012. In Taung Hpa Lu, Than Pyu Zayat, paddy productivity was cut from 40 to 12 baskets per acre in

2012. In Wea Kha Mi, paddy failed largely because of scarcity of water (after 2000 they grow rubber) and pest. Half of the populations in Taung Bon, Ye, rely on paddy farm (half on rubber) and has been using their income from rubber to support paddy cultivation. Paddy farmers from Kawt Kha Pon, Mudon, who used to rely on double cropping can only plant one crop per year.

People reacted differently to the loss in paddy businesses. One thousand out of six thousand acres in Thaung Bon village are either abandoned or converted into rubber acres. Paddy farmers remarked that they wanted to sell their paddy fields, but no one was interested in buying them. In Naing Hlon, Mudon, hoping that paddy may one day turn profitable, some residents allowed others to plant paddy in their fields for free to maintain the soil. Taung Hpa Lu, Than Pyu Zayat villagers also reported that increasingly shallower stream has led to the flooding of low-lying rice fields and eventual abandonment of 733 acres paddy in the village. Farmers began leaving paddy fields to work in Thailand especially after 2005.

Indebtedness due to high investment cost and low prices

Two types of rubber farmers fall within this category. The first group belongs to those who became indebted in 2008 due to a steep decline in rubber prices associated with the world economic crisis. The second group of rubber farmers lost their lands because they are unable to pay for maintenance costs in the first six initial years. Comments from the FGD and key informants reveal that Aafew farmers in Taung Hpa Lu, Than Pyu Zayat reportedly lost their lands before the trees matured because of their inability to pay for inputs and maintenance. Some farmers who attempt to introduce high yielding rubber in their traditional rubber land cope with the high cost investment by incrementing adding high yielding rubbers on a segment of their land each year. Informal conversation with respondents also revealed that people in Southern Mon had to close down their rubber plantation and sent back their workers during the rubber price crisis in 2008. In addition, inability to pay for maintenance cost in the initial six years was reported to have been a major factor of the sale of rubber land among respondents in Set Sei, Kyaik Kamee. We are however unable to conclude whether this is a common phenomenon and can be generalized for other locations. A couple of respondents we met in Ye mentioned, however, that this is more common among medium or upper holding farmers (or 20 acres and above), who found themselves unable to manage a large tract of land and often had to sell of their lands piece by piece.

Rubbers can be planted naturally through seedling or through budding or grafting. The naturally grown rubbers are less productive, but they are more resistant and require very little care. Those who cannot afford to grow high yielding plants grow the traditional rubber. The high-yielding plant requires a higher application of chemical fertilizers, regular weeding, and extra care. During the period of its growth, planters take all the measures against pest and diseases. Manure and fertilizer are regularly added. Wild plants can be tapped only after 10 years, while grafting trees can be tapped by 7 years.

Statistics on the exact coverage of high yielding and naturally grown rubbers in the whole Mon state is not available. However, our key informants estimated high yielding plants to constitute

about 2/3 of all rubber plantations in South, but they are vary by townships, villages, and households

To offset the cost during the initial six years, farmers grow vegetables or paddy in between small nursery rubbers. Others plant pineapples, rambutan, durian, betel leaves in between young rubber, but this practice of intercropping is only used for the first initial three years. The growing size and height of rubber and its roots prevent other trees and plants from surviving. In addition to the high cost associated with high-yielding plants, farmers commented that it was difficult to obtain certified and pure seeds, whose results cannot be known after six years of investment. Rodent, new diseases, and poor quality of fertilizer are also listed as major challenges.

Rubber can be tapped only a total of 6-8 months out of the whole year. The rubber market is monopolized by Chinese traders and rubber export has mainly been China. The price of rubber has increased since 2009 (after hitting the bottom during the 2008 crisis), but gradually decreased by 2012. Residents expressed their concerns over the decline of rubber prices and the overdependence on Chinese market.

Myanmar rubber is exported as raw material. Myanmar farmers stand to gain from higher prices if raw materials are processed locally. Low grade quality rubber is reported to have been an issue, but the Chinese buyers did not seem to be bothered by these. Both small and large farmers produce the lowest quality either because the prices between high and low quality products are not substantial enough to compensate for the amount of efforts and time one put into processing better quality.27 Farmers/laborers mixed sand/grounded small black carbon sticks from battery into rubber sap to increase the weight and fetch higher prices.

Sustainability and Land tenure

Although rubber has improved many lives and has the potential to generate economic growth in Mon state, the sustainability of rubber economy is a subject that remains open to debate. Thus far, the Forestry department seems to be the only agency that expresses concern about the negative aspects associated with the growth and expansion of rubber cultivation. The Forestry department in Mon state commented that mono-cropping of rubber could lead to deforestation, loss of biodiversity, loss of wildlife's inhabitants, drying of underground water, and potential large destruction if struck by pest, wild fire, or bad weather (interview, Mon state, 2013).

There are some potential environmental threats posed by the expansion of rubber cultivation. First, except for initial three years of rubber cultivation, nothing can be grown in between rubber trees. Bushes and trees must be cleared out completely to allow nutrients to be absorbed by rubber. It is difficult to plant trees in between matured, tall, and grown rubber which can

²⁷ The price difference is 150 kyats per lb for every grade, and the price difference between the best and worst quality rubber is estimated to be 600 kyats per lb.

overshadow other plants and vegetations. Rubber plants are said to absorb relatively higher volume of water and have a higher evaporating rate, and their existence is associated with increased scarcity of water in the region.

Second, overdependence on rubber undermines food security since it makes the Mon economy highly vulnerable to fluctuation of world rubber prices and pest epidemics. Many rubber farmers from Mon/Karen villagers pointed out the year 2008 as an important year that witnessed price collapse and destruction of rubber economy and rubber farmers' lives in the region.

Third, rubber plantation is generally associated with wild fire, which is either deliberately set as a preemptive move against imminent wild fire or carried out in personal revenge/retaliation against plantation owners. The absence of bushes and other vegetations is also attributed to have encouraged the spread of fire.

Fourth, the use of uncertified high-yielding seeds (many of which were smuggled from Thailand) and fertilizers are also suspected to have led to emergence and spread of diseases that have never seen before and have destructive impacts on other plants and the environment. Respondents alleged that fertilizers that were banned in Vietnam are being "dumped" on Burma. Farmers were reportedly sold poor quality and impure fertilizer with delayed payment, under which they paid back with either rubber latex or money during the harvest time. The Rubber Producers Association in fact has been accused by some villagers of selling uncertified and impure fertilizers to rubber farmers. Those who are using high-yielding varieties also observed that the size of trees and cucumber were getting smaller and that some of the small rubber plants died after being affected by varying diseases. A family from Wai Thun Chaung, Than Pyu Zayat, for instance, experienced some "ice bite disease" as well as new diseases (apin pauk poe) that eventually killed rubber trees after 4 years of their existence. By then, it is difficult to replace these deceased trees because the rest of the trees are already grown. Residents started seeing these symptoms since 2006 and reported to have more frequent sighting of rotten roots, barks, and leaves. Rodents have posed a problem in some rubber plantations, but we do not have sufficient information or expertise to examine the relationship between rubber and rodents.

The use of weed-spray in rubber plantations and chemical waste released by processing factories are speculated to have polluted underground water, river, and streams and killed their inhabitants. Others expressed concern about lack of proper handling of chemical and hazarded products and of safety standard at rubber processing factories in Mon state.

Hnint Soke villagers from Ye township attributed the destruction of wildlife inhabitant and forest in their local areas to the expansion of rubber which replaced the forest. A few rubber planters in the South observed some environmental changes, including fewer bird species (as birds do not like rubber seeds), dead fishes in the stream, poisonous plants, and frequent flooding. They argue that weed-killing spray that are used to uproot bushes contaminated underground water, killed fishes, poisoned plants and polluted streams and rivers. Wea Kha Mi residents from Than Pyu Zayat reported that three people in their village died from eating mushrooms which they speculated to have been contaminated with weed killing spray. Another large-scale rubber owner commented that plants and fishes in the streams in the nearby Chinese rubber processing factories in Mudon town became extinct since the plants were built. One complained that noises of factories are load and waste materials are harmful for the environments. The handling of hazard product at rubber factories are also a concern. The smoking coming out of rubber smoking room (using rubber woods) is very much unhealthy for the workers may have developed congested issues. The USAID recently reported that water pollution in Myanmar has increased due to the drainage of water or chemicals used in mineral extraction; overuse of pesticides; industrialization; excess siltation from watershed erosion caused by logging, mining and large-scale agriculture, the dumping of industrial and human wastes and garbage, and arsenic contamination as a result of gold mining (USAID 2012, 23). There are a few exceptional practices and features in the region that deserve special attention and further exploration. One Karen resident in Naung Bo, Thaton township, is reported to grow a variety of perennial plants in between native wild rubber plants. Contrary to the conventional understanding that it is difficult to intercrop between matured rubber trees he claimed that durian trees are taller than rubber and can be grown in between them. Villagers here also grow Min gut (mangosteen) and Kyet Mauk (rambutan) (they produce 10 lakhs per year) to diversify risk, an existing practice which was reinforced by Nargis cyclone in 2008 that destroyed many crops in their areas.²⁸

²⁸ One native of Southern Mon noted that MinGut, Durians, and Pomelo are too big to intercrop among Rubber. He considers betal leaves and banana as suitable plants that can be grown between rubber plants. Accordingly banana leaves produces moisture and water for rubber plants.

Su Mar: A Small-holding rubber farmer in Wea Kha Mi, Than Phyu Zayat

Su Mar, 25, is ethnic Burman, living among predominantly Sgaw Karen populations in Wea Kha Mi (WKM) village. The village is located on Than Pyu Za Ya-Ye road, and it is 17 miles from Than Pyu Za Ya. Most villagers are Karen Buddhists She originally migrated with her parents from Irrawaddy. Her mother passed away last year and her father went back to their native land to be employed as a daily wager. She was employed as daily-wager in a nearby rubber plantation. Although her wage, which is 2500 to 3000 kyats per day, is lower than a wage earned by men, which are about 4000 kyats per day, it is 1000-1500 kyats higher than what she would be earning in Irrawaddy.

