

Fragmented Sovereignty and the Politics of Watershed Resources in the Shan State of Myanmar

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Abstract

Forests and river resources in the Shan State of Myanmar provide the base for livelihood security among rural populations, providing food, shelter, and medicine to regions where markets, clinics, and schools are scarce. The traditional and resilient form of agriculture known as shifting cultivation utilizes the landscape as a mosaic of forest and upland fields. Moreover, the Salween River - known as the Thanlwin in Myanmar - provides fish, riverbank vegetables, river gold to sell for currency, water for drinking and household needs, and power for micro-hydro generators. The Thanlwin River is the longest free flowing river in Southeast Asia, but a cascade of six proposed dams threatens to change that. In the Shan state, early stages of construction for the Mong ton dam have already prohibited local communities from accessing the forest and river resources they rely on and it threatens to evict over 50,000 individuals with little consultation or compensation.

Current national policies such as the 2012 environmental conservation law favor business interests of the needs of local communities and laws such as the 2012 farmlands law and the 2012 vacant, fallow, and virgin lands management law allow for the removal of over 50,000 people, the loss of local medicinal and foraging knowledge of watershed resources, through the dam's reservoir and logging, the destruction of over 600 km² of watershed and its subsequent loss of biodiversity. The construction of the dam has already allowed the logging of nearby teak-dense forests and the presence of Burmese Tatmadaw and Lahu Militia in territory that previously was held by the Shan State Army. Through the lens of two communities along the Thanlwin river, this article discusses the salience of forest and river resources and the fragmented governance that influences access against the backdrop of the current and future effects Mong ton Hydropower Development Project. This research concludes that the

discrepancies that occur between local governance and a centralized Myanmar government and the politics that surround resource use and access will increase local communities' vulnerability.

Introduction

Natural resources contribute globally to biodiversity and carbon storage and provide food, shelter, and substance for communities around the world. Moreover, the extraction of natural resources funds economies, supports insurgent groups, and expands State territory. The twentieth century has seen the construction of over 50,000 large dams (Sneddon, 2015, p. 1) and according to a 2000 report by the World Commission for Dams, these dams have displaced an estimated 40-80 million people worldwide (Chatty and Colchester, 2002, p. 2). Some of the world's greatest expanses of natural forest exist in the Greater Mekong Sub-region (Myanmar, Laos, Thailand, Cambodia, Vietnam, and South China), yet a WWF report suggests this sub-region is one of 11 deforestation fronts that will contribute to over 80% of the world's forest loss (127-170 million hectare) by 2030, with agri-business, logging, hydro-electric development projects and unregulated infrastructure development as the primary cause of deforestation (WWF, 2015; EIA, 2015). Forests in the Mekong sub-region are sources of ecological and material wealth, used both as refuge and resource (EIA, 2015; Jones, 2014; Wood, 2011; Hengsuwan, 2013, Dahal, et. al., 2011; Sturgeon, 2004; MacLean, 2010). Specifically, in Myanmar, the last decade has seen a 12% deforestation of intact forests, with large globally significant tracts of forest still intact in the Shan state (EIA, 2015). These high rates of deforestation, in addition to the effects on climate change and biodiversity, directly impact the ability of local subsistence farmers to support themselves (Roberts, 2016). For the two communities discussed below, the greatest threat to forest access is a hydro-electric development project that has already allowed for the clearing of forested areas that will be flooded by the dam's reservoir.

The Thanlwin River is the longest free flowing river in Southeast Asia, but a cascade of five proposed dams threatens to change that. In the Shan state, early

stages of construction for the Mong ton dam have already prohibited local communities from accessing the forest and river resources they rely on and it threatens to evict over 50,000 individuals with little consultation or compensation. The decision that surround who has a right to a resource – State, business, or local communities - are political. They represent grabs for increased territorialization, displays of power and ‘national development’, and a source of revenue, often in ignorance of or to the expense of communities whose livelihoods depend on those resources (Bryant, 1997; Corson, 2011; Hengsuwan, 2013; Koubi, et. al., 2014; McCreary & Lamb, 2014; Peluso & Vandergeest, 2011; Wood, 2011).

Conflict over resource use and management threatens the nascent democratization of Myanmar and its peace treaty with over a dozen ethnic armed forces. Hydropower development projects often lead to conflicts between local communities, civil society, and the military and play a significant role in the displacement of people in Myanmar (Kattelus, Rahaman, & Varis, 2014, p. 94). The Shan state has experienced decades of armed conflict and remains fragmented and internally contested. The 1989 ceasefire agreements signed after China was no longer willing to financially support many of the pro-communist ethnic minority armed forces created a scenario referred to as ceasefire capitalism (Woods, 2011), where armed group leaders worked in concert with, often Chinese, investors to exploit the natural resources that the Shan state is replete with. Planning for the Mong ton dam began prior to the democratization process in Myanmar, and as of October 2016, although accounts vary on the size and scope of the plans, Aung San Su Kyi’s government has made no indication of halting the dam project (Deetes, 2016). Formally known as the Tasang dam, the Mong ton dam along the Thanlwin in the Shan state is set to be the largest dam in Southeast Asia, with a crest height of 231 m, generating 7,000 megawatts of electricity, and a 641 km² reservoir that will extend 380-870 kilometers upstream,

impacting an estimated 12,000 to over 120,000 people¹ (SRBFS, 2012; SWC, 2016; Maung, 2016).