She has remained in WKM with her husband, a son and daughter and her two sisters. Her husband is a man of Indian descent who can speak both Karen and Burmese. Her husband's grandparents came from India during the British colonial period, but decided to stay in WKM village when many of their counterparts returned to India after Burma gained independence. They inherited the land cleared by his grandparents. There were 500 rubber plants. They cut down 300 of them and replanted 500 new plants over the past 3 years. She relied on professionals to graft or bud the trees paying 50 kyats per tree, without knowing the types of seeds they were using. They try to manage the plantation on their own, but it has been overwhelming and they can only clear their plantation twice per year, and unable to eliminate rodents. They had to hire professional to kill rodents for 5000 kyats per head. In addition, 10% or 50-60 out of 500 new plants died so they had to replant them. They also spend 15,000 kyats for weed killing spray which is imported from Thailand whose label and instruction were written in Thai scripts they don't understand, but used by the whole village. She added "we dare not eat mushrooms grown in our plantation this month, because we just sprayed weed killing spray in our land." Due to financial constraints, they rely only on organic fertilizer, which they saw putting them at a disadvantage.

However, they admitted that their living standards have improved: In 2008, when rubber price went down to 200 kyats per pound, they did not get into debt because they still produced 3-4 sheets per day (each sheet weighing 5 lb) from their existing traditional rubber plants. Now they are mainly relying on the old 200 plants and produce only 2 sheets per day and do not have extra money. During the 3 months' slack rainy season, they had to borrow money from friends with 6 percent per month interest rate or free of charge from rubber buying center. They repay their debts during the harvesting. The buying center does not charge them interest as long as they regularly sell the latex to them. They cannot finish building their house, and have to cut down on their spending on social ceremonies during monsoon period.

She said, "we are so concerned something would happen to rubber market . The village community pitched in whenever they needed help. They do not have any documents that show that they have the rights to work on the land they occupy now. The government land record officials visited their village to offer them to help with land survey and registration, but they are afraid to approach them even though they wanted to register their title, because "we don't have money." She continued, "we tried to attend all the village meetings, but we may have been at the field during the time when they called a meeting on land registration. We heard from others that it would cost about 80,000 kyats to register the land. We do not have money in hand. We do not know anything about the current land laws nor our rights as farmers. We rarely talked to village tract administrator. We do not know how to earn a living other than growing rubber and we are not growing anything other than rubber."One of her two sisters was attending 8th grade and eligible for "free private tuition" as an "orphan". Her other 9 years old sister is a polio patient and cannot speak nor hear. She now goes to kindergarten in the village for free of charge.

U Aye: A small rubber landholder

In the past 20 years, U Aye (pseudonym) bought "Inn" land to grow rice and betel nuts. He used to produce 105 baskets per acre. Over the past 4 years, paddy productivity went down to 30 baskets per acre. He cannot pay for harvesters/nor transplanters. The paddy price has also gone down. He now only broadcasts the seeds. The price of betel nuts has also gone down.

The growing adoption of rubber as "white gold" influenced him to cut down all but 20 betel nuts trees. He started growing rubber in 2010 buying high- yielding plants from others for 500 kyats per plant. He planted about 400 plants. He had to replant those that were destroyed by rodents and rats and nourished them with fertilizer to catch up with the older plants. He left a bunch of hair at the entrance of rats and rodents' tunnels underneath the ground to prevent them from destroying the trees. He used both chemical and organic fertilizer to feed rubber plants. He had to clear the rubber garden two times a year. He used weed killing spray. His plants are only 3 years old.

To pay for these costs, he opened a betel nuts buying center at his home to collect betel nuts and sell them back for higher profit in town. He also gets assistance from his son who is working in Thailand and other children. He keeps hoping for the return of "white gold" in 4-5 years.

The rise of land prices

Land prices in Mon state (and across the nation) have risen exponentially (particularly those that are located near major roads) due to sheer speculation, scarcity of land, relatively higher profit margins from rubber, legalization of sale and transfer of land, anticipated flow of foreign direct investment and valuable mineral resources that are lying under the land in Mon state. The spike in land prices due to speculation is a growing phenomenon in Burma that could deter foreign investment in Myanmar's land market, but could also lead to an "epidemic of land confiscations."29 Mon State is expected to play a larger strategic and economic role once a deep-sea port and special economic zone (SEZ) in Dawei Township in the neighboring, Region is completed. A Thai company is reportedly exploring the possibility of developing another deep-sea port on Kalargote Island, which lies between the Mon townships of Ye and Moulmein.

Local and foreign businesses, particularly the Thais and South Koreans, are now vying the Mon state for potential investments in cement plants, entertainment, property, service, and infrastructural developments, and development of industrial zones. There still are reservations and concerns about government corruptions and political instability, but land prices are expected to increase especially after a road between the townships of Than Pyu Zayat and Dawei and the construction of a 230-megawatt power plant in the Mon State capital are completed.30 The possibility that some areas of Mon state (Thaton) may be sitting on top of valuable gold mines also contributed to the rise in land prices. Many small scale local

²⁹ USAID, Property Rights and Resource Governance: Burma, 5.

³⁰ Lawi Weng, "The Cusp of FDI boom, Mon state strill struggling to lure investors" Irrawaddy, September 17, 2013

businesses were extracting gold in Be Lin area during the time the research was conducted. A large scale rubber owner in Thaton township, whose land was reportedly sitting on a gold mine, described his land to our research team as "priceless."

Increase in the prices of land (and sometimes combined with higher debts) put pressure on people to sell off land to nearby villagers or city dwellers. More people within or outside Mon state are increasingly buying and cultivate rubber in areas that are no longer confined to their areas of residence. Estimated 60 percent of the rubber lands in Wei Nut village are said to have been owned by better-off and prominent people from Taung Bon village, Ye. Villagers from Wea Thung Chaung have traveled to the South in Thaton areas to buy lands for rubber. In Hnit Soke village, Ye township, two third of the rubber areas are said to have been owned by Mon residents from nearby villages (such as Taung Bon, Lamine, Ye), as Karen residents sold off these lands and retreated to live in the less expensive the forest areas. Karen are known for their skill to clear wild forest and have thus attempted to earn their living by clearing lands (which cost about 32 laks for 15 acres), and selling them back to Mon residents to plant rubbers.

We also found from FGD and information conversation that some people specialize on buying and selling lands. Others began buying waste lands in Karen states and Thaninthayi Region (Kyeikto, Thaton, Tavyo, Kyei Ma Yaw) which are still relatively cheap and can be cleared and sold for higher prices. Lands in some parts of Karen state which are said to have been sold for 30,000 kyats per acre following the KNU's ceasefire agreement with the government in 2012 are now worth 5 laks per acre (as of August 2013).

Residents from Naing Hlone, Mudon township were reportedly holding land in Kawkariat, Karen state, and concerned that they did not have any land holding documents and that they were nervous about uncertain political environment in the KNU controlled areas in Karen state. About 200 individuals from Taung Hpa Lu village in Than Pyu Zayat have bought vacant land in Ai Tu and Kyar Inn, Karen state (reportedly paying between 1.5 laks to 5 laks per acre) and reported to have hundreds of rubber land acres in three pagodas. Paddy farmers from Ta Kung Taing are also buying lands for rubber in Karen state and Pegu Region. Kawt Kha Pon residents reportedly traveled to Pa-an and Myawaddi in Karen state to buy lands under the KNU control paying 3-4 lakhs per acre.

Prices of lands vary depending on the crops grown, distance from the main roads, types and fertility of soil, and location. The prime areas are the ones that have rubber and those that are close to the main roads. A land with rubber trees that are producing latex is priced between 60-200 lakhs (\$ 6,000-20,000) per acre in the Northern Mon, while the prices for "forested/virgin" or waste lands can range between 20 to 200 lakhs (\$ 2,000-20,000) per acre. By contrast, a productive paddy land is priced around 20 laks (2000 dollars) per acre and some paddy farmers commented that potential buyers will not be interested in taking their lands even if offered for free.

Analysis of Institutions and Stakeholders: Land Tenure Security and Land Governance

A handful of experts have already carried out comprehensive review and analysis of land related laws (Farmland law 2012, VFV land management law 2012, Forest law 1992, FDI 2012), shed lights on their limitations, and offered recommendations toward strengthening land governance in Myanmar. This paper echoes sentiments expressed in these papers and reiterate the needs to follow up with the majority of the recommendations. These include the need to revise current laws to create a Comprehensive Land Law which include all land classifications and harmonization of legal and governance framework relating to land, recognition of customary laws governing land resources, assure free, prior, and informed consent of the community affected by the large scale investment and require investors to conduct Environmental and Social Impact assessment, and payment of fair market compensation for the public taking of land property rights (Obendorf 2012). There has been a legitimate concern that the 2012 land laws may lead to accumulation of lands by a few individuals and threaten the livelihoods of small land holders since many of latter are less likely to hold land use titles and sine the laws do not recognize customary or communal land holding practices.31 In addition, there has been a concern that the law puts too power over the allocation of farmland with the minister of the Ministry of Agriculture and Irrigation who chair the Farmland Administration Body (FAB). The 2012 Foreign Investment Law is another important law which deals with the land. It can allow foreign investment in restricted sectors, such as agriculture, if it considers that it is in the national interest, or if it is in less developed, difficult to access areas in order to promote economic development.32 It has been criticized for giving too much to the Myanmar Investment Commission (MIC), a body appointed by the government to oversee foreign investment, since does not need approval from state government for large-sized investments within their jurisdiction. None of these new laws (the Farmland Laws, the Foreign Investment Law, the Vacant, Fallow, and Virgin Land Law) deal with the resettlement of displaced populations in ceasefire areas.

Activists and rights organizations therefore argue that the new land laws and the foreign investment law should be amended to serve the needs and protect the rights of smallholder farmers, especially those in minority ethnic areas. The TNI, for instance, considers ethnic land rights as one of the most important issue that will largely determine the kind of 'peace' that will emerge in Burma.

³¹ Please see a comprehensive review of to farm land laws 2012 by Robert Obendorf 2012. Also see TNI, Access Denied: Land Rights and Ethnic Conflict in Burma, 2012. Also see Global Witness, May 2013.

³² The law allows foreign investors to lease land from the government or from authorized private owners for up to 50 years, depending on the type and size of the investment, and the deal can be extended twice, for 10 years each time. It is stated that leases longer than the standard 50 years may be granted for investments in areas of the country which are designated as less developed. Obsendorf, 2012, 17.

Some farmers in Northern Mon state who were aware of the existence of the new lands commented to the research team members that they appreciated the official recognition of the transfer and sale of land use since it will legalize many of the informal transactions that have taken place under the socialist and SPDC eras. The recognition of rights will however have to be accompanied by other supporting environment to formulate pro-poor policies such as the provision of multiple venues to address their grievances, strong state capacities, clear and transparent rules, as well as a functioning and independent judiciary.

Political Reform

The greater opening political system that has taken place under the post-2010 period change the configuration and dynamic of power by offering underprivileged populations with multiple venues to express their grievances. Farmers have used a variety of strategies, including negotiation with the land grabbers, persuading local and central authorities for better treatment and compensation, and making their plights known through rights organizations, domestic and foreign media. They also worked with political parties and influential local leaders to get back their lands. A growing numbers of "defiant" moves have also gained recent attention in the presses. Recent report by the HURFOM (2013, 16) for instance sheds light on stories of farmers who claimed to have cultivated or built on unused land that had been "unjustly" taken from them. One farmer from Kaloh village, Ye Township was reported to have constructed a fence around land that had been confiscated from him in 1992 for construction of a railway line but remained unused. Residents of Tumyoung village. Ye Township refused to pay an annual tax levied by the military in exchange for permission to work on land confiscated by LIB No. 586 in 2001 (HUFORM, 48). Activists also warned that farmers could resort to violent protests if land grabbing complaints were not dealt immediately. Protests have already occurred in various parts of the country, including a protest engaged by 100 farmers from 14 villages in Paung township in May of 2013.33 Some farmers also threaten that they would retake control of their old land if their demands are not met." 34

Originally the Farmland Management Body was intended to be a legally authorized body to arbitrate land disputes. Very few people however approached the FMB to settle land disputes because of their lack of trust in it. In response to popular pressure, President Thein Sein set up The Land Allotment and Utilization Scrutiny Committee, and the Land Investigation Commission in 2012 to address problems related to land classification, land tenure security and land conflict in the country. The former is a cabinet-level body in the executive branch, led by the Ministry of Environmental Conservation and Forestry and focuses on national land-use policy, land use

³⁴ Channel Translated by Thit Lwin and Zar Zar Soe, additional reporting by Thomas Kean; Myanmar times, 13 januaryIrrawaddy, march 5

³³ On a day of the official ceremony to celebrate Peasants Day on Saturday, about 700 hundred villagers from Shwepyitha Township in northern Rangoon handed out pamphlets stating that 1,742 farmers lost about 11,000 acres (4,422 hectares) since 1986 to private companies, such as Zay Ka Bar, Yuzana Group and Htoo Group.

planning and allocation of land for investment.35 The latter is composed of more than 60 members, led by U Tin Htut of Zalun constituency, and divided into state and region subgroups. The Land Investigation Commission in Karen and Mon states, and Thaninthayi Division is led by member of the Upper House of Parliament U Htay Lwin and four MPs from Lower House including Daw Mi Myint Than, an All Mon Regions Democracy Party (AMDP) MP for Ye Constituency.

Activists pointed out the more restricted political environment under which the investigation took place, failure to document all reported claims, and lack of cooperation by local authorities. In addition, the committee has no decision making power and is only mandated to investigate land grab cases, which must not go back before 1988 (the period before the previous military regime).

The commission's recent report at the national level shows that it has received 565 complaints between late July and January 2013 and found military's forced seizure of about 250,000 acres of farmland from villagers. The commission, which began its inquiry with military land grab, recommends that military adheres to the Farm Law which requires the return of the confiscated land if no work is done on a confiscated land within six months. The committee also recommends that in cases where land has been developed, affected farmers should receive adequate compensation from the military. Burma's military Commander-in-Chief Min Aung Hlaing reportedly acknowledged that the military has been involved in land seizures in the past and promised return seized farmlands that are away from its bases, and they are also thinking about providing farmers with compensation. 36 Further parliamentary reports on other forms of land-grabbing are still in the process and there is a possibility that amendments for the existing land laws will be introduced in the parliaments.

While the new political environment has empowered previously marginalized and disenfranchised farmers, there is also a danger that that the more dispute settlements are done in favor of people who encroached on land illegally, the clear the message it will be sending to the public that illegal occupying of land will pay off financially, leading many to encroach on more lands as a strategy to reap immediate benefits. Safeguards must be assured to prevent occurrences of these actions by distributing pamphlets about their illegality and associated punishments among the public.

Land dispute settlements mechanisms

These land disputes have been settled differently in different areas. Secondary reports have shown that the immediate response of farmers to outright land occupation is to negotiate with

³⁵ USAID, 2013, 18.

³⁶ Translated by Thit Lwin and Zar Zar Soe, additional reporting by Thomas Kean; Myanmar times, 13 fjanuaryIrrawaddy, march 5

the land grabbers and local authorities. Some of them appealed directly to the headquarters of the Myanmar military if the land is taken over by the army. Others approach local authorities, media, courts, the president of Myanmar, or MPs to appeal for their cases. The team did not hear about any cases that have successfully been resolved by the FMB.

Various reports in the local journals and investigation report show that some disputes ended either because the original occupants gave up on the claim, or because the new occupant returned the whole land back to the original occupant, or because they have reached agreement, albeit imperfect, regarding the "fair" amount of compensation. The Land Investigation Commission has made recommendations on a small number of land disputes, but many cases remain unresolved. 37 The two main issues that remain central to ongoing land conflicts are whether there is sufficient evidence to show that the land or unused land should be returned to the original occupants, and whether fair and adequate compensation rhave been paid to original occupants. In other cases, outright compensation is issued.

Our findings in Mon state confirm this general trend. In Than Py Zayat, a retired official/government officer mentioned that he knew of a case where the new owner agreed to return the previous occupant a small plot of unused lands (e.g. 70 out of 300 acres occupied lands were returned).

In Inn Shay, Thaton, those whose land were taken by the Industry II continued to work as landless laborers and did not try to regain lands. Half of these in Inn Shay who lost their lands to the army in 2000 got them back after directly appealing to the local officials, while the cases of the rest are still pending. They were organized by a retired school teacher.

In Danu village, Thaton township, villagers who lost their land to Myanmar army infantry 1 in 2010 have attempted to regain their lands by working with the township authorities. These cases are still pending during the period when the research was conducted.

1,000 acres that were confiscated by three individuals in Mon state were put on hold in August after the occupants protested and approached the village tract leader. We do not know the current status.

In Set Sei, seven paddy farmers (most of whom have no documents) who were planting paddy in the land owned by the Ministry of Labor will probably be kicked out after the land is sold to private investors. They expressed a feeling of helplessness during the time of the research. Again in Set Sei, individuals (with presumably no proof of documents) whose lands were about to be taken by the Ministry of Education approached the village tract leader to protect against this imminent land grab. The case is pending with regard to thirty nine share croppers in Ye township who attempted to make appeal directly to Sr General Min Aung Hlaing through a local activist. The case was also investigated by the Land investigation committee. However, the

³⁷ Myanmar times, 13 januaryIrrawaddy, march 5

army has thus far refused to return the land (January 2014) back to the original occupants. This case was already investigated by the state level land investigation committee.

Informal conversations with key informants identify the following individuals who have been assisting farmers who lost their lands: MPs such as U Saw Ba Thein, Myint Myint Than, Dr Banya Aung Moe, AMRDP members, president of Mon literature and culture and funeral society. Residents also approached the land Investigation Committee headed by Dr Htay Win. Those whose land was taken by the army said they wrote letters to Sr General Min Aung Hlaing and met with Speaker of the House, Thura Shwe Mann.

While farmers have been able to use multiple channels to settle land disputes, many cases are still pending. In addition, they still need government support to enforce decisions that are judged favorable to their cause.

State capacities and the Rule of Law

One recurring theme that cuts across land conflicts in Mon state (and the whole nation) is failure to adhere to existing rules and regulations. Weak state capacities, (caused largely by insufficient salary and lack of appropriate and adequate educational background and skill, and lack of human resources and incentive by civil servants to fulfill public interests, all of which have resulted in official corruption) and overlapped jurisdiction by different authorities, (both in terms of collaborating government agencies and in terms of the existence of non-government armed groups) have undermined the government's ability to safeguard rules and regulations. For instance, although the sale of land was prohibited during the socialist period up to the year 2012, lands were bought and sold, and were converted into different uses often without the knowledge of the central government authorities. People violated the non-transferable lease from forest by illegally selling their user rights or encroached on protected forests by paying off local authorities. Court decisions and parliamentary rulings that are in favor of small farmers may mean nothing if they are not backed by strong government enforcement.

Official data on cultivated, uncultivated, forest land are unreliable at best and unavailable at worst. In addition, different government agencies keep different records depending on the nature of their institutional interests and objectives (Thawnghmung 2004). The official data on forest reserves remains at above 900 acres (see below). This is disputable given the rate at which forests have disappeared in Mon state and across the country.38 In 2012 the Burmese government's Natural Resources and Environmental Committee stated that Burma's forest cover represented only 24% of the country. This is way below the previous official estimate, which is 49% of the country (USAID, 2013, 28).

Land grabbers failed to follow procedures accorded in the laws, and failed to return the lands that were not utilized. Forest officials failed to enforce the law which requires individuals to replant trees whenever they cut down timbers or cultivate crops on the forests. The laws

³⁸ Benjamin Sovacool, "Environmental Conversation Problems and Possible Solutions in Myanmar," Contemporary Southeast Asia, Vol 34, Number 2, 2012, 217-48.

themselves are too rigid to accommodate the diverse practices that exist at the grassroots level (either in crop choices, customary forms or under the various armed groups), or address political realities (e.g. return of displaced and refugee populations), and the changing nature of demographic and economic situations (population growth, urban expansion, fragmentation of land holding, market incentives). For instance, under the land law, the government may rescind use rights if a farmer breaches conditions for land use, for example by growing crops other than the "regular crop" without permission (USAID 2013, 19).