A reliance on forest and river natural resources and a lack of protection or enforceable land laws leave subsistence farmers in rural Shan State vulnerable to threats posed by natural resource extraction by corporations, the State, and insurgent groups. This article examines natural resource governance and use along the Thanlwin River ²in the Shan state of Myanmar by state and non-state actors. With the already begun construction of the Mong ton dam³, it is important to understand the natural resources and communities impacted by the project.

Through the lens of two communities along the Thanlwin River, this article discusses the salience of forest and river resources and the fragmented governance that influences access against the backdrop of current and future effects of the Mong ton hydropower development project. As a component of Myanmar's path to peace and democratization, ceasefire negotiations and new land and conservation laws are being negotiated. Considering this, the discrepancies that occur between local governance and a centralized Myanmar government and the politics that surround resource use and access. This research is drawn from four key informant interviews with village leaders and research team members, two group interviews with community members, and 24 survey interviews from community members based on a purposive sampling method based on gender and age.

¹ Discrepancy between reservoir and impact lies in the difference between pro-dam and anti-dam information notices.

² A river by many names, known as the Nu, Thanlwin, Nam Khone, and Thalwin, respectively in China, Thailand, the Shan state, and Myanmar. Because the portion of the river studied in this article is in Myanmar, this paper will refer to it as the Thanlwin River.

Study Sites

The Shan state rests in the Shan hills bordering contemporary China, Laos, and Thailand. The ethnic majority, Shan, speak a language more closely akin to Thai and Northern Thai than Burmese. The state is also home to many other ethnic minority groups, including Pao, Palaung, Lahu, Kokang, and Wa, many of whom represent the uplands peoples of Jean Michaud's Southeast Asia massif (2006). Spreading across Myanmar, Thailand, Laos, China, Cambodia, and Vietnam these 'minority' populations represent approximately 80 million people (pp. 2-5), collectively more numerous than the populations of Thailand, Laos, or Cambodia. However, representing numerous transnational ethnicities, these highland peoples typically reside above 500m in the periphery and their nation states often categorized them as backward and uncivilized (Scott, 2009; Vandergeest, 2003; Vienne, 1989). Moreover, historically they have posed a threat to settled agrarian states because their subsistence livelihoods, mobile communities, and diversity are hard to govern and difficult to tax (Bryant, 1997; Roberts, 2016; Scott, 2009).

Remotely located, the two Shan villages in this study share the history of marginalized minority groups in the uplands of Southeast Asia. Racialized as 'backward' by the ethnic majority Burman, traditional livelihood practices, such as taungya, get painted as destructive. Taungya is the Burmese word for shifting cultivation or swidden agriculture, taung for hill and for cultivation. Taungya includes partial forest clearance, multiple cropping, shallow cultivation, and field rotation to produce food and sometimes cash crops (Bryant, 1994, p. 226). It is a system, through use of a prolonged fallow phase – one that is longer than the cultivation phase – that allows woody vegetation to return to a site that had been cleared for annual crops (Brookfield, 2015, p. 26). For swidden agriculturists, like both communities in this study, the 'forest' is a component of an integrated landscape that provides long-term and short-term benefits and products. The land is a shifting mosaic of forest, agro forest, and agriculture supporting their livelihoods and often increasing biodiversity of the area.

Situated along the Thanlwin River, both village 1 and village 2 face the threat of relocation upon completion of the Mong ton dam and its reservoir. Positioned roughly 200 km north of upstream from the dam site, Village 1 is still within the flood zone of the reservoir (Salween Watch, 2013), which villagers only learned of in December of 2015 (Wa, 23 February 23 2016). According to the village headman, seven or eight households established Village over 160 years ago and the village currently has 27 households and 116 people, with de facto ownership of a large forested area. Women and men from village 1 have access to a rich forest and make use of traditional knowledge to recognize plants and animals used for foods, medicines, and building materials. The community does not have any schools, clinics, Buddhist temples, or markets. If people want access to health clinics, temples, or markets they can either walk for about two to four hours on a path, which connects them to a neighboring village that has motorbike taxis or they can pay for use of one of the few motorboats in the village that will transport them on the Thanlwin River. Both, however, are quite expensive and during interviews, every villager mentioned transportation as a major concern.

Village2, however, is located near the construction site of the Mong ton dam in the eastern Shan state near the Thanlwin River. It's a village of 61 households and about 200 people. Bigger than village 1, they have had a Buddhist Temple and a school since 2007, however, no health clinic. Shan traditional medicine that uses forest and river products is quite important to the village and there are three or four people in the village who can use traditional medicine to take care of the sick. If villagers are too ill, they travel to a neighboring health centers. The school is taught in Burmese and goes up to grade 4, although of the 12 villagers interviewed, one had finished high school education at grade 10 and two had had grade 6 educations. In taungya villagers grow rice, however, due to loss from pests like mice, many villagers buy rice in Mon Pon or Mong Ton townships. Many community members also have family members who work in Thailand and send money back to their parents (Group interview, 3 February 2016).