	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011
Reserve forest and protected public forest areas	849	849	842	841	838.23	838.23	837.85	837.84	832.32
Protected area system	69.56	69.56	69.56	69.56	69.56	69.56	69.56	69.56	69.56
Total	918.56	918.56	911.56	910.56	907.79	907.79	907.41	907.40	901.88

Table 8 Permanent forest estimated acres in Mon State

Source: Statistical Year Book 2007 and 2012, Union of Myanmar.

Actors and Stakeholders

The nature of power dynamics and power configuration between the central and regional governments and among different armed groups within the Mon state will very much influence how the land governance and land practices evolve. It is important to look at the roles, activities, and interests of actors and institutions that deal with land governance and rural development.

The Myanmar army

Military remains the main powerful player in Mon state and will continue to do so on how the land issues will resolve since it accounts for the majority of the lands occupied in the region. The military will remain influential and continue to influence the course and direction of political, economic and social affairs in Mon state. The military occupies one third of the Mon state legislature and control the ministries of Border Security, Defense, Home Affairs and all other armed forces such as Border Guards, Police and militia forces. Estimated 40 infantry battalions, 10 artillery battalions, and additional 10 battalions of corps (such as medical, signal, supply & transport, and so on) currently stationed in Mon state. There are one Regional Command Headquarters in Mawlamyaing, one Light Infantry Division in Kyeik Hto, one Military Operation Command in Ye, one Artillery Command in Thaton, and one Naval Region Command HQ. The military intelligence units and special branch are also active in the region.

Mon State Government

Mon state government was formed under the 2008 constitution which gave limited authority to the newly formed seven states and seven regions. The state government is consisted of a Chief Minister and a cabinet of state ministers, a unicameral, partially elected state hlutaw and state judicial institutions.39 In principle, the state hluttaw is endowed with authority to enact laws on areas such as agriculture and livestock, energy, electricity, mining and forestry, and Finance and Planning sector. The actual exercise of power over these sectors, however, is very limited. For instance, responsibilities are limited to power generation that is off the national grid, and policing local gems (not mining), and firewood. The state government's authority in social sector is limited to some areas of traditional medicine, welfare, and cultural heritage preservation, excluding major areas such as education and health excluded.40 The state government has limited budget drawn from land revenue, excise revenue, water and irrigation tax, tool fees, royalty from fresh water fisheries and marine fisheries, taxes on properties, services, and fines. The central government currently exercises control over issuing license to foreign investments that occur at the regional areas, and claims all revenues derived from the extraction of natural resources.

The Mon State government is predominantly composed of the USDP members, a government party composed of ex-government and military officials. Chief Minister is appointed by the President of the Union of Myanmar, the 13-member cabinet is composed of 10 USDP, 1 military, and 2 AMRDP members. Cabinet ministers are mandated to manage and control their respective departments. Portfolios include Ministry of Finance and Revenue, Ministry of Agriculture, Livestock Breeding, Ministry of Transport, Ministry of Forestry and Mines, Ministry of Planning and Economics, Ministry of Electronic, Power and Industry, Ministry of Development Affairs, Minister of Social Affairs and Ministry for Border and Security Affairs. These ministries for the most part carried out the policies implemented by their headquarters in Nay Pyitaw and have limited authorities to implement policies of their own. Neither are the regional hluttaws able to pass land laws specific to their region. Mon state hluttaw is composed of two members elected per township and additional elected representatives for each of the national races comprising greater than 0.1 percent of the state population. A total of 31 seats are occupied by the following groups: (8 by military appointees and 21 elected members including 14 USDP 14, 7 AMRDP 7, and 2 NUP).

The state also has chief Justices, nominated by the president, and between three and seven judges. All courts are subordinated to the national Supreme court, which has final appellate authority over other levels.

³⁹ For detailed analysis of the structure, responsibilities, and limitations states and regions in Myanmar, see State and Region Governments in Myanmar, MDRI, 2013. 11-12

⁴⁰ The structure, responsibilities, and limitations states and regions in Myanmar, 2013.

Political Parties

The two largest parties that have dominated the executive and legislative branches in Mon state have been USDP and AMRD. The USDP is a government party, but it has a few Mon nationals. The AMRDP, or the only Mon ethnicity based party that contested in the 2010 elections, won 3 seats in the national lower house, 4 in the national upper house, and 9 in regional hluttaws. The AMRDP is active in the villages the team visited and engages in both local development and advocacy to address local grievances (e.g. government abuses, land confiscation). Another major Mon political party, MNDF, or Mon National Democratic Front, which won seats in 1990 elections but boycotted the 2010 elections has recently re-registered and may gear up for the forthcoming election in 2015. HURFOM field reporters noted that both Mon political parties have helped victims of land confiscation in Ye township. In particular, AMDP MPs Dr. Byar Aung Moe and Daw Mi Myint Than of AMRD were reported to have been "instrumental in advancing claims lodged by residents against LIB Nos. 343 and 587" in Ye Township" In some situations, however, Mon political parties were alleged by the residents to have utilized their position as advocates for farmers' cause to build their political capital and "did not represent genuine commitment to securing swift and effective action." (HURFOM 2013)

Village Tract Authorities

Under the government-controlled areas, the official power resides with elected village tract administrators. For the first time since the military takeover in 1962, the village tract administrative post is elected. The introduction of the elections for the village administrative post, while expected to produce more accountable and responsive leaders, has varied positive as well as negative results across different villages in Mon state (and across the country)

They are elected every five years. Village tract administrators administer village affairs, work with government agencies to help implement development projects and serve as a key contact person for government authorities, NGOs, and armed groups and often maneuver their ways against competing demands from local government authorities and non-state armed actors. Wei Nut, Ye township, is a village under the control of the government but has also been under the influence of NMSP and frequently visited by the DKBA Border Guards, a Karen ceasefire group which is currently operating under the Myanmar army's command. Its village tract administrator is a former Karen soldier, who has to deal with both authorities and other armed groups, reporting on the visits of the government officials to the DKBA authorities, as well as on the visits of the DKBA to the government officials. This dual reporting is reportedly necessary to prevent unnecessary conflicts and fighting between the government troops and DKBA.

Village tract administrators are required to work with township level authorities representing Settlement and Land Record, military, Forestry department, department of Perennial crops enterprises, and Ministry of Agriculture to implement land and agricultural related policies. A village tract administrator is a member of Farmland Management Committee, working with local government officials to survey, register, issue, and arbitrate land use title. Many farmers did not go through the local Farmland Management Committee because they reportedly did not trust the village leader or government staff who are appointed in the committee. The village tract administrator will have to be trusted by the populations and be more accountable to the villagers if the village land management committee is to be empowered.

The actual influence and popularity of village administrative vary across villages. So is the level of their commitment to address the concerns and problems of their village constituency. HUFORM report show that Mon people reported confiscation of their land during the SPDC period by village administrators, who were alleged to take advantage of the government's tolerance of local level corruption, seizing land for personal gain (HUFORM, 2013, 8).

Kawt Kha Pon (Mudon) a medium- sized relatively better off village with paved roads has an extremely well-connected and powerful (wealthy) village tract administrative leader who has been in office for 20 years. This does not mean that he was popular: He claimed that he received a pile of complaint letters against him which are higher than his height if stacked together. The village has active PyithuSit (or paramilitia) and the village administrator mentioned that he was frequently threatened by the Mon armed group. This may explain the reason behind his stated preference for the Myanmar army. Another village administrator in Ta Kung Taing in Mudon seemed to be able to summon his fellow villagers quite easily despite the heavy rain that would have prevented many from attending.

These different profiles and scenario of village tract administrative leaders however show how local populations' interests can be best served through accountable, responsible, and sympathetic village leaders.

Government Ministries and Departments

A number of government ministries and agencies deal with issues that impact the livelihood and security of small holders in Mon state. These include the Ministry of Agriculture and Irrigation, department of Perennial Crops, Settlement and Land Record departments Ministry of Forestry, and Ministry of Mines. The Ministry of Agriculture and Irrigation (MoAI), which is responsible for implementing national policies on agriculture, is comprised of thirteen departments. Its largest unit, Myanmar Agricultural Services (MAS), administers field operations relating to extension, research, land use, seed multiplication and plant protection. The Irrigation Department, also within MoAI, oversees all aspects of irrigation design, construction, operation and maintenance. Other major relevant departments that are active at the township and village levels are the Settlement and Land Records Department (SLRD)that oversees land management, administers the land-tax system and conducts national agricultural surveys, and the department of Perennial Crops Enterprises (USAID 2013, 17). The Forestry department of the Ministry of Environmental Conservation and Forestry (MoECAF) is responsible for: issues relating to environmental protection and management of forestlands and forest resources (USAID 2013, 30). The Ministry of Mines is responsible for implementing the Union of Burma's mineral policy and for enforcing the laws, rules and regulations related to mining.

Agriculture department, Forestry department, SLRD, and department of Perennial Crops are the four most important government agencies that have relatively direct interaction with the people

at the grassroots level. The Ministry of Mines has also marked its presence in areas where mining activities occur.

Rigid classification of land types, restrictions on crops grown and overlapped institutional authorities that managed land issues make the coordination and implementation difficult.

The government has traditionally classified lands into paddy, ya (rain fed), kaing, shifting cultivation (taung yar/upland), reserved forest area, protected forest area, public forest area, pasture, wasteland, and monastery land and prohibited farmers from converting the use of land and the types of cultivated crops.41 Each agency is given jurisdiction and authority over seemingly distinct and separate areas and follows a distinct process for registering land to smallholder farmers. Land classified as "agricultural" is managed by the Ministry of Agriculture and SLRD while forest land is managed by the Forest Department. Although in principle different agencies are given seemingly distinct jurisdiction over the management of different land categories, changes in land use, conflicting definition over what constitute "virgin" or 'public forest" land, and informal transaction (that often involved local authorities) that violate existing regulations have led to overlapped and competing authorities among different ministries. They have made it difficult to coordinate activities among different ministries, which have kept different data of their own.

The MoECAF, for instance, has overlapping authority with multiple ministries over lands classified as public forest in the Forest Law and lands classified under the VFV Law as virgin. It is difficult to make one agency fully accountable when land, classified by "virgin" land is also defined as "public forest" by the Forestry department, and has been cultivated by farmers to grow rice. The jurisdictions held by these different agencies become blur when farmers convert their lands from annual to perennial crop or from forest to perennial crops. Because such conversion is regarded illegal, most local authorities were unwilling to register them in their record. Forestry Department claims that the current land laws contradicts existing forestry laws/regulations and argues that many of the forest areas have been mislabeled as "virgin" lands and handled by the Ministry of Agriculture instead of the Ministry of Conservation and Forestry. In addition, these forest and protected forests are subject to the jurisdiction of the Ministry of Mines, if they happen to sit above valuable mineral resources.

Civil Societal Organizations

There are a few active civil societal organizations that are operating in Mon state. They cover a wide range of issues which range from religious, to humanitarian, developmental, to advocacy activities. Mon state has well-established religious organizations (both Christians and Buddhists) that deal with spiritual issues as well as education and assistance to the more vulnerable segments of the populations. For instance, church members from Wai Thun Chaung (Than Pyu ZaYat), a Mon Christian village, can borrow money from the church, to carry out

⁴¹ The Farmland law specifically defines paddy land and alluvial island law, but does not define other subclassifications of farmland which include ya land, kiang land, perennial plant land, taungy lad, dhani land, garden land, land for growing of vegetables and flowers (Obendorf, 2012, 8).

small-scale income generating activities. The Mon monks are known for their active involvement in promoting Mon language education through the offering of monastic education and in addressing humanitarian causes. In Set Se, there are a number of community-based organizations that offer support to vulnerable populations, scholarships to students, provide medical treatments, focus on community development and small scale construction (rebuilding homes) operating either independently or with support by international organizations such as the Nippon foundation. A few of them express the desire to legally register their existence but have not been able to do so because of they are unable to pay for the costs (\$500). Funeral Associations which provide free funeral services are also active in some villages.

The Myanmar Rubber Planters and Producers' Association was founded with the official encouragement in 2005 to address issues and challenges facing rubber producers, and is under the umbrella of UMFCCI (Union of Myanmar Federation of Chambers of Commerce and Industry). The total numbers of the members of RPA is unavailable, but members of Mon state Rubber Planters and Producers Association operate their organization differently in different areas. They have mainly focused on providing low interest loans to members, and have done relatively nothing or little in terms of policy advocacy that will serve the interest of small holders. The Paung Rubber Planters and Producers Association, is reportedly the "strongest and most successful" rubber producers association in Mon state with about 1,000 memberships (RPA in Kyaukto and Than Pyu Zayat has membership of 300 and 500 respectively). However, it appears that the majority of them are large-scale holders, city-dwellers, or relatively wealthier and powerful individuals. Villagers we have met were not aware of the existence of this organization. State level officials, however, expressed their desire to form partnership with Rubber association to promote the rubber sector in Mon state.

Karen/Mon culture and literature organizations are quite influential in local areas and they deal with issues that are beyond the maintenance and preservation of culture and language. They usually offer Karen and Mon language training and teach cultural dances in the summer, organize New Year and National Day's celebrations and important religious and cultural festivals.

There are also Mon-based and Yangon-based human rights and land rights organizations and Mon exile groups that are active in Mon State. These include Mon News Agency which covers news about Mon and Human rights organizations such as HUFORM. Influential monks, Christian religious leaders, and wealthy and prominent community leaders also play a leading role in conflict resolution and advocacy for local grievances. An abbot from Wea Kha Mi, Than Pyu ZaYat, was reportedly engaged in ceasefire negotiations between Karen armed groups and government. U lwin, an activist who organized those who lost their lands, appealed to Bo gyoke Gyi Min Aung Hlaing on behalf of 87 people whose lands have been taken.

Recent political opening space also allows the formation and expansion of advocacy organizations. A few organizations that are in the process of formation of the Rehmonnya Agriculture and Farmers Union (RAFU) in Mon State, Karen State and Tenasserim Division, and the Rehmonnya Labour Union (RLU).

International NGOs

The World Vision, World Concern, UN agencies (UNDP, UNHCR, UNICEF, Association Francois - Xavier Bagnoud (AFXB), International Office of Migration (IOM), MAM, Marie Stopes International (MSI), Population Services International (PSI), Save the Children, Care Myanmar, TIMI are dominant players working with quite a few low profile organizations in Mon state. Some organizations focus on developmental issues such as building of roads, bridges, school, library, while others specialize on the resettlement and peace building process in Mon state (Japan Nippon Foundation and MPSI). Some villages are beneficiaries of UNHCR (water), IOM (provide medical assistance to malaria-infested migrant workers in rubber plantations), World Vision (libraries), SDC (school), and Care Myanmar. Some residents complained of incompatibility between the need of the villagers and the actual support provided by these organizations.

Non-state armed actors

The majority of the areas the team visited are in government-controlled areas while a few fall under the control of MNSP, and multiple authorities of KNU, DKBA, Mon breakaway armed group, Pyithu Sit, and Border Guard. After the NMSP signed ceasefire agreements with the government in 1995, the Mon controls a ceasefire zone in the Ye River area of Mon stae bordering Thailand and Karen state, plus two smaller zones further to the north. The NMSP, and its military wing, the Mon National Liberation Army, also exercise varying degrees of military and administrative influence in Mon-populated areas of Mon and Karen states. The MNSP has established schools, legal system, land management, and taxation. It has opened and operated more than 150 Mon national schools that provide native language teaching at primary level.42 Some residents from Wei Nut mentioned that they tend to seek help from the MNSP whenever they have legal problems (from rape, rubber plantation, trafficking) even though they are under the government's control. In Naing Hlon (Mudon), MNSP's Mon language middle school is operated by "insufficiently paid" teachers. Students who pass the Mon middle school cannot transfer to government high schools as they are only allowed to attend government universities as graduates of Mon high school.

Since the late 1990s, relations between the NMSP and the Burmese government and military have been highly strained. In February 2012 NMSP leaders re-confirmed a ceasefire with the new government. Meanwhile, in parts of southern Mon state, small ex-NMSP factions continued to fight government forces, with resulting in insecurity and widespread human rights abuses. Ceasefire groups include NMSP-MNLA; Mon Army Mergui District/Chaung Chee Peace Group [dormant, in Tanintharyi Region]; Nai Shawn's Mon Peace Defence Force (small militia or pyithusit); plus possibly now dormant Mon Defense Army, led by Nai Than Lwin. Those that have not signed ceasefire include Nai Pan Nyunt's Hongsawatoi Restoration Party (very small, Tanintharyi Region), and still a few groups or individuals running around in the jungle in a rather

⁴² Marie Lall and Ashley South, Education, Conflict and Identity: Non-State Ethnic Education Regimes in Burma, March 2012.

uncoordinated manner in Ye-Yebyu Townships. One armed group the teamhave come across may have been MPDF (referred to as 'breakaway') - although Mon armed groups tend to fragment even more than usual for Myanmar.

It is difficult to measure the level of support, legitimacy, and popularity of these various armed groups. Some villagers expressed that they did not accept the legitimacy of the Mon breakaway group, and that they saw them only as a tax collecting agency. Villagers in Than Pyu Zayat used gesture that indicates their acceptance and recognition the legitimacy of KNU. An influential monk from Southern Mon state said he recognized "the KNU and government as both of his governments." Villages from Ye in the South commented that they approached MNSP to address some village issues and problems. Although they are under the government rule, they are also under the influence of MNSP. These armed groups however are also associated with rights violation. HUFORM also reported cases of land confiscation by MNSP or prominent leaders of NMSP.43 Mon civil society organizations suggest the NMSP is genuinely concerned about issues relating to land and HLP rights, but in these initial stages, they have prioritized other issues they see as more pressing."

Village case studies reflecting local power dynamics

Wei Paung: A Village under the MNSP control

Wai Paung is a very isolated and inward looking village in Ye township which is under the control of MNSP. The MNSP governs the village by running school (reportedly donated by SDC), clinics, and training center in the village. NMSP paid for the salary of teachers and nurses, but each household however is required to contribute seven pyi of rice per year toward the salary of the health worker. The MNSP district headquarters is only one mile away from the village. The MNSP calls an annual meeting to instruct guidelines and enforce disciplines. Residents cannot repair roads or bridges unless otherwise permitted by MNSP. Households pay household taxes and crops/plants taxes to NMSP in return for the NMSP's protection, which reportedly assigns one security/intelligence personnel in the village. NMPS issued land titles with a fee of 5,000 kyats per acre, and imposed taxes on crops (at a rate of 30 kyats per rubber plant). The NMSP also imposes strict legal systems and fine and imposes penalty for those violating (e.g. a person who stole is required to pay the fine daily instead of a lump sum amount) their existing laws and regulations. This seems to serve as a preemptive move against potential rule breakers. Local residents reported that "there is no petty crime in the village." Residents are required to close a deal with the MNSP authorities if it exceeds the market value of 50 laks.

⁴³ 2013 One major complaint was conflict over 3,000 acres of land in Zin village marked out for confiscation by the NMSP, for use in an NMSP agriculture project. Nai Tala Nyi, an NMSP representative, detailed that since 2004 the NMSP had sought permission from the government to seize this land. The permission was finally granted when the NMSP signed a ceasefire with the government in 2012.23 Whilst the NMSP stated that land would not be confiscated if farmers could prove ownership of it, and that around half of the land marked out was too mountainous to be used

MNSP then issued the receipt. Any land or other contracts under the value of 50 lakhs below can be concluded through the village tract administrator.