Methods

Theoretical

This article uses political ecology to investigate the exchanges between natural resources and society. Rather than merely examining geopolitics or economics, political ecology allows for an analysis that integrates land management and natural resource use and connects it to its local, national, and international contexts. It looks at positions of power and control over use and access of resources within groups and classes of society and focuses on the power structures that shape those nature-society relationships (Blaikie and Brookfield, 1987; Bryant and Bailey, 1997; Peluso and Watts, 2001; Robbins, 2004; Zimmerer, 1996). Political ecology finds its origins in political economy and cultural ecology, focusing on the fluid dialectic between society (class, ethnicity, race, etc.) and natural resources (Blaikie and Brookfield, 1987, p. 17). This research considers national laws and political trends; however, it also investigates local use of natural resources that do not have an economic value. It understands the relationship between groups of people vying for control over natural resources as one of power. Feminist political ecology then explores these relationships further by recognizing the different gendered relationships and power dynamics that exist at the community and household levels.

In approaching this research from a feminist political ecology standpoint, the intent is to simultaneously recognize the role and function of the researcher's positionality in relationships of power and change, while also allowing for similar power relationships and intersections in society's many groupings of household, gender, class, race, ethnicity, sexual orientation, religion, and political party). A feminist political ecology framework influenced not just what questions were asked in this research, but the entire approach.

Linda Tuhiwai Smith calls 'research' "one of the dirtiest words in the indigenous world's vocabulary" (2012, p. 1). As a white female working in a postcolonial Southeast Asia country, I recognize my situated identity as an academic scholar from a dominant (USA) culture, who also embodies identities of domination and subjugation based on gender, sexuality, race, religion, physical traits, and class

(Haraway, 1988). Moreover, I recognize that I carry with me imaginary colonial histories and perspectives (Said, 2009). While outsider knowledge's carry certain advantages, they also can create a 'subaltern subject' (Spivak, 1999). In an effort address these challenges and due to the practical difficulties of not personally being able to access communities within "brown zones" I utilized feminist collaborative methods (Sharp, 2005) to design this research. This allows for the position of power to be shifted from the researcher and shared with those in the research areas. While working in collaboration provides challenges to me as a researcher, it also provided the opportunity for an interdisciplinary research project that centered not just on my interests as a researcher, but also those of the individuals I worked with.

Methods

This project involved collaboration between two researchers from separate Shan civil society organizations and myself. Together we crafted the research agenda, methods, and sites. As a foreigner, I have restricted access to most of the Shan state and there is a distrust within local communities for outsiders, including Burmese not from the same village tract. Therefore, Mai and Wa⁴ both selected villages to visit that they or their organizations were familiar. In site, we looked for locations that (1) include areas where existing forms of governance are being remade either through extensive resource extraction/agricultural production or through conservation; (2) are areas that are valued for ecological conservation; (3) are home to marginalized people groups who rely on timber and non-timber forest products for a portion of their life and livelihoods.

During a three-day workshop held in Myanmar in January 2016 we discussed our personal and organizational interests and agendas for the project pooled our collective knowledge on the region and shared our familiarity with different research methods. On the second and third days, we then collectively decided which research methods we wanted to use, what research questions we were each

⁴ For confidentiality reasons, actual names of researchers and interviewees are not used.

concerned about, and interviewee selection criteria. Research questions centered on village histories, access to education and health care, agricultural practices, and use of forest and river resources. Selection criteria for the 24 survey interviewees were selected through a type of non-probability sampling where we ascertained which units should be observed based on our judgment about which ones will be the most useful or representative (Babbie, 2007, p. 193). Mai, Wa, and I decided to try to interview an equal number of men and women, and as per their suggestion we decided to break of the age categories based on family status, i.e. single young adults, married with family, and elderly.

Wa visited Village 15 with five other employees from her organization. They visited the village for 2 days in February 2016. Wa conducted a key informant interview with the village headman and a group interview was held during the evening of the first day. During the group interview the community members drew a resource use map and did a participatory learning activity (PLA) where they cast votes on issues that concerned them the most. Each researcher then interviewed two people for a total of 12 survey interviews (see table 1). The six researchers also each recorded a daily journal.

Mai and her research assistant traveled to Village 2 for four days in February 2016. They conducted a group interview and the same PLA participatory learning activity and drew a resource use map. Mai also interviewed the pervious village headman, as the current village headman was traveling. Main interviewed 7 people and her assistant interviewed 5 for a total of 12 (see table 1). All interviews were conducted in Shan and interview notes were taken in Shan the first language of the researchers as well as the villagers.

⁵ For confidentiality reasons, the two villages will simply be called village 1 and village 2.

Table 1: Number of Survey Interviews by gender and age divisions

	Village 1	Village 2
Total village population	116	199
Total village # households	27	60
Total # of survey interviews	12	12
# female	6	9
# male	6	3
# of single young adults	4	3
# of married with children	5	7
# of elderly	3	2

Wa and Mai then translated the interviews and PLAs from Shan to English. On February 23 and 24, 2016 the three of us met again in Taunggyi to discuss research findings between the villages. I interviewed both Wa and Mai about their

While this project was designed as a collaborative project, there are areas where that both succeeded and failed. The core three of us succeeded in choosing which research methods to use and collectively deciding on question topics. However, when it came to writing the questions, my voice dominated and in the research process itself, all of us had been trained in ‘western’ scientific research methods.