The government authorities reportedly offered villagers to register and apply for land titles to the land record office, but no land survey officials have been able to enter the village because of the presence of the NMSP, which has reportedly conducted its own land survey. All of the eleven households interviewed by the research team have titles issued by the NMSP, and none of them were aware about the new land law. Because the village is located in the remote area and is under the NMSP, no known outside private investors have ventured into the areas to buy lands. Likewise, land confiscations by government ministries or by private corporations were unheard of during the time when the research team visited. Waing Paung is the only village that still has some vacant lands (albeit owned) in the region. The vacant land value is worth 7-10 lakhs per care. There are reportedly only 2-3 people from Ye town who come to buy the village's lands. However, rubber cultivated areas have increased since 2010 (when rubber prices reached its peak) and reportedly expanded into paddy areas. Some residents in the village earn a living by clearing forest lands, plant rubber, and resell the rubber plantations for higher profits.

Hagan: A village under Multiple Governing Authorities

Hangan is a relatively better off village in Ye township and falls under overlapped authorities of the government, Mon breakaway group, DKBA. It is by far the largest village that has been visited with 18 monasteries. The majority populations in the village are Mon Buddhist who cultivate rubber as their primary occupation.

The infrastructures in the village were deliberately kept poor by the Mon breakaway party which, for instance, asks hefty fees of 1500 lakhs to build roads (most probably for fear of providing better access by the government). Villagers reportedly pay taxes to the Burmese army as well as different armed groups, which usually occur one month before the harvest of rubber latex. Failure to pay taxes armed groups can result in arson against their rubber forests, and arrest of their laborers. Sometimes, Ye-based Burmese army prohibited rubber farmers from going to rubber fields in the morning for security season. Villagers reported that Burmese army and their family took advantage of this restriction by harvesting rubber during their absence. Taxes paid to the Mon breakaway group or "Mon kwei twet" can be negotiated and are given in return for the protection the Mon armed group provides to them. Because of the restrictions imposed by armed group and government on movement and activities, some better-off (estimated 15) villagers reportedly relocated to Ye town. There is one prominent large holder/money lender who owns 150,000 plants by the road, who also happened to be married to a retired MNSP colonel. Living under competing and unpredictable authorities, Residents commented to research team that "the best security is the one provided by ourselves."

Seven out of the total twelve households surveyed by the team has land tax receipts issued by the government, and about six of them are in the process of applying for land holding titles (for a small processing fee of 2,000 kyats per acre). Some residents traveled to other areas to cultivate rubbers in nearby villages and as far as Tavoy in Tenessarim town where land can be bought for about 10 laks. Half of the households reportedly own or work rubber land. A few

villagers are reportedly working in Myan Aung forest reserves with 30 years lease issued by the forestry department. Almost every household has members working in Thailand. Others grow betal nuts, whose acreage have increased over the past years after the price of rubber has declined.

Hnit Soke: An impoverished Karen village under overlapped authorities.

Hnit Soke is located 12 miles from Ye township. Although it is located by the main road, it is located in steep hills, making it less accessible to the main road. The village is under multiple authorities of DKBA, KNU, Border Guard, and PyiThuSit. The village administrative tract leader is ex-KNU leader.

The village is one of the poorest and smallest villages we visited. It has a total of 140 households. Residents are Sgaw Karen who are well versed in Mon, Burmese, and Thailand. Some have family members who resettled in North America as refugees. Researchers feel that Karen are less trustful of outsiders and hardly hire migrant labor.

Villagers started growing rubber since 2000, and rubber occupies the majority cultivated acres in the village. Most of them can only afford to grow wild rubber plants which do not need much care, nor inputs, but are more durable and resistant to diseases, pest, and extreme climate. They would prefer the high-yielding (only three cultivate grafted rubber) which is twice as productive as the wild plants. Some of them plant durian, rambutan, lime, betel, betal nuts, licheese in separate plots. Ten out of twelve rubber planters surveyed have land tax receipts and all ten of them are in the process of applying for land holding titles. The majority of them are small land holders.

Recommendations

The majority of the land grabbing took place at the SLORC/SPDC period. Greater political space in the post-2010 period have given farmers a number of venues to express their grievances and pressured law makers to propose laws that promote the agricultural sector and improve the livelihood of agriculturalists. As a consequence, some of the conflicts have been resolved and while the majority of them are pending. The Influx of aids into the country from western governments and non-government development organizations is also expected to have positive impact on marginalized and impoverished sectors of the country. The official land investigation commission has collected, reported, and made recommendations. Much has to be done in terms of implementing recommendations and reporting the reminding land conflicts.

The political situation remains uncertain with regard to the prospect of the relationships and reconciliation among the armed groups and government. One potential scenario is that armed group will form political parties to compete for a share of power within the state government. The other scenario is that they will be allowed to continue to carry arms and exercise power over the current territories assigned to them.

Policies and land laws

A handful of experts have already carried out comprehensive review and analysis of land related laws (Farmland law 2012, VFV land management law 2012, Forest law 1992, FDI 2012), shed lights on their limitations, and offered recommendations toward strengthening land governance in Myanmar. This paper echoes sentiments expressed in these papers and reiterate the needs to follow up with the majority of the recommendations. These include the need to revise current laws to create a Comprehensive Land Law which include all land classifications and harmonization of legal and governance framework relating to land, recognition of customary laws governing land resources, add a clause in the Foreign Direct Investment to assure free, prior, and informed consent of the community affected by the large scale investment, and Environmental and Social Impact assessment, and payment of fair market compensation for the public taking of land property rights. Since most people in the minority areas are unaware of the existing laws and regulations, the forestry department should be encouraged to extend the deadline (which was set on September 2011) for the application for forest user grant.44

The reviews and analyses however offer very little suggestions on residents living under the MNSP or KNU who hold certificates or tax receipts issued by these armed groups and the resettlement of displaced populations. Donors should facilitate and offer support toward dialogue among government, NMPS and KNU to create agreement to improve security for communities to land via one type of legal system i.e. the GoM system, while allowing the MNSP to retain some rights to revenues and taxes and subject them to international best practices. Donors can also work with armed groups to collect data on the number and profile of displaced populations and refugees who plan to return to their villages, and map out the current situations of these villages.

While a nation-wide comprehensive law should be created as guiding principles, state and regional governments should be given greater autonomy to formulate and implement land laws that reflect their specific region's economy and political situations. This will make the implementation and experimentation of new laws easier and manageable and make public officials and elected authorities more accountable to their constituents and address nuances specific to Mon State. These include the incorporation of land use practices under NMSP/KNU, and establishing mechanisms on the resettlements of displaced populations. If the KNU or MNSP is allowed to continue to hold their existing territories, there should be support toward improving sustainable resource management and land governance under their controlled areas.

Failure in paddy farming indicates that regional government should allow farmers to grow their choice of crops unless such practices have potential harmful environmental impacts. There is a

⁴⁴ Under the Forest Law of 1992, "reserved forest land" is considered a protected class of forestland that is intended primarily for the production of forest products. It may be used for various types of local village production or Community Forestry. Obendorf, 7.

need to beef-up enforcement mechanisms against those who intrude on forest and forest reserves, while simultaneously creating opportunities for alternative livelihood activities.

Improvements of Small Holders Land Tenure Security

Land title Registration and Dispute settlement

The majority respondents interviewed by the research team did not hold land use titles, but were in the process of applying for land holding certificates during the time of the study. A few who have not done so attributed their lack of awareness about the new land laws and/or the cost involved in applying for the land titles or/and lack of documents to prove their claim over the land they cultivate. Assistance can be provided to those who lack the means or the awareness or proper paper to establish legal claims over the lands they work. In many cases, land confiscations happened because farmers had no land security. It is important to try to secure titles for farmers as quickly as possible, so that if a land is marked for concessions, the company must pay a market rate to the farmers who can decide to sell or not;

Offer legal aids to small holders who have lost their lands to the military, government ministries, and private companies and individuals. The majority of the land confiscation occurred during the SPDC eras and it is estimated that 8,000 acres of land in Mon state has been seized by the military. The greater opening spaces in the post-2010 period have allowed individuals to address their grievances through a variety of channels with varying degree of outcomes. However, much remains to be done in terms of resolving the remaining land disputes, implementing recommendations by the land investigation commission.

Assistance can be provided to Farmland Management Body, political parties, land and human rights groups, the official Land Confiscation Inquiry Commission, Land Allotment and Utilization Scrutiny Committee, civil societal organizations, and activists who are working on land issues. Publish a paper on different scenarios of land disputes, highlight laws and regulations governing these cases, and offer general guidelines and appropriate procedures to settle disputes. Circulate the paper among the general public and multiple entities (courts, regional parliament, farmland management committees, land investigation commissions) working on land disputes. Help empower the farmland management committees, which has been legally authorized to settle arbitrate land claims.

The government should be encouraged to publish and make more accessible to the public the guidelines on land settlement mechanism (e.g. what actions were/are considered "unlawful" or what actions are/were considered "lawful" under the previous and current laws etc). Simultaneously, while there is a need to establish general guidelines on assessment of land values and on fair and just compensation, it is important to note that such guidelines are kept flexible to reflect the situations that are specific to the region. While individuals should be exposed to multiple venues to air their grievances, attempts should be made to empower the local Farmland Management Body which is legally endowed with the authority to arbitrate land disputes by encouraging farmers to use it as their first resort and making the FMB to be more accountable, fair, and transparent.

Offer infrastructure and technical input support towards small holders/medium holders

There are currently rubber farmers (those who own 10 acres and above) who are unable to pay for the maintenance costs in the initial six years before rubber mature, or those who were forced to sell their lands because they were unable to pay for the operating costs when the price of rubber went down in 2008. It is not clear how widespread this trend is however.

The rise of land prices due to speculation based on increasing shortages of land and anticipated inflow of foreign investment and mineral resources lying under the land of Mon state put pressure on stressed farmers to sell of their lands and retreat to remote areas. Government should take multiple measures to prevent land speculations by encouraging productive use of lands, imposing higher taxes on idle lands, and discouraging absentee land ownership as much as possible.

Paddy farmers also became heavily indebted due to high cost, low productivity, and extreme weather. There should be broad-base infrastructural support including diversification of market and creation of value-added industries to create price stability, establishing and ensuring quality control over seeds and fertilizer, and offering credits, micro-financing, technical support and additional and alternative or extra livelihood opportunities to vulnerable population in Mon state. Carry out needs assessment at individual villages to identify the most vulnerable populations. Encourage regional government to offer incentives to foreign investors to set up industries that use rubber and create more value-added industries

Partner with Rubber Producers Association to promote interests shared by both small-holders and larger holders. Explore the possibility of creating "small holding rubber association" as a sub group that can exist at the village level to collectively address problems encountered by small holders. Work with the department of Perennial Crop and Myanmar Agriculture Service to strengthen quality control by obtaining certified seeds, fertilizer, and make technology more accessible, and pest control management. Such resources and support should also be made available to the MNSP/KNU organizations.

Conduct a more in-depth needs assessment of the vulnerable populations and offer loan and technical support to small holders (which rely in rubber as their primary source of income) to help support the initial start-up cost

Improve state Capacity

Policies should be developed to strengthen the rule of law and enhance state capacities. One of the major causes of ongoing disputes can be traced back to failure of state authorities to protect the laws and regulations. Most of the ruling body (the Parliament, courts, investigation committee) just makes general recommendations for land returns, but it is the administrators at different levels that need to implement it. Farmers also complained that those who have applied for land use titles have yet to obtain their titles due to the lack of will and capacity by SLRD officials. State capacity will have to be strengthened by offering skill and capacity -building training to civil servants, and providing them with incentives to enforce laws, rulings, safeguard

regulations, and carry out policies to enhance public interests, while simultaneously subject them under public scrutiny for their potential abuses against the populations.

Work with the regional level government to introduce initiatives that would enhance the rule of laws in land governance, reduce corruption and enhance enforcement mechanisms to promote law-abiding government officials and citizens. These include providing venues for grassroots populations to put forth complaints about abuses by government, non-government actors, and political parties and strengthening enforcement against unlawful activities (encroachment on forests). State capacities should also be enhanced by recruiting highly competent civil servants and offering them salary that are in commensurate with their skills and expertise. They should be given a variety of incentives to act in public interests.

Offer assistance to undertake land survey

Facilitate a nation-wide land survey and assist coordination among different departments to register the actual cultivated acres, rubber cultivated acreage, paddy acreage, forest and waste lands, acres converted from forest, paddy, other annual and perennial crops to rubber; and from 'wasteland' to rubber land. Use satellite images to analyze the situations on the ground. In Mon state, lands designated for paddy, or other perennial (betel nuts, durian, etc), or protected forest reserves have been converted or cleared with or without the tacit approval of local authorities. Transfer of land-holding title has also occurred without being officially documented. Because such acts (were/are) considered illegal, the types of cultivated crops and the name of land title holders that appear on the official map usually different from those that are actually exist on the ground. Some organizations have already supported the government to collect accurate information about cultivated crops, land classifications and ownership. Donors can help assist the ongoing effort to conduct a nation-wide survey which will definitely require considerable human and financial resources. Further research is needed to identify the existence of customary practices and resettlement of displaced populations.

Further study on mono-cropping

Although global demand for rubber is expected to exceed global supply by 2020, the Mon state's economy remains vulnerable due to its overreliance on Chinese market and trend toward rubber mono-cropping. In addition, there are potential environment costs associated with rubber expansion in the region. Freedom of crop choices has been advocated by some experts, but individuals should be informed of the danger and risks associated with the overreliance of one crop. Farmers may be best placed to make decisions over which crops are most suitable to be grown, but they do not necessary have sufficient information forces on the market, or long term consequences of their decision or sustainable cultivation practices.

Experiment with intercropping and encourage villagers to set aside a small plot of land to grow a variety of crops for food or cash, or to plant trees (e.g. enforcing the Forestry Department Policy which has been difficult to implement). Document the successful experiences of those who intercrop to minimize risk. In Naung Bo, for instance, one Karen resident plants Durian, rubber

(20 years old), rambutan, and claims to earn 10 lakhs (1,000 USD) per year during slack rubber/ raining season.

Promote alternative sources of income to decrease dependence on rubber (such as small livestock breeding which can also produce organic fertilizers and explore income-generating job opportunities). A couple of large scale farmers inYe, who also plant betel nuts said they do not like to exclusively depend on rubber because rubber business has to rely on skilled rubber tappers (while other crops such as durian or betal nuts do not require skilled workers). Currently, some residents work as daily wagers during the slack rubber season to plant paddy, maintain and clear rubber plantation, but once the rubbers matures, there will not be much demand for the clearing and maintenance of land. They can be trained to top rubber that will come of age in a couple of years. Durian can offer income during rainy season. Someone who plant Durian (in Kawt Kha Pon) in one acre, for instance, claims to earn 150 lakhs (or 15,000 USD). However, Durian can only be grown under certain soil.

It is also important that enough market is created if there is effort to promote other crops. A large scale rubber farmer commented that there are only buying centers for betel nuts and rubber. There should be guaranteed market for other crops such as durian, etc.

Gaps in knowledge and directions for further research

Issues and problems related to the implementation of land title registration at the local levels

- The environmental impact of mono-cropping in Mon State
- The sustainability of small paddy producers in Mon state
- Comparing productivity and sustainability (i.e. environmental costs) of natural and high yielding rubbers
- In-depth socio economic assessment of "vulnerable populations" identified in this report
- Compiling and classification of different types of small holders, land holdings arrangements, land disputes and land dispute settlements
- Experimentation on the costs/benefits of intercropping

Bibliography

Altsean_Burma. Available at http://www.altsean.org/Research/2010/Key%20Facts/Results/Division%20and%20State%20Par liament%20Winners.php

Chantavanich, Supang "Myanmar Migrants to Thailand and Implications to Myanmar Development," Policy Review Series on Myanmar Economy, Bangkok Research Center, Number 7, October 2012.

Egreteau, Renaud. "Burmese Diaspora: A Preliminary Research Note on the Politics of Burmese Diasporic Communities in Asia," Journal of Current Southeast Asian Affairs, 02/2012, 115-147.

Global Witness, "Rubber Barons: How Vietnamese companies and international financiers are driving a land grabbing crisis in Cambodia and Laos." May 2013.

HURFOM, 36-37. Disputed Territory: Mon farmers' fight against unjust land acquisition and barriers to their progress, 2013.

Irrawaddy, March 5, 2013

Lall, Marie and Ashley South, Education, Conflict and Identity: Non-State Ethnic Education Regimes in Burma, March 2012.

Lambrecht, Curtis. "Destruction and violation: Burma's Border Development Policies," Watershed Vol.5 No. 2, November 1999-February 2000.

Land Core group of the Food Security Working Group, "13 Case studies of Land Confiscations in Three Townships of Central Myanmar," Yangon, September 2012.

Leckie, Scott and Ezekiel Simperingham (ed.,). Housing, land and Property Rights in Burma: The current legal Framework, edited by Displacement Solutions, HLP Institute, 2009.

MDRI, State and Region Governments in Myanmar, Yangon. 2013.

Myanmar times, 13 January 2013

Oberndorf, Robert. Legal Review of Recentaly Enacted Farmland Law and Vacant, Fallow and Virgin Lands Management Law: Improving the Legal and Policy Frameworks Relating to Land Management in Myanmar, Novmeber 2012, Food Security Working Group's Land Core Group

Sovacool, Benjamin "Environmental Conversation Problems and Possible Solutions in Myanmar," Contemporary Southeast Asia, Vol 34, Number 2, 2012, 217-48.

Sources: Statistical Yearbook 2012: The Government of the Union of Myanmar: Ministry of National Planning and Economic Development, Central Statistical Organization, NayPyitaw, Myanmar.

The TNI, "Access Denied: Land Rights and Ethnic Conflict in Burma," Transnational Institute, Burma Policy Briefing Nr 11, May 2013.

Turnell, Sean Alison Vicary and Wylie Bradford, BURMA ECONOMIC WATCH, Macquarie University, Sydney, Australia

The UNDP and Ministry of National Planning and Economic Development. Integrated Household Living Conditions Survey in Myanmar, Yangon, 2009.

USAID, USAID Country Profile: Property Rights and Resource Governance, Burma, Yangon, 2013.

Weng, Lawi. "The Cusp of FDI boom, Mon state strill struggling to lure investors" Irrawaddy, September 17, 2013

Annex 1. General profile of Villages Ye Township

villages	Location (township) South or North	Controlled authorities	Crops grown	households	Ethnicity
Wei Nut	Ye	Government/ but NMSP school operates there	Rubber (150 acres) paddy (50 acres)	200	Mon dominant/ Buddhist
Hnit Soke	Ye	Government DKBA, KNU, Border Guard, Pyi Thu sit	Rubber (1000+ acres) paddy (130 acres)	140	Mon dominant Buddhist
Wei Paung	Ye	NMSP	Rubber Dominant (500 acres)	200	Mon dominant Buddhist
Hangan	Ye	Overlapped authorities by government, Mon separatist, DKBA	Rubber (3000 acres) paddy (1756 acres) mixed	1,600	Mon dominant Buddhist

Than Pyu Zayat Tonwship

Villages	Location (township) South or North	Controlled authorities	Crops grown	Total households	Ethnicity
Taung Hpa Lu	Than Pyu Zayat	Government	Rubber (475 acres), paddy (1283.23 acres)	360	Mon dominant Buddhist
Set Se	Than Pyu Zayat	Government	Rubber (1575 acres), paddy (730 acres)	738	Mon dominant Buddhist
Wea Kha Mi	Than Pyu Zayat	Government and KNU	Rubber Dominant (1000) acres and paddy (150 acres)	319	Mon-Karen Mixed Christian- Buddhist mixed
Wai Thun Chaung	Than Pyu ZaYat	Government	Rubber 667 acres, Paddy (NA)		