Also, while the partnership between the Shan civil society organizations and myself remained strong, time prevented us from forming strong collaborative research methods with the villages themselves. Consistency between the methods used in the two villages was also a challenge. Although an equal number of men and women were supposed to be interviewed in both villages, the two female researchers in Village 2 found it challenging to speak with an equal number of

men. Regardless of these shortcomings, the research methods ensured trust between the Shan civil society organizations and the villages and that the information gathered represented the views and perceptions of the local communities interviewed. Additionally, because women conducted over half of the interviews, there was greater female gender inclusiveness in the responses.

Fragmented sovereignties and State policies

Public policies and laws

Administratively, the Shan state of Myanmar is fragmented. For example, located within Shan State Army, battalion 7 (SSA (7)) territory, the respondents from village 1 mentioned no interactions, conflicts, or ties to the national Burmese government. The SSA (7) provides what schools, roads, and other infrastructure exist in their area, while at the same time extracting taxes and resources to fund themselves and their activities. For example, Wa's organization provides a boarding school for Shan students, much of the rice they use to feed the students comes from rice taxes extracted by SSA (7). As she described of her organizations relationship with village 1 "They already knew about my organization and because they know we are from the SSA (7) military too. And they just take good care of us" (23 February 2016). Village 2, however, is within the administrative control of the Burmese government, although in 2012 the village was in Shan State Army south territory. The increased militarization around the Mongton dam as placed villagers inside Tatmadaw controlled territory (MacLean 2015).

In regards to de jure land ownership, all land in Myanmar is deemed as State property and a demilitarization process of the State government that began in 2010 has gradually opened the country to more foreign investment. During the post-independence era (1949) through to the establishment of the State Law and Order Restoration Council (SLORC) in 1988, the de-facto land policy protected peasant farmer's use and access rights to cultivate land, while the State maintained de-jure ownership of land (Callahan, 2009, p. 44; Oberndorf, 2012, p. 2). The land acquisition act of 1894, which is still in effect today, also gives the government the right to take over any land, contingent upon some form of

compensation to the original owners (Leckie and Simperingham, 2009; BEWG, 2011, Kattelus, Rahaman, & Varis, 2014, p. 90).

The Shan state army came into being in 1964 but later split into Shan State Army North (SSA-N) and Shan State Army South (SSA – S) (Fisher, 2016). In the late 1980s, bilateral agreements between Myanmar and China and ceasefire agreements between insurgent groups and the government of Myanmar increased trade (legal and illegal) of natural resources across borders (EIA, 2015). For example, as the headman described in village 1 “A few years ago [3-4 years ago] there was a Chinese company digging gold from the river along the village, allowed by the military. Recently there is no company nearby the village since the gold is gone.” (18 February 2016). One-hundred percent of interviewees discussed the difficulty they now have in panning for gold along the river since that time. When villagers can find gold, they sell it to buy household needs like cooking oil and salt. Animal leather is also sold (Mai, 23 February, 2016). As one individual described:

The gold left is less than usual. We could collect more before Chinese people went to dig gold at the floor of the river. After they used large machines and took most of the gold. Now, we can only collect one piece or two. However, we have to find gold for our lives to exist. (Interviewee 2, 18 February 2016).

Individuals from village 2 have also experienced a lack of access to gold. However, whereas with village 1 the digging was allowed by SSA (7), for village 2 the digging was allowed by the Tatmadaw.

“We have limited by the Burmese military to go to the river because of digging gold by the Chinese” (Interviewee 10, 4 February 2016).

After the established of the SLORC in 1988, land policy shifted from a socialist emphasis on peasant farmers to one of economic growth through market reform, relaxing control of domestic and foreign investment. Furthermore, the “wastelands instructions” of 1991 gave the state a means to designate land as “wasteland” and circumnavigate customary law of actual user right, and instead allowing private citizens or investors the ability to establish large scale

plantations, all of which has increased the scale of land appropriation throughout the country, particularly in the uplands (Oberdorf, 2012, p. 2). In 1989 a logging ban in Thailand followed by 1996 a logging ban in neighboring Yunnan province of China, followed by a national ban in 1998 increased pressure on Burmese forests and increased illegal logging across borders (EIA, 2015, Johnson & Forsyth 2002). The 1992 forest law, drafted by the SLORC, emphasized both forest conservation and forest extraction through logging and the establishment of plantations. In 2006, the Conservation of Water Resources and Rivers Law is the first unifying law to address water resource conservation in Myanmar. It seeks to benefit public users and prevent serious environmental impacts (Nyunt, 2008; Urban et al., 2013b; Kattelus, Rahaman, & Varis, 2014, p. 90). All land in Myanmar remains state property and forest produce may not be extracted without a permit (EIA, 2015, p. 5; 1992 Forest Law). Natural forest cover has been declining by two percent each year with a total loss of 1.7 million hectares of forest cover between 2001 to 2013 (EIA, 2015, p. 5). To slow this deforestation rate, Myanmar enacted a log export ban on April 1 of 2014 (EIA, 2015, p. 5), and the drafting of a logging ban is currently underway (Frontier Myanmar, 2016).