Thaton township

Villages	Location (township) South or North	Controlled authorities	Crops grown	Total populations/hous eholds	Ethnicity
Inn Waing Gyi	Thaton	Government	Rubber (40) paddy	170 HH	Karen
Gyi			(800 acres)	1,821 pop	
Inshay	Thaton	Government	Rubber (50 acres), paddy (15 acres)	185 HH	Karen
				8,50 pop	Buddhist
Naung Bo	Thaton	Government	Rubber (NA),	1,477 HH	Karen
			paddy (3026)	9,140 Pop	Buddhist
Da Nu	Thaton	Government	Rubber (300 acres)	85 HH	Karen
			paddy (15 acres)	496 pop	Buddhist

Mudon Township

Villages	Location (township) South or North	Controlled authorities	Crops grown	Total populations/ho useholds	Ethnicity
Be Yan	Mudon	Government	Rubber (NA), paddy (1836 acres)	696 HHs 3,969 pops	Mon dominant Buddhist
Kawt Kha Pon	Mudon	Government	Paddy dominant Rubber (115 acres) paddy (1864 acres)	858 HHs 8,768 PPs	Mon dominant Buddhist

Naing Hlon	Mudon	Government	Rubber (NA), paddy (68 acres)	1,174 HHs	Mon dominant Buddhist
Ta Kung Taing	Mudon	Government	Rubber (NA/Little) paddy (4300 acres)	983 HHs	Mon dominant Buddhist

Annex 2: Numbers and Background of respondents and respondent households

	Mudon (numbers)	`	Thanpyuzayat (numbers)	Ye (numbers)	State-level meeting in Malamyaing	Total
Paddy households	22	9	7	5		43
Rubber households	39	30	50	43	2	164
Village tract secretary/administrator	4	4	3	2		13
Village Administrative leader	4	4	4	4		16
Township SLRD	1	1	1	2		5
Township Agri						0
Township forestry	1	1	1	1		4
AMRD party			3		2	5
Rubber Association		1	1		4	6
Traders/processors			1(Fertilizer shop)		1	2
MNSP				1		1
DKBA						
Monks			1(Wei Kha Mi)			1

Key informants		1 U Saw Juee (Karen Culture & Literature)		4 U Lwin (Activist of Ye Tsp), Ko Mg (KI & logistics), Ko Khant Wai (Activist of Land grabbing case), U Myo Aung (Taung Bon village tract old leader)		5
Karen Literature & Culture Association						
Raren Elerature & Outure Association		2				2
State level authorities (Minister of agri, etc)					6 (1 Minister of Agriculture, 3 Directors from Land Record Dept, Dept of Industrial crops, and Dept of Forestry, and 2 2 Assistant Directors from Land Record Dept, Dept of Forestry (total 6 persons in township level)	6
Total	71	53	72	62	15	273

Annex 3: Estimated cost of rubber production by different years

Total Estimated cost for High-yielding Rubber in the first Year (2013)

The Beginning Yea	Thaton	Mudon
Cost of land	3,000,000	
Clearing the land	200,000	30,000
	76	

Grafting (800 kyats x 200 plants)	100,500	160,800
Soil preparation (200 x 200 plants)	40,200	40,200
Marking pole (20 x 200)	4,020	4,020
Fence	100,000	
Planting (labor)	3000 (one day)	40,200
Fertilizer (at planting: one bag per year)	22,000	35,000
Labor for feeding Fertilizer (two people, two days, two times)	30,000	32,000
Maintenance (three people, three days, two times)	54,000	72,000
Hurdle protecting the spread of fire		10,000
Total costs for the initial year	373,720	424,220

Total Estimated cost for the Second Year

The second Year	Thaton	Mudon	
Total costs for the initial year	373,720	424,220	
Total cost for the second Year			
Fertilizer (3 bags per year)	66,000	105,000	
Labor (two people, two days, two times)	30,000	32,000	
Maintenance (three people, three days, two times	54,000	72,000	

Fire hurdle		10,000
Total	150,000	219,000
Total cost for planting and maintenance in the initial seven years	900,000	1,314,000

Harvesting Cost

	Thaton	Mudon
Total cost for planting and maintenance in the initial seven years	900,000	1,314,000
Harvesting /processing Fertilizer (6 bags)	132, 000	200,000
Labor to feed fertilizer (3 people, 2 days, 2 times)	36,000	32,000
Maintenance (three people, three days, two times)	54,000	72,000
Fees (one per month, six months)	360,000	420,000
Total	582,000	734,000
Grinding machine (2)	600,000	600,000
Earthen ware container to collect juice(200 cups)	6,030	6,030
Acid one gallon	18,000	18,000
Knife (2), container and spoon	13.000	13,000
	637,030	637,030
Grand Totalup to the completion of the first harvest in the seventh year	2,492,750	3,109,250

Annex: 4 Total Income

The seventh Year	Thaton	Mudon
Grand Total expenses up to the completion of the first harvest	2,492,750	3,109,250
Productivity per year (high-yielding)	2,160 lb	2,160
12 pounds for thirty days for six months		
total income 8 a x 2168 lbs -	1,728,000 kyats	1,728,000

Remarks: Rodents that destroy the rubber plants can be exterminated for a fee of one per 5,000 kyats. It is more expensive to hire labor to clear the land on the hills. Note that productivity is highest in the first two months of harvesting (16 lbs) and gradually reduced to seven pounds. Average productivity can be estimated as 12 lbs.

Sr	No. of Acra	Pr	ivate	G	ìov	Co	o.ltd	A	rmy		state my	Соре	arte	Т	otal
	Plant	Nos	Acras	Nos	Acras	Nos	Acras	Nos	Acras	Nos	Acras	Nos	Acras	Nos	Acras
1	under 2 Acras	5247	8119.78	0	0	0	0	2	2	0	0	0	0	5249	8121.78
2	2 to 4.99	12428	40352.29	0	0	0	0	1	4	0	0	0	0	12429	40356.29
3	5 to 9.99	16206	118639.48	0	0	0	0	27	237	0	0	0	0	16233	118876.48
4	10 to 19.99	8886	133059.59	0	0	0	0	33	442	0	0	0	0	8919	133501.59
5	20 to 29.99	2140	54439.3	0	0	0	0	2	46	0	0	0	0	2142	54485.3
6	30 to 39.99	612	19333	0	0	0	0	3	95	0	0	0	0	615	19428
7	40 to 40.99	426	18297	0	0	1	40	3	220	0	0	0	0	430	18557
8	50 to 99.99	395	25278	1	66	0	0	6	411	0	0	1	62	403	25817
9	100 to 499.99	78	11016	1	557	3	1242	27	5532	0	0	0	0	109	18347
10	500 to 999.99	5	3414	6	4248	1	773	0	0	0	0	0	0	12	8435
11	over 1000	2	4365	4	12247	2	5762	0	0	1	2080	0	0	9	24454
														0	0
	Total	46425	436313.4	12	17118	7	7817	104	6989	1	2080	1	62	46550	470379

Annex 5: Sizes of Holding in Mon state

Source: Department of Industrial Crop Development, Mon State

Annex 6: Self-ranked socio-economic status in Northern and Southern Mon States

Self-ranked socio-economic status in Northern Mon state

	Total households	Poorest	Medium	Rich
In wein gyi				
Mostly paddy	150 Households	60 households Cannot even make contribution toward funeral/landless/daily wagers	60 Household 5-20 acres of paddy	30 Households (large land holdings, people who can donate money, those two storied house, phone, motor cycles
In shay	145 HH	85 HH	50 HH	10 HH
		Whoever cannot contribute at all/or who can contribute about 5,000 to social/religious events/,landless worker	Whoever can donate 8,000 kyats to social and religious events, can send kids to school, owners of grocery shops	Who own rubbers, remittance from migrant laborers, owners of grocery and transportation; whoever can donate 10,000 toward religious
Danu	85 HH	59 HH	20 HH	6 HH
		Struggle on daily basis; from hand to mouth	Whoever have "surplus" money	Own both paddy and rubber land; and 15 acres rubber producing lands
Naung Bo	1250 HH	650 HH	500 HH	150 HH
		They have family members who work outside Mon state	Own and operate some small scale businesses, such as trading, rice processing, they have families working in foreign countries	Own at least 8 acres; fewer family members who are working outside Mon state; they do trading; traditionally rich
Kaw ka bo	858 HH	258 HH	200 HH	400 HH

		Own a little bit of land; 58 households have no land and they are migrant from other villages; they said they have no poor people in their village, and that the only poor people are from other village	Own fewer rubber and paddy, their houses are not that nice	Own rubber and paddy (20-30 acres) very nice brick houses, a few have car, all have cycles, kids go to Malaysia and Singapore
BEYIN	660 HH	120 HH Thetch roof and bamboo sheet walls	395 HH Two storied, half brick, and half log houses, have motor cycle, a few have car	145 HH They have brick houses, motor cycles, and car
Ta Kon Daing	900 HH	385 HH Landless, daily wagers	500 HH Rubber, paddy, grocery stores, kids going to foreign countries	15 HH Own rice mills, children go to Singapore; have paddy, rubber, land, and car
Naing Lone	1124 HH	56 HH No land; landless because they don't want to do anything	169 HH House, rubber land, but fewer	899 HH Own car; large rubber acres and paddy (80% of them);

Self-ranked categories in Southern Mon state

	Total households	Poor (households)	Medium	Rich
Wei Nut, Ye		40	135	40
		Below 5 acres	5-10 acres	10 Ac above
Hnin Sone, Ye		90	30	20
			1000 rubber plants	1700 rubber plants

	1000 plants below	above	above
Han Gan, Ye	1200	300	50
	Below 10 acres	10 acres above	20-30 acres
Wei Paung, Ye	50	120	10
	1.5 acres	3 acres above	8-10 acres
Wei Kha Mi, Than Pyu Zayat	190	100	10
	5 acres below	7-15 acres	15 acres above
Taung Pha Lu, Than Pyu Zayat	50	300	10
	Landless	4-5 Ac	10 acres above
Set Se, Than Pyu Zayat	50	615	70
	Around 2 Ac	Around 5 Ac	10 Ac Above
Wei Thon Chaung, Than Pyu Zayat	20	269	75
	400-500 Plants	1000-5000 Plants	5000-7000 Plants