In 2010 elections were held – although the NLD party boycotted the election – and a demilitarization of the government began (Pedersen, 2011). A series of laws in 2012 further defined the process of land acquisition by individuals and investors. The 2012 Vacant, fallow, and virgin land management law (VFV) reaffirmed much of the practices established after the ‘wasteland instructions’, allowing citizens, private sector investors, government entities, and NGOs to apply to lease lands (Oberndorf, 2012, p. 2; Kattelus, Rahaman, & Varis, 2014, p. 90). The 2012 environmental conservation law does little to influence local and foreign business activities toward more sound environmental practices, as its fines are too minimal in comparison to the scale of the projects that violate the law (“Burma’s environmental law,” 2012). Instead it defines the application process for businesses to engage in a project that has the potential to harm the environment and several major projects with negative environmental impacts are under way. Myanmar law does not require an environmental impact assessment (EIAs) (Kattelus, Rahaman, & Varis, 2014, p. 90).

The 2012 Farmland Law offers land tenure security through a land use certificate and registration system, which is not in place in the Shan state. Moreover, this law does not recognize taungya (shifting cultivation) or other customary land uses as a form of agriculture. Its references to taungya, only refers to it as when an upland field is not used in rotation (Oberndorf, 2012, p. 8; Kattelus, Rahaman, & Varis, 2014, p. 90). Thus, when a section has been left fallow as part of a long-term taungya rotation, it can be classified as “vacant or fallow” under the VFV 2012 law and allows agro-industrial complexes to appropriate the land. While the Settlement and Land Records Department (SLR) has conducted land surveys, very little has been done in the more remote parts of the country where taungya is practiced. Moreover, even when smallholder farmers do have land leases, the farmland law often allows bigger businesses to acquire their land (Oberndorf, 2012, pp. 8-9). The 2012 Foreign Investment Law provides the perimeters for foreign investors to lease private land for an initial 30-year investment term, with the possibility of two 15 year extensions. And in a move that opened up the investment possibilities, it now allows investors to establish business without local partners (ADB, 2012b; Myanmar Legal, 2012; Robinson, 2012; Kattelus, Rahaman, & Varis, 2014, p. 90)

Oberndorf (2012) argues that access to land and land tenure security for smallholder farmers increases national economic growth, social stability, and environmental health (pp. 4-5). A draft land law policy should decrease the precariousness of de-facto land use for much of Myanmar’s smallholder farmers. Moreover, it should give rural households more control over land-related decisions (TNI 2015). The 2014 version of the land use policy threatened to further isolate peasant farmers and upland minority groups, failing to recognize non-economic values of land and placing business interests above the current occupants of the land (MacLean, 2014; “Myanmar,” 2014). The 6th draft does provide greater provisions for customary uses of land, such as taungya, but it still prioritizes an economic view of land and does not provide much recourse for the already disposed (Franco, 2014; TNI, 2015; Draft Land Law 2015).

Ceasefire agreement talks are underway between 13 of the 16 recognized ethnic armed groups and larger peace talks involving the 73 registered political parties,

16 major armed groups, and several civil society agencies are also in the works (Key informant interview, 7 July 2015). Nobel peace laureate DawAung San SuuKyi's National League for Democracy (NLD) party swept the nation's elections in November 2015, winning an absolute majority in parliament, and representing a significant step in the demilitarization of the Burmese government (Holmes, 2015). Yet, in the Shan state, the NLD party did not win a majority of votes, and indeed every respondent from village 1 and 2 who was able to vote mentioned voting for the Shan League for Democracy party (SNLD), not the NLD party.

The ceasefire agreement of the early 1990s produced a new form of resource management. The ceasefires didn't guarantee the authority of the Burmese government. Instead a hybrid governance occurred between the warlords of the insurgencies and local authorities, usually to the disadvantage of the local peasant population by enclosing the forest and restricting their access (Woods, 2011; Sturgeon, 2004; MacLean, 2010).

This enclosing of territorial authority by the Burmese State occurred with village 2. Speaking about after the village came under the jurisdiction of the Tatmadaw, community members from village 2 discussed changes in their access to forest and river resources based on these changes. AS mentioned previously, villagers discussed limited access to the forest and river when the Chinese company was present and working on dam construction, due to the presence of the Tatmadaw and the Lahu military hired out by the Chinese companies (Village headman, 3 February 2016). During those times, villagers would only access the forest during day light hours, expressing concern for their safety. At the time of the interviews the Chinese were not present, therefore the villagers did not feel restricted in their access to the forest. Moreover, per one interviewee, "if hunting and you get an animal, you must pay the Burmese Military a little, then they don't obtain all you got." (Village 2, Interviewee 10, 4 February 2016).

In village 1, as stated previously, they are not directly influenced by the laws and policies of the Burmese state, instead they feel the influence of SSA (7). Four or five years ago, SSA (7) provided two Shan teachers who taught for almost 2

years; however, currently the village does not have a school. And while, SSA (7) has allowed Chinese companies to dig for gold in the river and does hire out labour from the villagers for opium production (Group interview, 18 February 2016), they also, recently built a water tank in the village for cleaner drinking water. Also, Villagers said that because they are such a small village and too poor they do not pay the 20% rice tax they paid a few years ago.

Woods calls this new relationship between companies like the Chinese companies digging for gold or constructing the Mong ton dam, ceasefire capitalism and argues that this allows for a gain in “territorial authority by strategically appropriating markets, business people and ethnic political leaders” (2011, p. 754). With village 2 this ceasefire capitalism is occurring with the Burmese state and foreign companies, however, with village 1 is occurring between the SSA (7) and foreign companies.

Territorialization through natural resource extraction

The Shan state’s wealth of natural resources from hydropower, to forests, to wildlife, to minerals, contributes to the fragmented governance and rule within the state. Myanmar’s forests and rivers represent a confluence of interests. These politicized watersheds are more than just ecological zones, sources of timber, insurgency warfare jungles, or components of a mosaicked landscape. Instead the continual territorialization and reterritorialization of Myanmar’s forests, from colonial times to today, represent the above in a messy, dynamic, contestation of interests, powers, and resistances. When examining governance and territorialization, questions of how natural resources are used, who gets to call themselves “resource user” and how do resources get defined need to be asked. In the Shan state, natural resources provide life and livelihood to local communities and fund armed groups. Historically and contemporarily the State has used natural resource extraction to expand its territory. Territorialization involves the active inclusion or exclusion of people and their access to resources through defining a geographical space, defining resource use, and defining the resource users (Vandergest and Peluso, 1995; Corson, 2011). Internal

territorialization then includes this inside nation-state boundaries, as in the Forestry Department delineating state forests in Myanmar.

Nothing exemplifies this as much as teak (*Tectonagrandis*). Found in parts of South and Southeast Asia (India, Myanmar, Thailand, and Laos), its strength, straightness and durability made it desirable for shipbuilding, railway carriages, furniture, houses, and bridges (Bryant, 1997, p. 227). However, teak is also a difficult species to manage. It can take up to 150 years to mature and is only harvestable at 80-year intervals (Bryant, 1997, p. 227; Colin, 2005, p. 234). Moreover, teak grows naturally in mixed tropical forests, rarely making up more than 10 to 12 percent of the forested area, although it grows unusually dense along the Thanlwin River in parts of the Shan state (Colin, 2005, p. 224; Bryant, 1997, p. 227; Tewari, 1998).

Particularly because teak was viewed as a valuable economic commodity for the British Empire, it became imperative that the British Burma then “territorialize” teak forests. Forests became “teak forests” and forest laws sought to control local user’s access to teak (Bryant, 1997, p. 88). Hydropower further complicates governance, particularly in the Shan state. According to Salween Watch, to make way for Mong ton dam, starting in 1996 the Tatmadaw forcibly relocated over 300,000 people from the southern Shan state (2014). The Tatmadaw provided security for teak logging in the potential reservoir state and forced villagers build and repair military barracks and roads (SW, 2014).

There are five dams proposed along the Thanlwin River, crossing through villages and impacting as many 50,000 people if the projects go through (Salween Watch, 2013). These dams are based on agreements signed by Parliament with the Chinese Three Gorge’s Corporation, the Electricity Generating Authority of Thailand (EGAT) and the Burmese Ministry of Electric Power, with the Australian Snowy Mountain Engineering Company (SMEC) consulting on the construction of the dams. Near the Mon Ton Dam site, a project expected to export 90 percent of its roughly 7000 megawatts of electricity to Thailand and China, hundreds of villages have already lost access to tens of kilometers of forest and river, as it’s been cordoned off by Burmese military (MacLean, 2015).

Denis Gray reports that “Ethnic minority leaders and human rights activists say a pattern they call "damming at gunpoint" has been repeated across eastern Myanmar: proposed dam sites are forcefully depopulated by the military without compensation and the region is militarized through the expansion of army camps, helicopter pads, access roads and other facilities” (2015).

This has not been a peaceful process, fighting has occurred around the Mong ton dam site. In the fall of 2015, Shan Sapawa Environmental Organization reported some 9000 government troops surrounding the site (Gray, 2015). The fighting between the Burmese state and insurgent forces over natural resources represented more than just control over resource access but a means to determine who had the right to be resource manager (Bryant, 1997, p. 167). Violence is expressed in the subjugation of the rights of people to access resources and determine their own use of their environment (Le Billon, 2001, p. 561).

Eighty-three percent of interviewees in Village 2 discussed access limitations they experienced because of the Mongton dam. As one interviewee stated,

“If we are near the dam on the river, we can’t go further because it’s limited by the Burmese military. Also, the Burmese military have limited where we can go into the forest the Chinese’s project” (Interviewee 1, 4 February 2016).

According to the village headman, the Burmese military control the area around the dam and provide safety for the Chinese companies constructing the dam. The Burmese military also pay Lahu military to help protect them, thus the Lahu and the Burmese work together to secure the territory around the dam. The village headman explained that

“The Burmese military don’t stay in the village, but they do control it” (3 February 2016). *During the time of the interviews, the Chinese were not present around the dam, therefore individuals from village 2 felt more free to go into the forest and fish along the river; however, when the Chinese are present, they mentioned that they only go into the forest between 9am and 5pm because when it is dark, they stated that the forest is not safe”* (Mai, 23 February 2016).

From both villages, 100% of respondents said that they were against the dam. In village 2, they had already experience the effects from a smaller hydropower project on a tributary of the Thanlwin River, in the form of the Tasang dam⁶. The Thai MDX group of companies established the Tasang dam in 2005. During the group interview villagers discussed how the Thai company held public consultation and FPIC before they built the dam and did receive approval. Additionally, the Thai company did hire local villagers for labor and did purchase food from the villagers. However, since the dam has been built, villagers say that fishing has become more difficult and that there is an increase in erosion on the 3 acres of paddy fields (Group Interview, 3 February 2016). The Chinese companies in charge of the Mongton dam have even less interaction with villagers. Although, the Lahu military, hired by the Chinese will buy some food products from the villagers, the Chinese companies have not contributed to the local economy. As one villager stated “I don’t want or need this [MongTon] project. For a small hydropower like Tasang hydropower that is already finished, they didn’t give us the electricity. If the big dam, we will get more negative impact than benefit “(Village 2, 13 February 2016).

The Mongton hydropower project, if completed, would require people from both villages to relocate. SMEC, the Australian consulting company and the public face of the project has said that villagers will be compensated per an ‘inventory of loss-economic survey’ and that they would provide environmental impact assessments (MTDPIB, 2004). In 2015, scientists from Myanmar’s Moulmein University said that the private sector or government did not allow them access to the EIAs or any other documents on the dams (Gray, 2015). Moreover, the guidelines for compensation in the ‘inventory of loss-economic survey’ are unclear. When villager’s livelihoods are heavily subsidized from forest and river products that have no commercial value, compensation becomes a gray area. SMEC did provide a public consultation meeting, however, individuals who attended the meeting mentioned that upland communities were invited to attend, but asked to dress in traditional dress and a disproportionate number of Palaung and Lahu villagers attended. The Palaung and Lahu individuals are from villages in

the highlands where they would not be forced to relocate because of the dam (Mai, 23 February 2016).

Non-economic value in watershed resources

For minority groups in the Shan state, their use of the forest products for food and medicine is not considered in business deals conducted over land concessions and forest extraction. The Mongton dam, through acts of violence has already redefined the landscape. Territorialization can draw boundaries around resources and people, and for communities like village 2, controls over themselves and those resources are imposed on them (Peluso and Lund, 2011; Peluso and Vandergeest, 2001). For village 2, their ability to live, work, and access forest and river resources are already inhibited. Through roads, relocation, and teak logging, people's lives have been disrupted. Local use of the forest, however, ran and runs in direct contradiction of State and business resource extraction.

For upland agrarian communities, the forests provide food, fodder, fibers, and medicine. However, non-timber forest products (NTFPs) such as shoots, nuts, lichens, fungi and forest vegetables like forest vine pepper (*Piper interruptum*), fishtail palm (*Caryotamitis*), snowflake tree (*Trevesiapalmata*) do not have market value and instead teak, *Accacia catechu* (cutch), and even some bamboo species become the species coveted, protected and thereby contested (Burnette, et. al., 2015; Bryant, 1997; Charnley & Poe, 2007). Despite research that shows that long fallow shifting cultivation systems can lead to an increase in biodiversity and ecological resilience (Brookfield, 2015). In village 1, some of the Shan researchers - who have been educated in towns and cities - expressed dismay at the process of taungya. As one researcher stated in their journal

They [villagers] don't know the value of the forest and that is important for their farming land. They cut many plants in the forest to make their plantation. When I went to their farming land to know deeply how they are working and what they are planting, I saw a huge deforestation region. Furthermore, they don't use the plants that they cut down. It means that they spent or waste their resources they fired many plants in the woods. (18 February 2016)

Burmese and Thai narratives around ethnic minority groups, such as the Karen, Shan, Palaung, or Lahu (i.e. not ethnic majority Burmans) that practice taungya have been and continue to be condemned and accused of forest destruction (Bryant, 1997; Vandergeest, 2003). Yet as Mai highlighted from her discussions with community members “If they don’t burn they can’t do their livelihood (23 February 2016).

The forests surrounding both villages provide space for taungya as well as food and medicine and building materials.

“The forest is very important for my household because if the forest is destroyed we don’t get nature’s medicine, food, building and we lose our livelihoods. Also, the river is very important for us. The river can help us to get clean wind, the living of tree, drinking water, swimming and agriculture.” (Village 2, Interviewee 5, 4 February 2016).

In village 1, people get their basic needs met from the forest, such as firewood, herbal medicine, traditional medicine, vegetables, meat (chicken, pig, deer), different kinds of bamboo and woods (including teak) that they use for building houses. Also, for taungya in the forest, no irrigation is needed and they grow mostly rice, tea and pineapple. Different types of local vegetables, eggplant, sweet potato, opium, beans, jackfruit, and chilies were also mentioned. The fields remain fallow for 8-10 years and they don’t fertilize the fields, although they will use a spray to kill grasses. From the river, they get many different fish species, oyster and crab. Like village 2 they also get gold from the river, through panning.

From the forest, interviewees also mentioned hunting for pig, deer, and chickens, harvesting forest vegetables like bamboo shoots and mushrooms, and collecting medicinal herbs and roots. Orchids, cutch, and some wildlife, including the Sunda pangolin a critically endangered species caught live and sold to market. The trade goes mostly to China. Villagers acknowledge that they are very rare to find, however, when they do they get roughly \$200 US dollars per animal, which is almost as much as most families will earn in a year. In 2014 a black-market pangolin could be sold for \$1000, with each scale later being sold for about \$600 (Davies, 2014). Teak, other non-specified wood, and bamboos are used for

building materials and firewood is collected. Both men and women will go into the forest and go to the river, although only men fish in boats and hunt.

Individuals from village 2 also talked about the importance of forest and river resources. As one interviewee stated “The forest and river are very important for our natural environment, washing, agriculture and drinking water.” (Interviewee 1, 3 February 2016). Village 2 has only 3 acres for paddy fields and those are ‘owned’ by 3-4 people, although it was unclear from the group interview, how ‘ownership’ was acquired (3 February 2016). In the last ten years, villagers reported an increase in erosion and logging along the Thanlwin River. In the upland fields people grow garlic, onion, corn, soybean, peanut, bean, pineapple, banana, chili, mango, lemon, garlic, cucumber, tomato in upland fields. They also have riverbank gardens and grow tea. People also get fish, crab, prawns, snails, and oysters from the Thanlwin River, as well as sand and large rocks from its banks used in building, leafy vegetables from the banks and micro-hydro generators used in the tributaries to provide electricity. In the summer season, they get drinking water from the Thanlwin and they also pan for gold.

For both village 1 and village 2, the forest and river provide life and livelihood. Moreover, as one interviewee stated,

“Both river and forest are important. They depend on each other. So, if we don’t have the forest then we don’t have the river.” (Village 2, Interviewee 10, 4 February 2016).

Seventy-five percent of interviewees from village 2 reported a negative change in forest and river ecosystem services that they attributed to the logging around the Mong ton dam. As one villager observed,

“Because of logging, the forest and the river are dry. Also, the noise from cutting down the trees frightens the wildlife and causes them to run away from the village” (Interviewee 7, 3 February 2016).

Of those who discussed a perceived change to the surrounding watershed, all mentioned the narrowing and drying of the river and 78% mentioned forest loss,

both of which interviewees attributed to logging around the dam construction site. Additionally, 33% mentioned the difficulties they now experienced in hunting. During the group interview, villagers also discussed how they had to travel further to practice Taungya. As Mai described,

“If doing taungya they have to stay in the mountain. It’s so far from village, so they stay for week or month and kids stay with grandparents. If they are staying overnight, men do the taungya and woman do cooking and washing, and when they are finished they will help the husband)” (Group interview, 3 February 2016).

Conclusion

As the practice of taungya suggests watershed resources support local livelihoods. Forests and river resources enable livelihood security among rural populations. Forests provide food, shelter, and medicine to regions where markets, clinics, and schools are scarce. Moreover, the Thanlwin provides fish, riverbank vegetables, gold, water for drinking and household needs, and power for micro-hydro generators. Yet fragmented governance between State and local authorities and business interests disadvantages the local populations (Woods 2011; Sturgeon 2004; MacLean 2010).

Neither village has any form of de jure land titling system nor have national laws that allow for foreign investment allowed for the construction of the dam. As they stand, the 1894 land acquisition act, the 1992 forest law, the 2012 Vacant, fallow, and virgin land management law, the 2012 farmland law, and the 2012 investment law do nothing to protect villages like the two described in this study. Not only is the “ownership” of the land undocumented and de-facto, not only is taungya still a marginally accepted practice, but as the 2012 laws show, non-economic use of the land remains subservient to the business interests of hydropower, logging, and plantations provide (MacLean 2014; Myanmar 2014). Indeed, even Daw Aung San Su Kyi, the de facto leader of the country, in a recent trip to Thailand emphasized the importance of moving the hydropower projects forward (Deetes, 2016).

The construction of the Mong ton dam has already altered access to forest and river resources for communities. For people from village 2, they are prohibited from accessing certain forest and river resources and has allowed the logging of nearby teak-dense forests and the presence of Burmese Military and Lahu Military in territory that previously was held by the Shan State Army.

The discrepancies that occur between local governance and a centralized Myanmar government and the politics that surround resource use and access does increase local communities' vulnerability. Be it decisions made by the SSA (7) or the Burmese Military over a Chinese company's right to extract gold from the river or logging of the forest, or the construction of the Mong ton dam, neither village has the 'right' to call themselves resource owners and both communities experience violence through a subjugation of their rights to determine their own resource use (Le Billon, 2001). Ultimately, a reliance on forest and river natural resources and a lack of protection or enforceable land laws leave subsistence farmers in rural Shan State vulnerable to livelihood threats posed by natural resource extraction by corporations, the State, and insurgent groups.

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